IBISCHK6

IBISCHK6 (IBIS Golden Parser) User Guide

Version 6.1.3

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1 INTRODUCTION

This document describes the usage, functionality, and message codes of the IBISCHK6 Version 6.1.3 source code and its associated executable programs. IBISCHK6 is used to test files for conformance with IBIS (I/O Buffer Information Specification) Version 6.1.

- The IBIS Version 6.1 Specification is available at www.ibis.org/ibis/ver6.1.
- IBISCHK6 executable program is freely available at www.ibis.org/ibis/ibischk6.
- Checks performed by IBISCHK6 are documented here.
- A high-level description of the source code package is provided, but actual documentation and utilities exist in the source code package. The license to be filled out is located with the executables, and the source code package is available from the IBIS Open Forum.

IBIS Version 6.1 describes formats named IBS, PKG (Define Package Model), EBD (Electrical Board Description), and AMI (Algorithmic Model Interface). IBISCHK6 parses files with .ibs, .pkg, .ebd, and .ami extensions. The first three file formats are keyword based with keywords enclosed by square brackets. The .ami format is tree-structure based where a parameter hierarchy is documented with parentheses.

Note that this specification was first written for IBISCHK6 Version 6.0.0. Prior versions of this document do not exist. As the IBIS specification evolves, the IBISCHK executable program and this IBISCHK specification will evolve and be numbered in parallel with IBISCHK version numbers.

The source code consists of C language modules (.c and .h files) and makefile scripts to create the executable code for the operating system being used. Windows and Linux makefiles are supplied along with compiled executables.

In addition, multiple suites of QA (quality assurance) tests are provided for major and minor version levels starting with IBISCHK3. The test cases consist of IBIS files, their outputs, also their golden results. These test cases often relate to the feature set evolution (through the BIRD buffer issue resolution document revision process) and through code corrections (documented with BUG reports). The links below are:

- BIRDs: http://www.ibis/birds
- BUGs: http://www.ibis/ibis-bugs

2 IBISCHK6 USAGE

When “ibischk6_64” (see section 2.3 PLATFORM CONSIDERATIONS) is run with no arguments, it prints this help message:

```
IBISfile validation:

This program has been provided free to the electrical engineering
community by the IBIS Open Forum.  The purpose of this program is to
validate that the contents of ASCII device data in a file specified
conform to the IBIS specification.

Usage: IBISCHK6_64       <IBS filename>

     : IBISCHK6_64  -ebd <EBD filename>

     : IBISCHK6_64  -pkg <PKG filename>

     : IBISCHK6_64  -ami <AMI filename>

Usage: IBISCHK6_64  -caution -numbered      <IBS filename>

     : IBISCHK6_64  -caution -numbered -ebd <EBD filename>

     : IBISCHK6_64  -caution -numbered -pkg <PKG filename>

     : IBISCHK6_64  -caution -numbered -ami <AMI filename>

The flags prior to the file name can be in any order, and the -caution
and/or -numbered flags are optional.
```

One (and only one) file name argument must be provided to perform checking, and the file name extension must be consistent with the file type flag.

2.1 INPUT FILE FLAGS

The following option flags are required for files other than those in the **.ibs** format.

-pkg Use this option if the file is in Define Package Model format, described in section 7 of the IBIS 6.1 Specification.

-ebd Use this option if the file is in Electrical Board Description format, described in section 8 of the IBIS 6.1 Specification.

-ami Use this option if the file is in Algorithmic Model Interface format, described in section 10.3 of the IBIS 6.1 Specification.

Note: if a top-level file calls other IBIS (IBS, PKG, EBD, and AMI) files, then all referenced files are checked with one call. For example, an EBD file can contain other EBD references and also IBS file references that reference both PKG files and also AMI files. The top-level EBD file check will initiate checking for that EBD file plus checking for all referenced files. These referenced files could also be checked individually by using the appropriate input file flags.

2.2 OUTPUT FLAGS

Printed output messages can be modified using the following flags:

-caution Additional Cautions level messages will be printed only when the -caution flag is used. Their meaning is described further below and in section 3.

-numbered The –numbered flag gives alphanumeric message codes rather than generic codes. The generic codes messages begin with ERROR, WARNING, NOTE, INTERNAL ERROR, or CAUTION (when using the –caution flag). With the –numbered flag, the message format is <single-letter-category><four-digit-number>, discussed later. For example, one generic message begins with WARNING (without the –numbered flag) or W1113 (with the –numbered flag).

2.3 PLATFORM CONSIDERATIONS

IBISCHK6 performs platform-specific checks where executable IBIS-AMI models are present. It will load and check all IBIS-AMI executable files (.dll/.so files) that are suitable for the platform on which IBISCHK6 is currently running, where the platform is defined by operating system and address bit size. IBISCHK6 is downloadable for Windows, Linus, and MacOS operating systems. For each operating system both “ibischk6_32” and “ibischk6_64” programs are available, for 32 bit and 64 bit addressing.

Complete checking of an IBIS file may require running IBISCHK6 on each operating system and bit size supported by any IBIS-AMI models in an IBIS file. When IBIS-AMI models are present IBISCHK6 prints a platform summary report near the end:

```
... Status of [Algorithmic Model] Executables for Windows 32:
icg_64.dll: Windows 64:       Not Checked
icg_32.dll: Windows 32:       Checked
icg_64.so:  Linux 64:         Not Checked
icg_32.so:  Linux 32:         Not Checked
... This IBISCHK6 executable supports Windows 32 bit only
```

The example above indicates that models for 64-bit Windows, 64-bit Linux, and 32-bit Linux were present, but were not tested because IBISCHK6 was running on 32-bit Windows. To fully check the model it would be necessary to repeat IBISCHK6 on systems running the other three platforms.

3 OUTPUT MESSAGE CATEGORIES

Message categories with their single-letter-categories in parentheses are described below by descending severity. ERROR messages and some INTERNAL ERROR messages indicate a model file that should not be used. Most EDA tools will reject models that produce these messages. Models with WARNING, CAUTION, and NOTE messages should be reviewed manually or graphically to understand if the noted issues are important.

As IBISCHK has evolved, some messages have been promoted to a stronger level and some have been demoted. While the category code has changed, the message number remains the same. The Messages with their single-letter-category in parentheses are described below:

(E) ERROR MESSAGES

Error messages are issued if there is a documented specification violation based on a syntax rule, a syntax argument violation, or some required combination of keywords, or subparameters and arguments. In some cases an unstated major violation (such as I-V to V-T table mismatch beyond 10%) is deemed an Error, because better matching is expected by proper extraction rules based on IBIS Version 6.1 Section 9 "Notes on Data Derivation Method".

(B) INTERNAL ERROR (BUG) MESSAGES

Internal Error messages flag system errors that are not necessarily related to the model data (for example, memory allocation errors), and functional errors that are expected to be rare but are not easily documented by any means other than giving code file name and line number. In some cases the Internal Error messages reveal IBISCHK6 program bugs where the message should have been documented as an Error. We request that suspected program bugs be reported to ibis-bug@eda.org.

(W) WARNING MESSAGES

Warning messages are issued based on expected common practice and expected range of data values. They alert the user that something is likely to be wrong with the IBIS file. Usually no rule stated for these Warnings in the IBIS specification, but the model may contain suspicious data or may have missing subparameters that make it unusable for high-speed signal integrity application in common EDA tools. For example, limits on C_comp values are checked to warn the model developer about excessively high values (such that might have occurred if the modeler incorrectly entered 1F instead of 1nF).

(C) CAUTION MESSAGES

Caution messages require the –caution flag and are issued where even a Warning message can be incorrect for some cases or where a problem has no impact on simulation and a Warning message would cause many Warnings to appear in older models. For example, the [Ramp] dV values can now be checked for validity, but a flawed dV entry should have no impact on simulation. Older models developed without a dV check (prior to IBISCHK5) could exhibit many failures. Also, in some rare I/O models, Vmeas can fall outside of the Vinh and Vinl. For this case, a Caution message is issued to alert the modeler of a possible data entry mistake.

(N) NOTE MESSAGES

Note messages are also cautionary, but no option flag is required to produce them. So far, Note messages are used only for cases where I-V data contains non-monotonic data points. Monotonic data for I-V tables is not required in the IBIS Specification. However, it is very useful to know if any of the I-V data is non-monotonic, or if combined I-V tables (where all clamp tables are included) are monotonic. Combined tables with non-monotonic points might cause simulation

problems in some EDA tools. Sometimes there is no impact, especially if some of the detected non-monotonic points are very small (numerical noise) and in regions that are outside the normal simulation region. Inspecting or graphically viewing the tables is advised. In earlier versions of IBISCHK, the non-monotonic I-V reports were issued as Warnings. This was objectionable because some model vendors and users require having zero Errors and Warnings.

UNUSED MESSAGES

Unused messages are old messages that still exist in "dead" code and should never be encountered due to subsequent code changes. The messages are retained for historical source code documentation and also for the cases where they might show up when using earlier versions of IBISCHK.

4 MESSAGE LISTING BY CODES

Message Codes along with their Symbols and Messages issued by IBISCHK6 are shown in the next sub-sections below. Each message has a shaded and unshaded row and the following columns:

1. **Code** – In the shaded row the alphanumeric Code consisting of a <single-letter-category><four-digit-number> (for example "E0102") is given. Alphanumeric Codes are issued by IBISCHK6 when the **–numbered** option is used and the documented problem is encountered.
2. **Symbo**l – In the shaded row the message symbol found in the IBISCHK6 source code is given. The Symbol name identifies the source code module in which the message is encoded. For example, MDL_ERR_0 can be located in mdl.c. Each distinct Symbol name within a module has a distinct trailing integer (for example MDL_ERR_1, MDL_ERR_2, etc.). The symbol always has ERR regardless of its actual category.
3. **Message/Comments** – The shaded row shows the printed message with variable portions denoted by labels (where actual names or numerical information is substituted) enclosed in {curly brackets}. The unshaded row of each message contains a comment with further details or clarifications. Some comments still need to be refined and others still need to be filled in. If the message is not used in IBISCHK6, "Unused" is shown in the Comment field.

The Message Codes are organized and indexed in groups of 500 for easier location. Usually a contiguous set of Codes will correspond to a contiguous set of Symbols. Numerical gaps exist in the message Codes to allow room for new messages. So while the actual Code numbers range from 0100 through 5602, this document contains only 1326 messages codes.

An example of a message without and with the –numbered flag, respectively, is shown below:

```
WARNING - Model BUFFER: GND Clamp : Typical value never becomes zero
W1113 - Model BUFFER: GND Clamp : Typical value never becomes zero
```

The table entry located by its four-digit-number is:

W1113	CRV_ERR_13	{label} {name}: {curveName} : Typical value never becomes zero
		A general message indicating that the section with name has a curve whose typical current never becomes zero

This message exists in crv.c. The {label} is "Model", the {name} is "BUFFER", the {curveName} is "Gnd Clamp", and the message is printed as shown above. An expanded comment is given in the unshaded row.

The message listing follows in the sections below.

4.1 MESSAGE CODES 0 TO 499

Code	Symbol	Message/Comments
B0100	MDL_ERR_0	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		[UNUSED}
B0101	MDL_ERR_1	Unable to get IBIS structure {sourceFile} {sourceLinenum}
		Program data structures are corrupt
E0102	MDL_ERR_2	(line {lineNum}) - Orphan Model keyword.
		Model keyword found but not within a Model declaration
E0103	MDL_ERR_3	(line {lineNum}) - Illegal Digital Port (not allowed in SPICE/IBIS-ISS Ports section)
		Improper use of Digital port
E0104	MDL_ERR_4	(line {lineNum}) - D_switch not allowed with (D_drive,D_receive,or D_enable) in Ports/A2D/D2A Section
		Improper use of D_switch
E0105	MDL_ERR_5	(line {lineNum}) - {portName} not allowed with D_switch in Ports/A2D/D2A Section
		(D_receive; D_enable; D_drive) are not allowed with D_switch
E0106	MDL_ERR_6	(line {lineNum}) - Reserved Digital Port used as analog port
		Improper use of Reserved Digital port
E0107	MDL_ERR_7	(line {lineNum}) - Orphan data line keyword.
		A Model related data line was found where none was expected
E0108	MDL_ERR_8	(line {lineNum}) - TTgnd Typical value should be > 0
		Improper TTgnd typical value
E0109	MDL_ERR_9	(line {lineNum}) - TTgnd Min value should be > 0
		Improper TTgnd minimum value
E0110	MDL_ERR_10	(line {lineNum}) - TTgnd Max value should be > 0
		Improper TTgnd maximum value
W0111	MDL_ERR_11	TTgnd typ value is not in between Min and Max
		Improper range for TTgnd
E0112	MDL_ERR_12	(line {lineNum}) - TTpower Typical value should be > 0
		Improper TTpower typical value
E0113	MDL_ERR_13	(line {lineNum}) - TTpower Min value should be > 0
		Improper TTpower minimum value
E0114	MDL_ERR_14	(line {lineNum}) - TTpower Max value should be > 0

Code	Symbol	Message/Comments
		Improper TTPower maximum value
W0115	MDL_ERR_15	TTpower typ value is not in between Min and Max
		Improper range for TTPower
E0116	MDL_ERR_16	(line {lineNum}) - [Model Spec] should be specified immediately after all the subparameters of a model and before the other keywords of a model
		Improper positioning of [Model Spec]
W0117	MDL_ERR_17	(line {lineNum}) - [Receiver Thresholds] should not be specified for model type {modelType}
		Receiver thresholds are not allowed for a which is not an Input or I/O model type
E0118	MDL_ERR_18	(line {lineNum}) - [Add Submodel] should be specified before other keywords for a model
		[UNUSED}
E0119	MDL_ERR_19	(line {lineNum}) - {subparam/keyword} Already Defined For Model '{modelName}'
		A model was already defined for
E0120	MDL_ERR_20	(line {lineNum}) - [Receiver Thresholds] should be specified immediately after all the subparameters of a model and before the other keywords of a model except [Model Spec]
		Improper positioning of [Receiver Thresholds] keyword
E0121	MDL_ERR_21	(line {lineNum}) - Expecting Keyword. Invalid Line
		An invalid line was found where a keyword was expected
B0122	MDL_ERR_22	Should Not Be Here: {sourceFile}, {sourceLinenum}
		The code has a bug
E0123	MDL_ERR_23	(line {lineNum}) - Expecting [End External Model]. Invalid Line,FATAL ERROR
		Some data other than [End External Model] found
E0124	MDL_ERR_24	(line {lineNum}) - Expecting [End External Model]. Invalid Line
		[UNUSED}
B0125	MDL_ERR_25	(line {lineNum}) - Unable to eat keyword : {sourceFile} {sourceLinenum}
		Error in parsing keyword
E0126	MDL_ERR_26	Unable to Save Model Name
		[UNUSED}
E0127	MDL_ERR_27	'Model' Keyword Missing name
		The name of the model was not specified with the [Mode] keyword
E0128	MDL_ERR_28	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For Keyword {keyword}: Expecting {numberOfItemsExpected}
		The keyword should have had items on the keyword line but only number of data items were found

Code	Symbol	Message/Comments
E0129	MDL_ERR_29	(line {lineNum}) - Model Name Over {maxModelNameChars} Characters Long
		[UNUSED}
E0130	MDL_ERR_30	(line {lineNum}) - Invalid Model Name (\"{reservedWord}\"), Reserved Word.
		A reserved word was used as a model name
E0131	MDL_ERR_31	(line {lineNum}) - Model Name Previously Defined (\"{modelName}\")
		A new model is being defined with the same name as a previously defined model.
E0132	MDL_ERR_32	(line {lineNum}) - Redundant a_port for A2D, \n
		[UNUSED}
E0133	MDL_ERR_33	(line {lineNum}) - Digital Port already used in previous A2D for this corner
		The digital port has already been used in a previous A2D section
B0134	MDL_ERR_34	Unable to Parse {errorString}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E0135	MDL_ERR_35	(line {lineNum}) - Duplicate External Language Line
		The Language subparameter is already defined for an [External Model] section
E0136	MDL_ERR_36	(line {lineNum}) - Invalid {subparam/keyword} (\"{badValue}\") (try \"{options}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E0137	MDL_ERR_37	Incorrect Number of Line Items ({lineNum}) For {numberOfItemsFound}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E0138	MDL_ERR_38	(line {lineNum}) - Missing Language sub-parameter. Language must be defined
		The Language subparameter was not defined in an [External Model] section
E0139	MDL_ERR_39	(line {lineNum}) - Duplicate Typ Corner
		The Typ corner was specified multiple times in [External Model] Corner sub parameter
E0140	MDL_ERR_40	(line {lineNum}) - Duplicate Max Corner
		The Max corner was specified multiple times in [External Model] Corner sub parameter
E0141	MDL_ERR_41	(line {lineNum}) - Duplicate Min Corner
		The Min corner was specified multiple times in [External Model] Corner sub parameter
E0142	MDL_ERR_42	(line {lineNum}) - Wrong number of args in PORT_TYPE
		Non spec check
E0143	MDL_ERR_43	(line {lineNum}) - Port_type not allowed

Code	Symbol	Message/Comments
		Non spec check
E0144	MDL_ERR_44	(line {lineNum}) - Language must be defined before D2A
		The Language subparam should be specified before the D_to_A subparam
E0145	MDL_ERR_45	(line {lineNum}) - D2A only allowed for language = SPICE or language = IBIS-ISS
		The subparam D2A can only be specified if the Language suparam is SPICE
E0146	MDL_ERR_46	(line {lineNum}) - No Typ Corner Defined... required
		The Typ corner was not specified in [External Model] Corner sub parameter
W0147	MDL_ERR_47	(line {lineNum}) - No Min Corner Defined for D2A. using Typ
		[UNUSED}
W0148	MDL_ERR_48	(line {lineNum}) - No Max Corner Defined for D2A. Using Typ
		[UNUSED}
E0149	MDL_ERR_49	Invalid {lineNum} Value (\"{badValue}\")
		An invalid Corner was specified in the [External Model] section
E0150	MDL_ERR_50	(line {lineNum}) - trise < 0,[{tRiseval}]
		The tRise specified on the D_to_A subparam is less than 0
E0151	MDL_ERR_51	(line {lineNum}) - tfall < 0,[{tFallval}]
		The tFall specified on the D_to_A subparam is less than 0
E0152	MDL_ERR_52	(line {lineNum}) - Vlow >= Vhigh [{lowValue} >= {highValue}]
		The Vlow is greater Vhigh for the D_to_A subparam in an [External Model} section
E0153	MDL_ERR_53	(line {lineNum}) - Illegal Analog Port {portName},not in port list
E0154	MDL_ERR_54	(line {lineNum}) - Language must be defined before A2D
		The Language subparam should be specified before the A_to_D subparam
E0155	MDL_ERR_55	(line {lineNum}) - NO Typ Corner defined for A2D
W0156	MDL_ERR_56	(line {lineNum}) - NO Min Corner defined for A2D. Using Typ
		[UNUSED}
W0157	MDL_ERR_57	(line {lineNum}) - NO Max Corner defined for A2D. Using Typ
		[UNUSED}
E0158	MDL_ERR_58	(line {lineNum}) - Invalid {subparam} (\"{value}\")
		A Generic error to display that the [Model] subparameter (Enable; IOType; Polarity) has an

Code	Symbol	Message/Comments
		invalid value . Also used for [Add SubModel] Mode subparameter. This error message is also used incorrectly for invalid [External Model] subparameters.
W0159	MDL_ERR_59	(line {lineNum}) - Vinl should not be specified for model type {modelType}
		is not an Input and IO modeltype and hence Vinl cannot be specified
W0160	MDL_ERR_60	(line {lineNum}) - {subType} should not be specified for model type {modelType}
		[UNUSED}
W0161	MDL_ERR_61	(line {lineNum}) - Vinh should not be specified for model type {modelType}
		is not an Input and IO modeltype and hence Vinl cannot be specified
E0162	MDL_ERR_62	(line {lineNum}) - Sub Parameter Cref_diff is valid only for IBIS version >= 4.1
		Cref_diff is not valid for IBIS file versions less than 4.1
W0163	MDL_ERR_63	(line {lineNum}) - Creff_diff should not be specified for model type {modelType}
		is not an output model type hence Cref_diff is not valid
E0164	MDL_ERR_64	(line {lineNum}) - Sub Parameter Rref_diff is valid only for IBIS version >= 4.1
		Rref_diff is not valid for IBIS file versions less than 4.1
W0165	MDL_ERR_65	(line {lineNum}) - Rreff_diff should not be specified for model type {modelType}
		is not an output model type hence Rref_diff is not valid
W0166	MDL_ERR_66	(line {lineNum}) - Vmeas should not be specified for model type {modelType}
		is one of Input; Input_Diff; Input_Ecl; Terminator; Series; Series_switch hence Vmes is not vaiid
W0167	MDL_ERR_67	(line {lineNum}) - Cref should not be specified for model type {modelType}
		is one of Input; Input_Diff; Input_Ecl; Terminator; Series; Series_switch hence Cref is not vaiid
W0168	MDL_ERR_68	(line {lineNum}) - Rref should not be specified for model type {modelType}
		is one of Input; Input_Diff; Input_Ecl; Terminator; Series; Series_switch hence Rref is not vaiid
W0169	MDL_ERR_69	(line {lineNum}) - Vref should not be specified for model type {modelType}
		is one of Input; Input_Diff; Input_Ecl; Terminator; Series; Series_switch hence Vref is not vaiid
E0170	MDL_ERR_70	(line {lineNum}) - Sub Parameter C_comp_pullup is valid only for IBIS version >= 4.0
		C_comp_pullup is not valid for IBIS file versions less than 4.0
E0171	MDL_ERR_71	(line {lineNum}) - Sub Parameter C_comp_pulldown is valid only for IBIS version >= 4.0
		C_comp_pulldown is not valid for IBIS file versions less than 4.1
E0172	MDL_ERR_72	(line {lineNum}) - Sub Parameter C_comp_power_clamp is valid only for IBIS version >= 4.0
		C_comp_power_clamp is not valid for IBIS file versions less than 4.2
E0173	MDL_ERR_73	(line {lineNum}) - Sub Parameter C_comp_gnd_clamp is valid only for IBIS version >= 4.0

Code	Symbol	Message/Comments
		C_comp_gnd_clamp is not valid for IBIS file versions less than 4.2
E0174	MDL_ERR_74	(line {lineNum}) - Unknown Line Among Model Data
		A line was found in the [Model] section wich was not a valid line
E0175	MDL_ERR_75	(line {lineNum}) - '{subparam}' Subparameter Missing Setting
		There was no value specified for model subparameter
E0176	MDL_ERR_76	(line {lineNum}) - Invalid {subparam} Line
		The line corresponding to mdeol subparameter has an invalid syntax
W0177	MDL_ERR_77	(line {lineNum}) - Model {model}: {subparam} min value is not the smallest value listed
		Unused
E0178	MDL_ERR_78	(line {lineNum}) - 'NA' Not Allowed For Typical Value
		Unused
W0179	MDL_ERR_79	Model {modelName}: {subparam} max value is not the largest value listed
		Unused
E0180	MDL_ERR_80	Model '{modelName}': {Model_type} Not Defined
		The Model Type is not defined for Model
E0181	MDL_ERR_81	Model {modelName}: One of C_comp,C_comp_pullup,C_comp_pulldown,C_comp_power_clamp,C_comp_gnd_clamp must be defined
		A mandatory sub-parameter is missing for
C0182	MDL_ERR_82	Vmeas is <= Vinl for model {modelName}
		Vmeas must be greater than Vinl but is not so for
C0183	MDL_ERR_83	Vmeas is >= Vinh for model {modelName}
		Vmeas must be less than Vinh but is not so for
W0184	MDL_ERR_84	Model '{modelName}': Model_type '{modelType}' must have {subparam} set
		A generic message indicating that for Model which is of type the Vinl or Vinh parameter should be set
E0185	MDL_ERR_85	Model '{modelName}': {subparam} is set when Model_type is not Terminator
		Model is not Terminator type; but corresponding to Rgnd; Rpower; Rac; or Cac has been defined
E0186	MDL_ERR_86	Model '{modelName}': Rac must be defined when Cac is
		For Model which is of type Terminator; Cac is defined but Rac is not
E0187	MDL_ERR_87	Model '{modelName}': Cac must be defined when Rac is
		For Model which is of type Terminator; Rac is defined but Cac is not

Code	Symbol	Message/Comments
E0188	MDL_ERR_88	Model '{modelName}': {clampReference} Required when No Voltage Range is Specified
		For model ; the [Voltage Range] is not specified; so the Reference must be specified (Pullup_reference; Pulldown_reference; Power_clamp_reference; Gnd_clamp_reference are all required if [Voltage Range] is not specified)
E0189	MDL_ERR_89	Model '{modelName}': Ramp Not Allowed for Series and Series_switch
		Model is of type Series or Series_switch and hence the [Ramp] keyword is not allowed
E0190	MDL_ERR_90	Model '{modelName}': Ramp Not Defined
		[Ramp] needs to be defined for all model types except Input types; Series; Series_switch and Terminator and was not defined for Model
W0191	MDL_ERR_91	Model '{modelName}': {keyword} is not allowed when Model_type is Series
		Any of Pullup; Pulldown; POWER_Clamp; GND_Clamp; Rising Waveform; Falling Waveform; TTgnd; TTpower; Driver Schedule; Model Spec should not be defined for model type Series but it it was defined for
W0192	MDL_ERR_92	Model '{modelName}': {keyword} is not allowed when Model_type is Series_switch
		Any of Pullup; Pulldown; POWER_Clamp; GND_Clamp; Rising Waveform; Falling Waveform; TTgnd; TTpower; Driver Schedule; Model Spec should not be defined for model type Series_switch ; but it was defined for
E0193	MDL_ERR_93	Model {modelName} is of type Series_switch. [On] keyword is required
		An [Off] section was not defined for Model which is of type Series_switch
E0194	MDL_ERR_94	Model {modelName} is of type Series_switch. [Off] keyword is required
		An [On] section was not defined for Model which is of type Series_switch
E0195	MDL_ERR_95	Model {modelName}: Receiver Thresholds use POWER Clamp Reference which is not defined in this Model
		The reference_supply subparameter of Receiver Threshold was set to POWER_Clamp_Ref but there is no [POWER Clamp Reference] section specified for Model
E0196	MDL_ERR_96	Model {modelName}: Receiver Thresholds use GND Clamp Reference which is not defined in this Model
		The reference_supply subparameter of Receiver Threshold was set to GND_Clamp_Ref but there is no [GND Clamp Reference] section specified for Model
E0197	MDL_ERR_97	Model {modelName}: Receiver Thresholds use Pullup Reference which is not defined in this Model
		The reference_supply subparameter of Receiver Threshold was set to Pullup_Ref but there is no [Pullup Reference] section specified for Model
E0198	MDL_ERR_98	Model {modelName}: Receiver Thresholds use Pulldown Reference which is not defined in this Model
		The reference_supply subparameter of Receiver Threshold was set to Pulldown_Ref but there is no [Pulldown Reference] section specified for Model
E0199	MDL_ERR_99	Model {modelName}: Receiver Thresholds use External Reference which is not defined in this

Code	Symbol	Message/Comments
		Model
		The reference_supply subparameter of Receiver Threshold was set to Ext_Ref but there is no [External Reference] section specified for Model
W0200	MDL_ERR_100	Model '{modelName}': Vmeas,Vref and Rref timing test load parameters should be specified
		Since is Open_drain or Open_sink or ECL type; one of Vmeas or Vref or Rref is mandatory
W0201	MDL_ERR_101	Model '{modelName}': Vmeas timing test load parameter should be specified
		Since is an I/O type or Output type or Tri-state type; Vmeas is mandatory
W0202	MDL_ERR_102	Model '{modelName}': Rref_diff or Cref_diff timing test load parameters should be specified
		Since is of type IO_Diff; Output_Diff or Tri-state_Diff; Rref_diff or Cref_diff are mandatory
E0203	MDL_ERR_103	(line {lineNum}) - External Model language wrong or not specified\n
		[UNUSED}
E0204	MDL_ERR_104	(line {lineNum}) - Model '{modelName}' is of type Series_switch. {subparam} should be defined before the [On] and [Off] sections
		Model is of type Series_switch so corrresponding to one of the keywords Voltage Range; Temperature Change; Pullup Reference; Pulldown Reference; GND Clamp Reference; POWER Clamp Reference should be defined before the [On] or [Off] keywords
E0205	MDL_ERR_105	(line {lineNum}) - Keyword is valid only for Series_switch models
		[On] and [Off] keywords are only valid for Series_switch models
E0206	MDL_ERR_106	(line {lineNum}) - Keyword is valid only for Series and Series_switch models
		[On] keyword is only valid for Series and Series_switch models
E0207	MDL_ERR_107	(line {lineNum}) - No preceding [On] or [Off] keyword found. Assuming [On]
		A keyword associated with Series_switch models should be preceded with an [On] or [Off] keyword.
E0208	MDL_ERR_108	(line {lineNum}) - Add sub model: Already Defined for this model
		Only a single [Add Submodel] section is allowed in a model
E0209	MDL_ERR_109	(line {lineNum}) - Add Submodel is not allowed for Series or Series_switch models
		[Add Submodel] section is not allowed for models which have type Series or Series_switch
E0210	MDL_ERR_110	(line {lineNum}) - Invalid Add Submodel Line. Expecting two items only
		More than 2 items were defined on the [Add Submodel] keyword line
E0211	MDL_ERR_111	(line {lineNum}) - Add Submodel Name not found
		The Add Submodel line did not have a submodel name specified
E0212	MDL_ERR_112	(line {lineNum}) - Add Submodel Name Over {maxSubModelChars} Characters Long
		A submodel name cannot be more than ; ie; 40

Code	Symbol	Message/Comments
E0213	MDL_ERR_113	(line {lineNum}) - Invalid Submodel Name (\"{submodelName}\"), Reserved Word.
		A reserved word was used as a sub model name
E0214	MDL_ERR_114	(line {lineNum}) - Duplicate Add Submodel Name {submodelName}
		[UNUSED}
E0215	MDL_ERR_115	(line {lineNum}) - Add Submodel Mode not found
		The mode "Driving" or "Non-Driving" was not specified for an [Add SubModel]
E0216	MDL_ERR_116	(line {lineNum}) - Driving mode is not valid for input model types
		If a Model is of type Input; then the added Submodel cannot be in Driving mode
E0217	MDL_ERR_117	(line {lineNum}) - Non-Driving mode is not valid for output model types
		If a Model is of type Output; the the added Submodel cannot be in Non-driving mode
E0218	MDL_ERR_118	Could not find definition for Submodel {submodelName} of Model {modelName}
		The model has an added submodel but the submodel definition was not found
W0219	MDL_ERR_119	Model {modelName} not referenced in any [Pin],[Model Selector],
		The Model has not been referenced anywhere in a [Pin] or [Model Selector] section
W0220	MDL_ERR_120	Submodel {submodelName} is not referenced by any model [Add Submodel] keyword
		The SubModel has not been referenced by any [Add Submodel] section in any model
E0221	MDL_ERR_121	(line {lineNum}) - No Paramter list for model {modelName}\n
		(Though this error message is referenced in code; that code is never invoked)
E0222	MDL_ERR_122	[External Model] corner type does not contain reserved port REQUIRED
E0223	MDL_ERR_123	[External Model] corner type contains reserved port ILLEGAL
E0224	MDL_ERR_124	Illegal type or program bug\n
E0225	MDL_ERR_125	[EXTERNAL CIRCUIT] : corner Port : used as digital and analog
E0226	MDL_ERR_126	MODEL Corner line: {lineNum} has A2D not matching TYP A2D:
E0227	MDL_ERR_127	MODEL Corner line: {lineNum} has D2A not matching TYP D2A:
W0228	MDL_ERR_128	MODEL Corner has no A2d matching TYP: .. adding by default

Code	Symbol	Message/Comments
		[UNUSED}
W0229	MDL_ERR_129	MODEL Corner has no D2A matching TYP: .. adding by default
		[UNUSED}
E0230	MDL_ERR_130	(line {lineNum}) - [End_External_Model] with no [External Model]
E0231	MDL_ERR_131	(line {lineNum}) - No Typ Corner Defined for [External Model](required)
		The Typ corner was not specified in [External Model] Corner sub parameter
W0232	MDL_ERR_132	External Model for has suspiciously few PORTS ({numPorts})
E0233	MDL_ERR_133	(line {lineNum}) - No A2D or D2A for Typ corner in model {modelName}
		[UNUSED}
W0234	MDL_ERR_134	(line {lineNum}) - No A2D or D2A for Min corner in model {modelName},will use Typ corner
		[UNUSED}
W0235	MDL_ERR_135	(line {lineNum}) - No A2D or D2A for Max corner in model {modelName},will use Typ Corner
		[UNUSED}
E0236	MDL_ERR_136	(line {lineNum}) - Illegal (not specified and not reserved) port name in
		Port name can't be used for [External Model] or [External Circuit] type.
E0237	MDL_ERR_137	(line {lineNum}) - Reserved Analog Port used as digital port
E0238	MDL_ERR_138	(line {lineNum}) - Redundant port1 in D2A
		[UNUSED}
E0239	MDL_ERR_139	(line {lineNum}) - Illegal Digital Port in D2A
E0240	MDL_ERR_140	(line {lineNum}) - Illegal Digital Port in A2D (must use D_receive)
E0241	MDL_ERR_141	(line {lineNum}) - Illegal Digital Port in A2D (use D_receive or a User Defined)
E0242	MDL_ERR_142	(line {lineNum}) - Vlow > Vhigh [{Vlow} >= {Vhigh}]
E0243	MDL_ERR_143	(line {lineNum}) - PORT2 must be reserved word analog port

Code	Symbol	Message/Comments
		[UNUSED}
E0244	MDL_ERR_144	(line {lineNum}) - [End_External_Circuit] with no [External Circuit]
		An [End External Circuit] keyword was found with no associated [External Circuit] keyword
W0245	MDL_ERR_145	[External Circuit] has suspiciously few PORTS ({portCount})
W0246	MDL_ERR_146	(line {lineNum}) - No A2D or D2A for Typ corner in Circuit {cktName}
		[UNUSED}
W0247	MDL_ERR_147	(line {lineNum}) - No A2D or D2A for Min corner in Circuit {cktName},will use Typ corner
		[UNUSED}
W0248	MDL_ERR_148	(line {lineNum}) - No A2D or D2A for Max corner in circuit {cktName},will use Typ Corner
		[UNUSED}
E0249	MDL_ERR_149	(line {lineNum}) - Orphan External Cucuit keyword.
E0250	MDL_ERR_150	Unable to Save External Circuit Name
		The code failed to allocate the required memory
E0251	MDL_ERR_151	(line {lineNum}) - 'External Circuit' Keyword Missing name
		There was no name specified on the [External Circuit] keyword line
E0252	MDL_ERR_152	(line {lineNum}) - External Circuit Name Over {maxLength} Characters Long
		[UNUSED}
E0253	MDL_ERR_153	(line {lineNum}) - Invalid External Circuit Name (\"{cktName}\"), Reserved Word.
		The name specified for an external circuit is invalid as it is a reserved word
E0254	MDL_ERR_154	(line {lineNum}) - External Circuit Name Previously Defined (\"{cktName}\")
		An external circuit with name is already defined
E0255	MDL_ERR_155	External Model D2A Line Illegal connection,2 analog reference/driver ports
E0256	MDL_ERR_156	(line {lineNum}) - A2D only allowed for language = SPICE or language = IBIS-ISS
E0257	MDL_ERR_157	(line {lineNum}) - [Composite Current] should be preceded by a [Rising Waveform] or [Falling Waveform] section
		A [Composite Current] section in a model should be immediately be preceded by a [Rising Waveform] or [Falling Waveform] section
E0258	MDL_ERR_158	(line {lineNum}) - No previous Rising or Falling Waveform found with which to associate the

Code	Symbol	Message/Comments
		Composite Current
		A [Composite Current] section in a model was preceded by a [Rising Waveform] or [Falling Waveform] section but due to some error the [Rising Waveform] or [Falling Waveform] section was not parsed so the parser is unable to associate a Rising or Falling waveform with the Composite current
E0259	MDL_ERR_159	(line {lineNum}) - Missing [End Algorithmic Model] keyword
		An [Algorithmic Model] section was not terminate with an [End Algorithmic Model] keyword
E0260	MDL_ERR_160	(line {lineNum}) - [End Emi Model] keyword expected
		The [End Emi Model] keyword was expected to finish off a previously started [Begin Emi Model] section
E0261	MDL_ERR_161	(line {lineNum}) - Orphan [End Algorithmic Model] keyword found
		An [End Algorithmic Model] keyword was found without an associated [Algorithmic Model] keyword
E0262	MDL_ERR_162	(line {lineNum}) - Orphan [End EMI Model] keyword found
		An [End EMI Model] keyword was found without an associated [Begin EMI Model] keyword
B0263	MDL_ERR_163	(line {lineNum}) - Composite Current is already associated with the last Waveform
		More than one [Composite Current] section has been defined for Rising or Falling waveform
E0264	MDL_ERR_164	(line {lineNum}) - Invalid {subparam} assignment. Too many tokens found
		[UNUSED}
E0265	MDL_ERR_165	(line {lineNum}) - Invalid {subparam} assignment. Each assignment should be defined on a separate line
		[UNUSED}
E0266	MDL_ERR_166	(line {lineNum}) - Converter Parameter {paramname} is not Numeric
		[UNUSED}
E0267	MDL_ERR_167	(line {lineNum}) - The parameter {paramname} reference '{paramreference}' has mismatched parenthesis
		[UNUSED}
E0268	MDL_ERR_168	(line {lineNum}) - Invalid D2A polarity '{polarity}': Can only be 'Inverting' or 'Non-Inverting'
		[UNUSED}
E0269	MDL_ERR_169	(line {lineNum}) - The D2A d_port should be 'D_drive' when polarity is specified
		[UNUSED}
E0270	MDL_ERR_170	Mdl '{modename}' D2A corner '{corner}': When polarity is specified, there should two D2A defined with opposite polarities
		[UNUSED}

Code	Symbol	Message/Comments
E0271	MDL_ERR_171	(line {lineNum}) - Invalid Converter Parameter line. Should contain a single parameter assignment
		[UNUSED}
E0272	MDL_ERR_172	(line {lineNum}) - Parameters are not allowed for language=SPICE
		[UNUSED}
E0273	MDL_ERR_173	Model {modelname} has [Initial Delay] sub parameter {subparam} specified but it has no {section}
		Model has [Initial Delay] sub-parametr (V-T; I-T) specified but the corressponding [Rising/Falling Waveform] or [Composite Current] is missing
W0274	MDL_ERR_174	Vinl > Vinh for model {modelname}
		Vinl is greater than Vinh in
E0275	MDL_ERR_175	{keyword} {modelname} : Port '{portname}' is not a reserved port name and is not used a D2A or A2D port
		The model associated with keyword [External Model] or [External Circuit] has a port which is not defined as a D2A or A2D port
5306	MPINS_ERR_6	Invalid [Merged Pins] Pin Name {pinName}. Reserved word.
		[UNUSED}
5309	MPINS_ERR_9	Pin {pinName} cannot be connected to the Merging Pin {mergePinName} as it is defined in the [Pin Numbers] section
		[UNUSED}
5408	IDLY_ERR_8	{V-T|I-T}: Min value is not the smallest value listed
		[UNUSED}
5409	IDLY_ERR_9	{V-T|I-T}: Max value is not the largest value listed
		[UNUSED}

4.2 MESSAGE CODES 500 TO 999

Code	Symbol	Message/Comments
B0500	CMPNT_ERR_0	{sourceFile}:{sourceLinenum}:Unable to get IBIS.
		[UNUSED}
E0501	CMPNT_ERR_1	(line {lineNum}) - Orphan Component keyword.
		Component keyword found but not within a Component declaration
B0502	CMPNT_ERR_2	(line {lineNum}) - Orphan data line keyword.
		A non keyword line was found when no Component keyword section was active
E0503	CMPNT_ERR_3	(line {lineNum}) - Unexpected End Alternate Package Models keyword
		Found [End Alternate Package Modes] where it was not expected
E0504	CMPNT_ERR_4	(line {lineNum}) - Expecting End Alternate Package Models keyword
		Did not find [End Alternate Package Models] keyword where it was expected
B0505	CMPNT_ERR_5	{fileName}:{lineNum}:Illegal keyword passed to cmpnt.
		Program data structures are corrupt in program file
E0506	CMPNT_ERR_6	(line {lineNum}) - Data on this line appears to be for the Component keyword,which does not allow data on subsequent lines.
		There should be no additional lines associated with the [Component] keyword
E0507	CMPNT_ERR_7	(line {lineNum}) - Data on this line appears to be for the Manufacturer keyword,which does not allow data on subsequent lines.
		There should be no additional lines associated with the [Manufacturer] keyword
E0508	CMPNT_ERR_8	(line {lineNum}) - Data on this line appears to be for the Package Model keyword,which does not allow data on subsequent lines.
		There should be no additional lines associated with the [Package Model] keyword
B0509	CMPNT_ERR_9	{fileName}:{lineNum}:Unknown keyword received data.
		Program data structures are corrupt in program file
B0510	CMPNT_ERR_10	{fileName}:{lineNum}:Illegal line type passed to cmpnt.
		Program data structures are corrupt in program file
E0511	CMPNT_ERR_11	Component '{compName}' is duplicated within the .ibs file.
		[UNUSED}
E0512	CMPNT_ERR_12	(line {lineNum}) - Unable to create new CMPNT.
		Memory allocation for a new Component failed
W0513	CMPNT_ERR_13	(line {lineNum}) - Component '{compName}' contains a blank character.
		Blank characters are illegal in a (; ; ; ; ; and)

Code	Symbol	Message/Comments
E0514	CMPNT_ERR_14	Required keyword 'Manufacturer' not defined for Component '{compName}'.
		[UNUSED]
B0515	CMPNT_ERR_15	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E0516	CMPNT_ERR_16	Unable to find Package Model '{pkgName}' for Component '{compName}'
		[UNUSED]
E0517	CMPNT_ERR_17	(line {lineNum}) - Duplicate Package keyword.
		The [Package] section should be defined only once within a component
E0518	CMPNT_ERR_18	(line {lineNum}) - Unknown data after Package keyword.
		The [Package] keyword line should have no data following the keyword.
E0519	CMPNT_ERR_19	Keyword 'Package' not defined for Component '{compName}'.
		[UNUSED]
E0520	CMPNT_ERR_20	(line {lineNum}) - Duplicate [Alternate Package Models] keyword.
		The [Alternate Package Models] section should be defined only once within a component
E0521	CMPNT_ERR_21	(line {lineNum}) - Unknown data after [Alternate Package Models] keyword.
		The [Alternate Package Models] keyword line should have no data following the keyword.
E0522	CMPNT_ERR_22	(line {lineNum}) - Unknown data after [End Alternate Package Models] keyword.
		The [End Alternate Package Models] keyword line should have no data following the keyword.
E0523	CMPNT_ERR_23	(line {lineNum}) - Duplicate Pin keyword found.
		The [Pin] section should be defined at most once within a component
E0524	CMPNT_ERR_24	Unable to find Pin keyword data for Component '{compName}'.
		[UNUSED]
E0525	CMPNT_ERR_25	(line {lineNum}) - Duplicate Pin_Mapping keyword found.
		The [Pin Mapping] section should be defined at most once within a component
E0526	CMPNT_ERR_26	(line {lineNum}) - [Diff Pin] keyword column count must be 3,5 or 6 found {numColumns} columns.
		[UNUSED]
E0527	CMPNT_ERR_27	(line {lineNum}) - Duplicate Diff_Pin keyword found.
		A [Diff Pin] section should be defined at most once within a component
E0528	CMPNT_ERR_28	(line {lineNum}) - Unable to find column headers after {keyword} keyword.
		If is one of Pin; Pin Mapping; Diff Pin or Series Pin Mapping then a set of column headers is

Code	Symbol	Message/Comments
		expected but were not found
E0529	CMPNT_ERR_29	(line {lineNum}) - '{columnName}' column header not found or out of order.
		A associated with a Pin; Pin Mapping; Diff Pin or Series Pin Mapping keyword was not found or found in the incorrect position
E0530	CMPNT_ERR_30	(line {lineNum}) - Unknown column header '{columnName}' or out of order.
		A associated with a Pin; Pin Mapping; Diff Pin or Series Pin Mapping keyword was not recognized or found in an incorrect position
E0531	CMPNT_ERR_31	(line {lineNum}) - Duplicate column header '{columnName}' .
		A associated with a Pin; Pin Mapping; Diff Pin or Series Pin Mapping keyword was specified more than once
E0532	CMPNT_ERR_32	(line {lineNum}) - {keyword} keyword column count must be {minHeaders} or {maxHeaders},found {actualHeaders} columns.
		[UNUSED}
E0533	CMPNT_ERR_33	(line {lineNum}) - Unable to add data for {keyword} keyword.
		There was an error trying to create the data structures associated with keyword
B0534	CMPNT_ERR_34	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E0535	CMPNT_ERR_35	(line {lineNum}) - Unknown Line after Component Description
		A Timing_location or SI_location line was expected
B0536	CMPNT_ERR_36	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
E0537	CMPNT_ERR_37	(line {lineNum}) - {subparam} Already Defined For Component '{compName}'
		The subparameter (SI_location or Timing_location) was already defined for component
E0538	CMPNT_ERR_38	(line {lineNum}) - '{subparam}' Subparameter Missing Setting
		The subparameter (SI_location or Timing_location) did not have a value associated with it
E0539	CMPNT_ERR_39	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E0540	CMPNT_ERR_40	(line {lineNum}) - Invalid {subparam/keyword} (\"{badValue}\") (try \"{options}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E0541	CMPNT_ERR_41	(line {lineNum}) - Invalid {subparam} (\"{badValue}\")
		The subparameter (Si_location or Timing_location) has an invalid value specified. Should be

Code	Symbol	Message/Comments
		"Die" or "Pin".
E0542	CMPNT_ERR_42	(line {lineNum}) - Duplicate Series_Pin_Mapping keyword found.
		A [Series Pin Mapping] section should be defined at most once in a component
E0543	CMPNT_ERR_43	(line {lineNum}) - Unknown column header after 'function_table_group'
		An unknown columnHeader was found after the 'function_table_group' header on the [Series Pin Mapping] keyword line
E0544	CMPNT_ERR_44	TBD: Put this in model check,*_DIFF without external model
		A Diff model type should have an External Model defined
E0545	CMPNT_ERR_45	Component pin model type using [External Model] without corresponding [Diff_Pin]
E0546	CMPNT_ERR_46	(line {lineNum}) - Duplicate [Series_Switch_Groups] keyword found.
		A [Series Switch Groups] section should be defined at most once in a component
B0547	CMPNT_ERR_47	{sourceFile}:{sourceLinenum}:Unable to get Components.
		Program data structures are corrupt in program file
E0548	CMPNT_ERR_48	(line {lineNum}) - Duplicate Node Declaration keyword found.
		A [Node Declaration] section is already defined for the component
E0549	CMPNT_ERR_49	(line {lineNum}) - Unable to create new NODE LIST.
		The code failed to allocate the required memory
E0550	CMPNT_ERR_50	(line {lineNum}) - Unable to create new Circuit Call (malloc).
		Memory allocation for a new Circuit Call failed
U0551	CMPNT_ERR_51	[End Emi Component] Keyword expected
		[UNUSED}
U0552	CMPNT_ERR_52	Unexpected [End Emi Component] Keyword
		[UNUSED}
E0553	CMPNT_ERR_53	(line {lineNum}) - Unexpected Keyword in a [Component EMI] block
		The only keywords allowed within a [Begin EMI Component] block are [Pin EMI] and [Pin Domain EMI] but an unexpected keyword was found
E0554	CMPNT_ERR_54	(line {lineNum}) - Duplicate Repeater_Pin keyword found.
		Only a single [Repeater_Pin] section is allowed in a component
E0600	PIN_ERR_0	(line {lineNum}) - Unable to add the line of Pin data.
		Memory allocation failed when trying to create the data structures for a Pin
E0601	PIN_ERR_1	(line {lineNum}) - Pin not found.

Code	Symbol	Message/Comments
		A Pin was not specified in a data line in the [Pin] Section
E0602	PIN_ERR_2	(line {lineNum}) - Signal name not found.
		The signal_name was not specified in a data line in the [Pin] section
E0603	PIN_ERR_3	(line {lineNum}) - Model name not found.
		The model_name was not specified in a data line in the [Pin] section
E0604	PIN_ERR_4	(line {lineNum}) - Each line of Pin data must contain either 3 or 6 columns.
		A data line in the [Pin] section should have either 3 (if the package parameters are not specified) or 6 (if the package parameters are specified) values
E0605	PIN_ERR_5	(line {lineNum}) - When using 6 columns, the headers R_pin,L_pin,and C_pin must be listed.
		If package parameters are specified for a pin in the [Pin] section; then the headers R_pin; L_pin and C_pin must be specified on the [Pin] keyword line
E0606	PIN_ERR_6	(line {lineNum}) - Duplicate Pin '{pinName}'.
		The same was defined more than once in the [Pin] section
B0607	PIN_ERR_7	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E0608	PIN_ERR_8	Component '{compName}': Model '{modelName}' for Pin '{pinName}' not defined.
		The model associated with pin for component was not defined elsewhere in the file
C0609	PIN_ERR_9	Pin {pinName} is not defined as a Diff Pin though the associated Model Selector {modelSelectorName} was determined to be Differential
		The pin is associated with a model selector which was found to be associated with a differential model but the pin is not defined as a differential pin
E0610	PIN_ERR_10	Component '{compName}': Pin '{pinName}': Model '{modelName}': model type for a Pin cannot be Series or Series_switch.
		[UNUSED}
C0611	PIN_ERR_11	Pin {pinName} is not defined as a Diff Pin though the associated Model {modelName} was determined to be Differential
		The pin is associated with a model which was found to be differential but the pin is not defined as a differential pin
E0612	PIN_ERR_12	Component '{compName}': Pin '{pinName}' not referenced in Pin Mappings.
		The Pin of Component is not referenced in the component's [Pin Mapping] section
E0613	PIN_ERR_13	Pin '{pinName}' found in Package_Model '{pkgName}' Pin_Numbers list not found in Component '{compName}' Pin list.
		The Pin was referenced in the [Pin Numbers] section of the package model but is not defined in the [Pin] section of the associated component

Code	Symbol	Message/Comments
E0614	PIN_ERR_14	(line {lineNum}) - Unable to allocate new PIN.
		Memory allocation for a new pin failed while trying to parse the [Pin] section
E0615	PIN_ERR_15	Pin {pinName} referenced in the [Merged Pins] section of Package {pkgName} is not defined as POWER or GND in Component {compName} Pin list
		The Pin is referenced in the [Merged Pins] section of Package pkgName of Component but is not defined as a POWER or GND pin in the [Pins] section of the component
E0616	PIN_ERR_16	Pin {pinName} referenced in the [Merged Pins] section of Package {pkgName} is not defined in Component {compName} Pin list
		The Pin is referenced in the [Merged Pins] section of Package pkgName of Component but is not defined as a Pin in the [Pins] section of the component
E0617	PIN_ERR_17	Component {compName}: {type} Pin {pinName} referenced in the [Merged Pins] section of Package {pkgName} is merged with a {type} Pin {pinNameMerged}
		In Component and Package ; a Pin of POWER is merged with a Pin of GND or a Pin of GND is merged with a Pin of POWER
E0618	PIN_ERR_18	[Component] {compName} with [Package Model] {pkgName} has pin and pad mismatch because [Merged Pins] pins ({mergingPin}, {mergedPin}) point to different buses ({mergingPinBus},{mergedPinBus}) in [Pin Mapping]
		In Component and Package ; a Pin is merged with a Pin but they are connected to different busses ; in the [Pin Mapping] section
E0619	PIN_ERR_19	[Package Model] {pkgName} with [Merged Pins] requires [Pin Mapping] in [Component] {compName}
		The Package in Component has a [Merged Pins] section but no [Pin Mapping] section
E0620	PIN_ERR_20	Component {compName}: Pin '{pinName}' is associated with a Model Selector '{mselName}' which references model of type '{modelType}'
		In Component compName>; the Pin is associated with a Model Selector which has an illegal reference to a model of type
E0700	PINMPG_ERR_0	(line {lineNum}) - Extra data columns on this line.
		There was some extraneous data specified at the end of the data line in the [Pin Mapping] section
E0701	PINMPG_ERR_1	(line {lineNum}) - No Pin number.
		A pin number was not specified on a data line in the [Pin Mapping] section
E0702	PINMPG_ERR_2	(line {lineNum}) - No pulldown_ref data.
		The pulldown reference was not specified on a data line in the [Pin Mapping] section
E0703	PINMPG_ERR_3	(line {lineNum}) - No pullup_ref data.
		The pullup reference was not specified on a data line in the [Pin Mapping] section
E0704	PINMPG_ERR_4	(line {lineNum}) - Pin Mapping data lines must contain either 3,5 or 6 columns.
		A data line in the [Pin Mapping] section should contain 3 entries (when the pin number;

Code	Symbol	Message/Comments
		pullup reference and pulldown reference are specified) or 5 entries (when the external reference is not specified) and 6 entries when the pin number; pulldown reference; pullup reference; gnd clamp reference; power clamp reference and external reference are all specified)
E0705	PINMPG_ERR_5	(line {lineNum}) - Pin Mapping data lines must contain either 3 or 5 columns.
		In IBIS versions earlier than 4.1; a data line in the [Pin Mapping] section should contain 3 entries (when the pin number; pullup reference and pulldown reference are only specified) or 5 entries (when the pin number; pullup reference; pulldown reference; power clamp reference and gnd clamp reference are specified)
E0706	PINMPG_ERR_6	(line {lineNum}) - When 5 columns are specified,the headings gnd_clamp_ref and power_clamp_ref must be used.
		The column headings gnd_clamp_ref and power_clamp_ref must be specified on the [Pin Mapping] keyword line when a data line contains 5 etnries
E0707	PINMPG_ERR_7	(line {lineNum}) - When 6 columns are specified,the headings gnd_clamp_ref, power_clamp_ref and ext_ref must be used.
		The column headings gnd_clamp_ref and power_clamp_ref and ext_ref must be specified on the [Pin Mapping] keyword line when a data line contains 6 entries
E0708	PINMPG_ERR_8	(line {lineNum}) - Duplicate Pin Mapping Pin.
		A pin must be referenced at most once within a [Pin Mapping] section
W0709	PINMPG_ERR_9	(line {lineNum}) - Component {compName} Pin {pinName} is a POWER pin. Usually only has Pullup_ref in Pin Mapping
		Pin of Component has a model type of POWER and hence should only have a Pullup_ref associated with it in the [Pin Mapping] section
W0710	PINMPG_ERR_10	(line {lineNum}) - Pin {pinName} is a POWER pin. Usually only has Pullup_ref in Pin Mapping
		Pin has a model type of POWER and hence should only have a Pullup_ref associated with it in the [Pin Mapping] section
W0711	PINMPG_ERR_11	(line {lineNum}) - Component {compName} Pin {pinName} is a GND pin. Usually only has Pulldown_ref in Pin Mapping
		Pin of Component has a model type of GND and hence should only have a Pulldown_ref associated with it in the [Pin Mapping] section
W0712	PINMPG_ERR_12	(line {lineNum}) - Pin {pinName} is a GND pin. Usually only has Pulldown_ref in Pin Mapping
		Pin has a model type of GND and hence should only have a Pulldown_ref associated with it in the [Pin Mapping] section
W0713	PINMPG_ERR_13	(line {lineNum}) - Component {compName} Pin {pinName} is NC. Should not have any references in Pin Mapping
		The pin in Component is of model type NC and hence should not be associated with any references in the [Pin Mapping] section
W0714	PINMPG_ERR_14	(line {lineNum}) - Pin {pinName} is NC. Should not have any references in Pin Mapping

Code	Symbol	Message/Comments
		The pin is of model type NC and hence should not be associated with any references in the [Pin Mapping] section
E0715	PINMPG_ERR_15	Component '{compName}': Pin Mapping Pin '{pinName}' not previously declared in Pin section.
		The pin has been referenced in the [Pin Mapping] section of component but the pin has no definition in the [Pin] section of the component
E0716	PINMPG_ERR_16	Component '{compName}': Pin Mapping pulldown_ref entry '{pdRef}' is not connected to at least one pin whose model_name is POWER or GND.
		In component ; the pull down reference in the [Pin Mapping] section is not associated with a pin whose model is POWER or GND
C0717	PINMPG_ERR_17	Component '{compName}': Pin Mapping '{pdRef}': pulldown_ref entry is usually connected to GND.
		In component ; the pull down reference in the [Pin Mapping] section is associated with a pin whose model is POWER; but the expectation is that it would be associated with a pin whose model is GND
C0718	PINMPG_ERR_18	Component {compName}: Pulldown Reference {pdRef} is also used as a Pullup Reference
		In component ; in the [Pin Mapping] section; the pulldown reference is also used as a pullup reference. This message is only generated for IBIS versions >= 4.
C0719	PINMPG_ERR_19	Pulldown Reference {pdRef} is also used as a Pullup Reference
		In the [Pin Mapping] section; the pulldown reference is also used as a pullup reference. This message is only generated for IBIS versions < 4.
E0720	PINMPG_ERR_20	Component '{compName}': Pin Mapping pullup_ref entry '{puRef}' is not connected to at least one pin whose model_name is POWER or GND.
		In component ; the pull up reference in the [Pin Mapping] section is not associated with a pin whose model is POWER or GND
C0721	PINMPG_ERR_21	Component '{compName}': Pin Mapping '{puRef}': pullup_ref entry is usually connected to POWER.
		In component ; the pull up reference in the [Pin Mapping] section is associated with a pin whose model is GND; but the expectation is that it would be associated with a pin whose model is POWER
E0722	PINMPG_ERR_22	Component '{compName}': Pin Mapping gnd_clamp_ref entry '{gcRef}' is not connected to at least one pin whose model_name is POWER or GND.
		In component ; the gnd clamp reference in the [Pin Mapping] section is not associated with a pin whose model is POWER or GND
C0723	PINMPG_ERR_23	Component '{compName}': Pin Mapping '{gcRef}': gnd_clamp_ref entry is usually connected to GND.
		In component ; the gnd clamp reference in the [Pin Mapping] section is associated with a pin whose model is POWER; but the expectation is that it would be associated with a pin whose model is GND
E0724	PINMPG_ERR_24	Component '{compName}': Pin Mapping power_clamp_ref entry '{pcRef}' is not connected to at least one pin whose model_name is POWER or GND.

Code	Symbol	Message/Comments
		In component ; the power clamp reference in the [Pin Mapping] section is not associated with a pin whose model is POWER or GND
C0725	PINMPG_ERR_25	Component '{compName}': Pin Mapping '{pcRef}': power_clamp_ref entry is usually connected to POWER.
		In component ; the power clamp reference in the [Pin Mapping] section is associated with a pin whose model is GND but the expectation is that it would be associated with a pin whose model is POWER
E0726	PINMPG_ERR_26	Component '{compName}': Pin Mapping ext_ref entry '{extRefName}' is not connected to at least one pin whose model_name is POWER or GND.
		In component ; the external reference in the [Pin Mapping] section is not associated with a pin whose model is POWER or GND
C0727	PINMPG_ERR_27	Component '{compName}': Pin Mapping '{extRefName}': ext_ref entry is usually connected to POWER.
		In component ; the external reference in the [Pin Mapping] section is associated with a pin whose model is GND but the expectation is that it would be associated with a pin whose model is POWER
E0728	PINMPG_ERR_28	(line {lineNum}) - Unable to alloc new PINMPG.
		Memory allocation failed when trying to create the data structures for a [Pin Mapping]
E0729	PINMPG_ERR_29	(line {lineNum}) - {badValue} is an invalid Pin_Mapping column entry.
		A "NA" has been specified on a row in the [Pin Mapping] section
E0800	DIFPIN_ERR_0	(line {lineNum}) - Unable to alloc DIFPIN.
		Memory allocation failed when trying to create the data structures for a [Diff Pin]
E0801	DIFPIN_ERR_1	(line {lineNum}) - Too many Diff Pin data columns.
		There are two many tokens on a data line in the [Diff Pin] section
E0802	DIFPIN_ERR_2	(line {lineNum}) - No Diff_Pin column entry.
		Diff_pin was not specified on a data line in the [Diff Pin] section
E0803	DIFPIN_ERR_3	(line {lineNum}) - No inv_pin column entry.
		inv_pin was not specified on a data line in the [Diff Pin] section
E0804	DIFPIN_ERR_4	(line {lineNum}) - Diff_Pin column pin same as inv_pin column pin.
		The diff pin and the inv pin on a data line in the [Diff Pin] section should not be the same
E0805	DIFPIN_ERR_5	(line {lineNum}) - No vdiff column entry.
		Vdiff was not specified on a data line in the [Diff Pin] section
E0806	DIFPIN_ERR_6	(line {lineNum}) - No tdelay_typ column entry.
		tdelay_typ was not specified on a data line in the [Diff Pin] section
W0807	DIFPIN_ERR_7	(line {lineNum}) - Typ value is not in between Min and Max

Code	Symbol	Message/Comments
		The tdelay_typ value does not lie between the min and max values in a [Diff Pin] section
E0808	DIFPIN_ERR_8	(line {lineNum}) - Diff_Pin data line column count must be 4 or 6.
		A data line in the [Diff Pin] section should contain 6 colums; ie; Diff_pin; inv_pin; vdiff; tdelay_typ; tdelay_min; tdelay_max or 4 columns; ie; Diff_pin; inv_pin; vdiff; tdelay_typ
E0809	DIFPIN_ERR_9	(line {lineNum}) - When using 6 columns,the tdelay_min and tdelay_max headers must be used.
		A data line in the [Diff Pin] section contains 6 values but only 4 headers were specified on the keyword line
E0810	DIFPIN_ERR_10	Component '{compName}': Diff_Pin '{pinName}' not previously declared in Pin section.
		The pin was referred to in the [Diff Pin] section of component but not defined in the [Pin] section of the component
E0811	DIFPIN_ERR_11	Component '{compName}': inv_pin '{pinName}' not previously declared in Pin section.
		The pin was referred to in the [Inv Pin] section of component but not defined in the [Pin] section of the component
W0812	DIFPIN_ERR_12	Component '{compName}': Diff_Pin '{pinName}' is not unique.
		The Diff_pin has been referenced more than once in the [Diff Pin] section of component
E0813	DIFPIN_ERR_13	Component '{compName}': Inv_pin '{pinName}' already in use as a Diff_pin.
		The inv_pin has been referenced as a Diff_pin in the [Diff Pin] section of component
E0814	DIFPIN_ERR_14	Component '{compName}': Diff_pin '{pinName}' already in use as an inv_pin.
		The Diff_pin has been referenced as an inv_pin in the [Diff Pin] section of component
W0815	DIFPIN_ERR_15	Component '{compName}': inv_pin '{pinName}' is not unique.
		The inv_pin has been referenced more than once in the [Diff Pin] section of component
E0816	DIFPIN_ERR_16	(line {lineNum}) - Bad value for {columnName} column.
		One fo the numeric values of tdelay column has invalid syntax
W0817	DIFPIN_ERR_17	(line {lineNum}) - Suspicious value for {columnName} column.
		One fo the numeric values of tdelay column has a bad scale factor perhaps
B0818	DIFPIN_ERR_18	Unknown value returned by CMN_GetValueOrNA(). {sourceFile} {sourceLinenum}
		The code has a bug
E0900	PARSE_ERR_0	Could not determine Version for file {fileName}
		There was an error parsing the IBIS File Version for the IBIS file
W0901	PARSE_ERR_1	Filename '{fileName}' should be lowercase
		The input file name should only used lower case letters
E0902	PARSE_ERR_2	(line {lineNum}) - Non-comment line exists after 'End' keyword.

Code	Symbol	Message/Comments
		There should be no more no comment lines after the [End] keyword
E0903	PARSE_ERR_3	Required keyword 'End' not found.
		The [End] keyword should be the last keyword in the IBIS file
B0904	PARSE_ERR_4	(line {lineNum}) - Unknown enumerated keyword code.
		Internal data structures were found to be corrupt
E0905	PARSE_ERR_5	(line {lineNum}) - Exceeds {maxLineLength} chararacters.
		[UNUSED}
E0906	PARSE_ERR_6	(line {lineNum}) - Keywords Must Begin In Column 1.
		A keyword was found which did not start from the first column in a line
E0907	PARSE_ERR_7	(line {lineNum}) - Data for unknown keyword.\n{text}
		The code has a bug trying to parse
B0908	PARSE_ERR_8	{sourceFile}:{sourceLinenum}:Unknown current keyword.
		The code has a bug
E0909	PARSE_ERR_9	(line {lineNum}) - Previous keyword not terminated properly. Possibly missing a \"/\"\n
		A new keyword exists on a continuation line from a previous section
E0910	PARSE_ERR_10	(line {lineNum}) - Duplicate IBIS_Ver keyword.
		The [IBIS_Ver] keyword was found more than once in the IBIS file
E0911	PARSE_ERR_11	(line {lineNum}) - Illegal keyword for a '.pkg' file.
		A keyword found in a '.pkg' file ws not a valid keyword
E0912	PARSE_ERR_12	(line {lineNum}) - Illegal keyword for a '.ebd' file.
		A keyword found in a '.ebd' file ws not a valid keyword
E0913	PARSE_ERR_13	(line {lineNum}) - Illegal keyword for a '.ibs' file.
		A keyword found in a '.ibs' file ws not a valid keyword
E0914	PARSE_ERR_14	(line {lineNum}) - Keyword Missing Ending Bracket (']').
		A keyword should be terminated with a ']' character
E0915	PARSE_ERR_15	(line {lineNum}) - Invalid Keyword.
		A keyword is found which is too long or an empty string
E0916	PARSE_ERR_16	(line {lineNum}) - Invalid Keyword: {keyword}
		An unrecognized keyword was found
E0917	PARSE_ERR_17	(line {lineNum}) - Invalid Comment Character Definition.
		The comment character was not defined properly (possible missing the suffix _char)

Code	Symbol	Message/Comments
E0918	PARSE_ERR_18	(line {lineNum}) - Invalid Comment Character '{badChar}'.
		is not allowed as a valid comment character (cannot be any of these "0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ[]._/=+-")"
E0919	PARSE_ERR_19	(line {lineNum}) - Too Many Line Items For Keyword COMMENT_CHAR.
		There is extraneous data on the [Comment Char] keyword line
E0920	PARSE_ERR_20	(line {lineNum}) - Extraneous data on End keyword line.
		The [End] keyword should not have any other data after it
W0921	PARSE_ERR_21	(line {lineNum}) - IBIS files should not contain tab characters.
		Tab characters should be avoided in an IBIS file
E0922	PARSE_ERR_22	Unable to Allocate Memory: {fileName} {lineNum}
		The code failed to allocate memory
E0923	PARSE_ERR_23	Description line in file (at line no {lineNum}) is greater than {maxChars} characters
		[UNUSED}
E0924	PARSE_ERR_24	Unterminated string detected. Possibly started at line {lineNum}
		A string literal was not terminated in an AMI file (it possibly originated at line)

4.3 MESSAGE CODES 1000 TO 1499

Code	Symbol	Message/Comments
B1000	HDR_ERR_0	Unable to get ptr to IBIS struct?
		Internal data structures were found to be corrupt
E1001	HDR_ERR_1	(line {lineNum}) - Orphan File Header keyword.
		A header keyword [IBIS Ver]; [File Name]; [File Rev]; [Date]; [Source]; [Notes]; [Disclaimer]; [Copyright] was specified where it was not expected
E1002	HDR_ERR_2	(line {lineNum}) - Orphan Data Line.
		A line was identified as a data line for a header keyword but the header definition is not in progress
B1003	HDR_ERR_3	(line {lineNum}) - Bad keyword type passed to hdr.
		The code has a bug while parsing the header keywords
B1004	HDR_ERR_4	(line {lineNum}) - Bad line type passed to hdr.
		The code has a bug while parsing the header keywords
E1005	HDR_ERR_5	(line {lineNum}) - Duplicate IBIS_Ver keyword
		The [IBIS_Ver] keyword was found more than once in the input file
E1006	HDR_ERR_6	Unable to create new File Header structure.
		The code failed to allocate the required memory
E1007	HDR_ERR_7	(line {lineNum}) - IBIS_Version must be first keyword.\n
		The first keyword in an IBIS file should be [IBIS Ver]
E1008	HDR_ERR_8	(line {lineNum}) - Illegal IBIS_Version '{badVersion}'.
		An invalid version was specified as the IBIS version
E1009	HDR_ERR_9	(line {lineNum}) - Duplicate File_name keyword.
		The [File Name] keyword was found more than once in the input file
E1010	HDR_ERR_10	File_name '{fileName}' contains an upper case character '{character}'.
		Input file name should only used lower case characters but an upper case character was found
E1011	HDR_ERR_11	File_name '{fileName}' contains a character '{character}' that is illegal for DOS.
		Input file name contains a character that is not allowed in DOS/Windows
E1012	HDR_ERR_12	File_name '{fileName}' contains more than one period.
		Input file name contains more than one period '.' character
E1013	HDR_ERR_13	File_name '{fileName}' must contain one period.
		Input file name contains no period '.' characters

Code	Symbol	Message/Comments
E1014	HDR_ERR_14	(line {lineNum}) - File name opened '{actualFileName}' not the same as File_name '{keywordFileName}'.
		The file name that was providing on the command line to the parser; is not the same as the file name specified with the [File Name] keyword
E1015	HDR_ERR_15	(line {lineNum}) - Duplicate File_Rev keyword.
		The [File Rev} keyword was found more than once in the input file
E1016	HDR_ERR_16	(line {lineNum}) - Duplicate Date keyword.
		The [Date} keyword was found more than once in the input file
E1017	HDR_ERR_17	(line {lineNum}) - Duplicate Source keyword.
		The [Source] keyword was found more than once in the input file
E1018	HDR_ERR_18	(line {lineNum}) - Duplicate Notes keyword.
		The [Notes] keyword was found more than once in the input file
E1019	HDR_ERR_19	(line {lineNum}) - Duplicate Copyright keyword.
		The [Copyright] keyword was found more than once in the input file
E1020	HDR_ERR_20	(line {lineNum}) - Unable to add text.
		The code failed to allocate the required memory
E1100	CRV_ERR_0	(line {lineNum}) - {curveName} Already Defined
		The curve has already been defined
B1101	CRV_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B1102	CRV_ERR_2	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B1103	CRV_ERR_3	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E1104	CRV_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
B1105	CRV_ERR_5	Out of Memory
		The code failed to allocate the required memory
E1106	CRV_ERR_6	(line {lineNum}) - Voltage Value Cannot Be 'NA'
		The Voltage value has to be specified as a numeric value in a data line for a curve
E1107	CRV_ERR_7	(line {lineNum}) - More Than {maxPoints} Voltage Points Provided For {curveName}

Code	Symbol	Message/Comments
		More than data points (ie; 100) were sepcified for curve
E1108	CRV_ERR_8	Require at least 2 Voltage Points for {lineNum} Beginning at Line {curveName}
		The curve defined on line has less than 2 data points
E1109	CRV_ERR_9	{First|Last} {Typ|Min|Max} Value Cannot Be 'NA' for {curveName} Beginning at Line {lineNum}
		A general message indicating that the (the first or the last) (typValue; min or max) value for the curve defined on line cannot be NA
N1110	CRV_ERR_10	(line {lineNum}) - {curveName} {Typ|Min|Max} data is non-monotonic
		The is non monotonic
W1111	CRV_ERR_11	{label} {name}: {curveName} has Decreasing Current
		A general message indicating that the section with name has a curve which has decreasing current
W1112	CRV_ERR_12	{label} {name}: {curveName} has Increasing Current
		A general message indicating that the section with name has a curve which has increasing current
W1113	CRV_ERR_13	{label} {name}: {curveName} : Typical value never becomes zero
		A general message indicating that the section with name has a curve whose typical current never becomes zero
W1114	CRV_ERR_14	{label} {name}: {curveName} : Minimum value never becomes zero
		A general message indicating that the section with name has a curve whose minimum current never becomes zero
W1115	CRV_ERR_15	{label} {name}: {curveName} : Maximum value never becomes zero
		A general message indicating that the section with name has a curve whose maximum current never becomes zero
E1200	PKG_ERR_0	(line {lineNum}) - Unable to allocate a Package
		Memory allocation for a Package while parsing the [Package] section
E1201	PKG_ERR_1	(line {lineNum}) - Package sub-parameters must start in column 1.
		The package sub parameters R_pkg; L_pkg; C_pkg should be defined starting at column 1
E1202	PKG_ERR_2	(line {lineNum}) - Expected {expected} columns in Package sub-parameter line,found {actualColumns} columns.
		Each data line in a [Package] section should have (ie; 4) number of values but number were specified
E1203	PKG_ERR_3	(line {lineNum}) - Duplicate R_pkg sub-parameter.
		The R_pkg subparameter was multiply defined
E1204	PKG_ERR_4	(line {lineNum}) - Duplicate L_pkg sub-parameter.

Code	Symbol	Message/Comments
		The L_pkg subparameter was multiply defined
E1205	PKG_ERR_5	(line {lineNum}) - Duplicate C_pkg sub-parameter.
		The C_pkg subparameter was multiply defined
E1206	PKG_ERR_6	(line {lineNum}) - Unknown Package subparameter.
		An unknown subparameter was specified in the [Package] section
E1207	PKG_ERR_7	(line {lineNum}) - Unable to parse data for Package subparameter '{subparam}'.
		A generic error message which indicates that a parsing error related to
B1208	PKG_ERR_8	(line {lineNum}) - Unknown Package subparameter
		The code which handles Package sub parameters has a bug
E1209	PKG_ERR_9	(line {lineNum}) - The typical column must be specified.
		The typical column for a Package subparameter should be specified as a numeric value
E1210	PKG_ERR_10	(line {lineNum}) - The minimum column must be specified or NA.
		The minimum column for a Package subparameter should be specified as a numeric value or as NA
E1211	PKG_ERR_11	(line {lineNum}) - The maximum column must be specified or NA.
		The maximum column for a Package subparameter should be specified as a numeric value or as NA
E1212	PKG_ERR_12	(line {lineNum}) - Required sub-parameter R_pkg not found.
		[UNUSED}
E1213	PKG_ERR_13	Component '{compName}': Required sub-parameter R_pkg not found.
		The R_pkg subparameter was not defined in the [Pacakge] section for component
E1214	PKG_ERR_14	(line {lineNum}) - Required sub-parameter L_pkg not found.
		[UNUSED}
E1215	PKG_ERR_15	Component '{compName}': Required sub-parameter L_pkg not found.
		The L_pkg subparameter was not defined in the [Pacakge] section for component
E1216	PKG_ERR_16	(line {lineNum}) - Required sub-parameter C_pkg not found.
		[UNUSED}
E1217	PKG_ERR_17	Component '{compName}': Required sub-parameter C_pkg not found.
		The C_pkg subparameter was not defined in the [Pacakge] section for component
E1300	RAMP_ERR_0	(line {lineNum}) - Ramp Already Defined
		A [Ramp] section can only be defined once in a model
B1301	RAMP_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}

Code	Symbol	Message/Comments
		The code failed to allocate memory
B1302	RAMP_ERR_2	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B1303	RAMP_ERR_3	Unable to Parse {errorString}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E1304	RAMP_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E1305	RAMP_ERR_5	(line {lineNum}) - Unknown Line Among Ramp Data
		An unrecognized line was found in the [Ramp] section
E1306	RAMP_ERR_6	{lineNum} Not Defined For Ramp Beginning on Line {paramName}
		The parameter was not specified for the [Ramp] section defined on line
E1307	RAMP_ERR_7	(line {lineNum}) - {paramName} Already Defined For Model '{modelName}'
		The [Ramp] section parameter is already defined in model
E1308	RAMP_ERR_8	(line {lineNum}) - No {Typ|Min|Max} Value Was Provided for {paramName}
E1309	RAMP_ERR_9	(line {lineNum}) - 'NA' not allowed for {paramName} Typical value
		The typical value in a Range cannot be NA; but for [Ramp] parameter it is not so
E1310	RAMP_ERR_10	(line {lineNum}) - {dv_dt} must be greater than 0 in a Ramp specification
		The value for dv or dt in [Ramp] spec should be greater than 0 but it is not so for
W1311	RAMP_ERR_11	(line {lineNum}) - Suspicious {paramName} {columnName} Value (\"{actualValue}\"), Numeric in Scale
		The numeric value for a column of parameter was somewhat incorrect (possibly in the scale factor) in a [Ramp] section
E1312	RAMP_ERR_12	(line {lineNum}) - Invalid {paramName} {rampColumn} Value (\"{actualValue}\")
		The numeric value for a column of parameter was invalid in a [Ramp] section
E1313	RAMP_ERR_13	(line {lineNum}) - Invalid Ramp {Rload} Line
		The syntax of the line in a [Ramp] section is invalid
E1314	RAMP_ERR_14	(line {lineNum}) - Invalid {Rload} Value (\"{value}\")
		An invalid numberic value was found for in a [Ramp] section
B1400	RNGP_ERR_0	Unable to parse {subparam} arguments

Code	Symbol	Message/Comments
E1401	RNGP_ERR_1	(line {lineNum}) - No {Typ|Min|Max} Value Was Provided for {subparam}
E1402	RNGP_ERR_2	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected} *The sub parameter should have had items on the keyword line but only number of data items were found*
W1403	RNGP_ERR_3	(line {lineNum}) - Value {tableValue} repeated in the First Column
B1404	RNGP_ERR_4	Unable to Allocate Memory: {sourceFile} {sourceLinenum} *The code failed to allocate memory*

4.4 MESSAGE CODES 1500 TO 1999

Code	Symbol	Message/Comments
W1500	ACDC_ERR_0	Model '{model}': {Typ|Min|Max} VI curves cannot drive through Vmeas={Vmeas}V\n given load Rref={Rref} Ohms to Vref={Vref}V
W1501	ACDC_ERR_1	INFO: v_dc L/H = {VdcLow} {VdcHigh}\n
		[UNUSED]
W1502	ACDC_ERR_2	Model '{model}': {Typ|Min|Max} AC {Rise|Fall} Endpoints ({VacLow}V,{VacHigh}V) not within \n,{Vtol}V ({percTol}%) of ({VdcLow}V,{VdcHigh}V) on VI curves for {Rfixture} Ohms to {Vfixture}V
		[UNUSED]
W1503	ACDC_ERR_3	Model {model}: The [{Rise|Fall} Waveform] \nwith [R_fixture]={Rfixture} Ohms and [{Vfixture}]={Typ|Min|Max}V\nhas {VacLow} column DC endpoints of {VacHigh}V and \na difference of {percTol}% and {VdcLow}%%{VdcHigh}v,but\nan equivalent load applied to the model's I-V tables yields\ndifferent voltages ({diffLow}V and {diffHigh}V),respectively.
W1504	ACDC_ERR_4	Model '{modelName}': {Typ|Min|Max} AC {Rise|Fall} Endpoints ({VacLow}V,{VacHigh}V) *ARE* WITHIN \n,{Vtol}V ({percTol}%) of ({VdcLow}V,{VdcHigh}V) on VI curves for {Rfixture} Ohms to {Vfixture}V
		[UNUSED]
W1505	ACDC_ERR_5	INFO low t/vac/vdc {TacLow} {VacLow} {VdcLow} high {TacHigh} {VacHigh} {VdcHigh} rfix vfix {Rfixture} {Vfixture}\n
		[UNUSED]
W1506	ACDC_ERR_6	Model '{model}': Extreme currents present in {corner} {curveName} VI Curve ({current}A @ {voltage}V)
E1507	ACDC_ERR_7	Model '{model}': Currents <> 0.0mA in 'Pullup' for Open_drain/Open_sink device
E1508	ACDC_ERR_8	Model '{model}': Currents <> 0.0mA in 'Pulldown' for Open_source device
N1509	ACDC_ERR_9	{process} {model} {curveName} data is non-monotonic
E1510	ACDC_ERR_10	Model '{modelName}': Currents <> 0.0mA in 'ISSO PU' for Open_drain/Open_sink device
E1511	ACDC_ERR_11	Model '{modelName}': Currents <> 0.0mA in 'ISSO PD' for Open_source device

Code	Symbol	Message/Comments
W1512	ACDC_ERR_12	Model {modelName}: {Typ|Min|Max} {ISSO_PD|PU} current ({current}A) at 0V is not within {percTol}% of {Pullup|Pulldown} current ({current}A) at reference ({PuPdRefV}V)
		percTol = 5%
W1513	ACDC_ERR_13	Model {modelName}: {Typ|Min|Max} {ISSO_PD|PU} current ({current}A) at {Pullup|Pulldown} reference ({PuPdRefV}V) - table value ({voltage}V) is non-zero (> {maxCurrent}A)
C1514	ACDC_ERR_14	[Ramp] dV ({RisedV|FalldV}V) not within {percentLimit}% of I-V table dV ({calcdV}V) calculation: Model {modelName}: Process: {Typ|Min|Max}: ({Rise|Fall})
		[UNUSED]
W1515	ACDC_ERR_15	Model '{modelName}': {Typ|Min|Max} {Rising|Falling} VI curves cannot drive through Vmeas={Vmeas}V\ngiven load Rref={Rref} Ohms to Vref={Vref}V
E1600	APKG_ERR_0	(line {lineNum}) - Invalid Package Model name: '{modelName}' is too long.
E1601	APKG_ERR_1	(line {lineNum}) - Missing Package Model name
E1602	APKG_ERR_2	(line {lineNum}) - Unable to create new APKG.
E1603	APKG_ERR_3	(line {lineNum}) - Alternate Package Model has no package models defined
W1604	APKG_ERR_4	(line {lineNum}) - Alternate Package Model has only one package model defined
E1605	APKG_ERR_5	(line {lineNum}) - Package Model Name Previously Defined (\"{pkgModelName}\")
		APKG_ERR_5
W1700	CHK_ERR_0	CMPT '{compName}',Pin '{pinName}': Pin Resistance {resistance} Ohms greater than {maxR} Ohms
		The resistance of pin of component is greater than (5.0E+01)
W1701	CHK_ERR_1	CMPT '{compName}',Pin '{pinName}': Pin Inductance {inductance}nH greater than {maxL}nH
		The inductance of pin of component is greater than (1.0E-03)
W1702	CHK_ERR_2	CMPT '{compName}',Pin '{pinName}': Pin Capacitance {capacitance}pF greater than {maxC}pF

Code	Symbol	Message/Comments
		The capacitance of pin of component is greater than (1.0E+06)
W1703	CHK_ERR_3	{modelSubmodel} '{modelName}': {Typ|Min|Max} {Rise|Fall} Ramptime {rampDt}nsec unusually large (> {maxT}nsec)
W1704	CHK_ERR_4	[Model] {modelName} has no description of the buffer's high state\nDC drive characteristics (no [Pullup] table). This warning\ncan be silenced by using an open drain Model_type or by\nadding a [Pullup] table.
		The [Pullup] table for model is missing
W1705	CHK_ERR_5	[Model] {modelName} has no description of the buffer's low state DC\ndrive characteristics (no [Pulldown] table). This warning\ncan be silenced by using an open source Model_type or by\nadding a [Pulldown] table.
		The [Pulldown] table for model is missing
W1706	CHK_ERR_6	[Model] {modelName} has no description of the buffer's low state DC\ndrive characteristics (no [Pulldown] table). This warning\ncan be silenced by changing the Model_type or by adding a\n[Pulldown] table.
		The [Pulldown] table for model is missing
W1707	CHK_ERR_7	[Model] {modelName} has no description of the buffer's high state\nDC drive characteristics (no [Pullup] table). This warning\ncan be silenced by changing the Model_type or by adding a\n[Pullup] table.
		The [Pullup] table for model is missing
E1708	CHK_ERR_8	Component : Duplicate Node Name
E1709	CHK_ERR_9	Component : Illegal Node: same as pin
W1710	CHK_ERR_10	CMPT '{compName}': Rpkg {Typ|Min|Max} value {Rpkg} Ohms not within expected range ({minR} Ohms,{maxR} Ohms)
		[UNUSED}
W1711	CHK_ERR_11	CMPT '{compName}': Rpkg Max value < Min value
		[UNUSED}
W1712	CHK_ERR_12	CMPT '{compName}': Lpkg {Typ|Min|Max} value {Lpkg}nH not within expected range ({minL}nH,{maxL}nH)
		[UNUSED}
W1713	CHK_ERR_13	CMPT '{compName}': Lpkg Max value < Min value
		[UNUSED}
W1714	CHK_ERR_14	CMPT '{compName}': Cpkg {Typ|Min|Max} value {Cpkg}pF not within expected range ({minC}pF,{maxC}pF)

Code	Symbol	Message/Comments
		[UNUSED}
W1715	CHK_ERR_15	CMPT '{compName}': Cpkg Max value < Min value
		[UNUSED}
W1716	CHK_ERR_16	Model '{modelName}': C_comp {Typ|Min|Max} value {Ccomp}pF out of expected range ({minC}pF, {maxC}pF)
		[UNUSED}
W1717	CHK_ERR_17	Model '{modelName}': C_comp_pullup {Typ|Min|Max} value {Ccomp}pF out of expected range ({minC}pF,{maxC}pF)
		[UNUSED}
W1718	CHK_ERR_18	Model '{modelName}': C_comp_pulldown {Typ|Min|Max} value {Ccomp}pF out of expected range ({minC}pF,{maxC}pF)
		[UNUSED}
W1719	CHK_ERR_19	Model '{modelName}': C_comp_power_clamp {Typ|Min|Max} value {Ccomp}pF out of expected range ({minC}pF, {maxC}pF)
		[UNUSED}
W1720	CHK_ERR_20	Model '{modelName}': C_comp_gnd_clamp {Typ|Min|Max} value {Ccomp}pF out of expected range ({minC}pF,{maxC}pF)
		[UNUSED}
E1800	CIRCUIT_ERR_0	(line {lineNum}) - Too Many Signal Pins (only one instance of Signal_pin,Diff_signal_pins, or Series_pins is allowed)
E1801	CIRCUIT_ERR_1	(line {lineNum}) - Redundant use of port
E1802	CIRCUIT_ERR_2	(line {lineNum}) - Use of reserved port in Port Map
B1803	CIRCUIT_ERR_3	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
E1804	CIRCUIT_ERR_4	(line {lineNum}) - Illegal parameter
E1805	CIRCUIT_ERR_5	(line {lineNum}) - Not Enough arguments to {paramName}
E1806	CIRCUIT_ERR_6	(line {lineNum}) - Extra Charaters on PIN line

Code	Symbol	Message/Comments
E1807	CIRCUIT_ERR_7	(line {lineNum}) - Missing port or pad name in Port_map
E1808	CIRCUIT_ERR_8	(Line {lineNum}) No [External Circuit] {cktName} for [Circuit Call]
B1809	CIRCUIT_ERR_9	Node not found {nodeName} {sourceFile} {sourceLinenum}\n
		[UNUSED]
B1810	CIRCUIT_ERR_10	should not be here {sourceFile} {sourceLinenum}
		The code has a bug
B1811	CIRCUIT_ERR_11	should not be here
		The code has a bug
B1812	CIRCUIT_ERR_12	should not get here
		The code has a bug
B1813	CIRCUIT_ERR_13	should not be here {fileName} {lineNum} {sourceFile} {sourceLinenum}\n
		The code has a bug
B1814	CIRCUIT_ERR_14	should not get here {sourceFile} {sourceLinenum}
		The code has a bug
E1815	CIRCUIT_ERR_15	[CIRCUIT CALL] Line: Redundant use of port
E1816	CIRCUIT_ERR_16	CCALL Line A2D Line Illegal connection,2 analog reference/driver ports = =
E1817	CIRCUIT_ERR_17	Circuit Call Line {cktLinenum} instantiates External Circuit at {cktdefLinenum} with Floating Internal Node type {nodeType}
E1818	CIRCUIT_ERR_18	Internal Node ,External Circuit at {lineNum}: is analog and digital
E1819	CIRCUIT_ERR_19	CCALL Line A2D Line Illegal connection,\n2 analog reference/driver ports = ={temp1}{temp2}
B1820	CIRCUIT_ERR_20	should not get here {sourceFile} {sourceLinenum}\n
E1821	CIRCUIT_ERR_21	Component Floating Node (1 connection){cktCall}

Code	Symbol	Message/Comments
W1822	CIRCUIT_ERR_22	Component Unused Node (0 connection){cktCall}
E1823	CIRCUIT_ERR_23	Component Floating Pin (no connections but used in CIRCIUT CALL)
E1824	CIRCUIT_ERR_24	Component {compName} Node : is analog and digital{digitalOrAnalog}
E1825	CIRCUIT_ERR_25	Component Node: has a digital receiver but no digital driver{portName}
W1826	CIRCUIT_ERR_26	Component Node: has a digital receiver but no obvious digital driver\nThis indicates connection to a AMS port that 'may' be digital {portName}
E1827	CIRCUIT_ERR_27	Component Node: has a digital driver but no digital receiver{portName}
W1828	CIRCUIT_ERR_28	Component Node: has a digital driver but no obvious digital receiver\nThis indicates connection to a AMS port that 'may' be digital {portName}
E1829	CIRCUIT_ERR_29	Component Node: has no defined drivers{portName}
E1830	CIRCUIT_ERR_30	Component Node: has a analog receiver but no analog driver{portName}
W1831	CIRCUIT_ERR_31	Component Node: has a analog receiver but no obvious analog driver\nThis indicates connection to a AMS port that 'may' be analog {portName}
E1832	CIRCUIT_ERR_32	Component Node: has a analog driver but no analog receiver{portName}
W1833	CIRCUIT_ERR_33	Component Node: has a analog driver but no obvious analog receiver\nThis indicates connection to a AMS port that 'may' be analog {portName}
E1834	CIRCUIT_ERR_34	Component Pin Used as Digital in CIRCUIT CALL(s)(pins are analog){portName}
E1835	CIRCUIT_ERR_35	is connect to a reserved port
		[UNUSED}
E1836	CIRCUIT_ERR_36	Component Pin Used as Digital in CIRCUIT CALL(s)(pins are analog)

Code	Symbol	Message/Comments
		[UNUSED}
E1837	CIRCUIT_ERR_37	Component Node Used as Analog and Digital in CIRCUIT CALL(s)
		[UNUSED}
E1838	CIRCUIT_ERR_38	(line {lineNum}) No [External Circuit] for [Circuit Call] {cktCall} in Component {compName}
E1839	CIRCUIT_ERR_39	CMPT ,[Circuit Call] at (line {cktLinenum}) refererences illegal pin:
E1840	CIRCUIT_ERR_40	[Circuit Call] at (line {lineNum}) first reference pin is not declared CIRCUITCALL in [Pin] section
E1841	CIRCUIT_ERR_41	[Circuit Call] at (line {lineNum}) second reference pin is not declared CIRCUITCALL in [Pin] section
E1842	CIRCUIT_ERR_42	CMPT ,[CIRCUIT CALL] at (line {lineNum}) references same pin twice:
E1843	CIRCUIT_ERR_43	CMPT ,[CIRCUIT CALL] at (line {lineNum}) no reference pin (need Signal_pin, Diff_signal_pins,Series_pins)
		[UNUSED}
E1844	CIRCUIT_ERR_44	Circuit : Floating User Defined Digital Port
		[UNUSED}
E1845	CIRCUIT_ERR_45	[Circuit Call] at (line {lineNum}),no port in [External Circuit] {cktCall}
E1846	CIRCUIT_ERR_46	[Circuit Call] at (line {lineNum}),no node/pin in Component {compName}
E1900	CMN_ERR_0	File Name Requires '.ibs' Extension.
		The input file name was specified with an extension other than then the expected '.ibs'
E1901	CMN_ERR_1	Unable to append filename extension.
		The input file name was specified without an extension but the base filename length and the '.ibs' extension length together become greater than the allowed filename length (ie; 1024 characters)
E1902	CMN_ERR_2	File Name Requires '.ebd' Extension.
		The input file name was specified with an extension other than then the expected '.ebd'

Code	Symbol	Message/Comments
E1903	CMN_ERR_3	File Name Requires '.pkg' Extension.
		The input file name was specified with an extension other than then the expected '.pkg'
E1904	CMN_ERR_4	Unable to assemble filename.
		The input file directory path length and the input filename length together become greater than the allowed filename length (ie; 1024 characters)
E1905	CMN_ERR_5	Unable To Open File '{filePath}{fileName}'
		There was an error trying to open the file
E1906	CMN_ERR_6	Memory allocation failed. This request {size}.\n
		The code failed to allocate bytes of memory
E1907	CMN_ERR_7	Memory reallocation failed. This request {size}.\n
		The code failed to reallocate bytes of memory
B1908	CMN_ERR_8	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
E1909	CMN_ERR_9	(line {lineNum}) - Invalid {columnName} Value (\"{actualValue}\")
		A numeric value or "NA" was expected for column but the value specified was invalid
W1910	CMN_ERR_10	(line {lineNum}) - Suspicious {columnName} {paramName} Value (\"{actualValue}\"), Numeric in Scale
		The numeric value for parameter was somewhat incorrect (possibly in the scale factor)
E1911	CMN_ERR_11	(line {lineNum}) - Duplicate '{keyword}' keyword.
		A keyword has been defined more than once
E1912	CMN_ERR_12	(line {lineNum}) - {keyword} string '{value}' is too long,truncating to {maxChars} characters.
		The value specified for keyword was too long and was trucated to characters
E1913	CMN_ERR_13	(line {lineNum}) - Zero length value for keyword '{keyword}'.
		The value specified for keyword was an empty string
E1914	CMN_ERR_14	(line {lineNum}) - {keyword} string '{value}' is too long,maximum length {maxChars} allowed.
		The value specified for keyword was too long (more than characters)
E1915	CMN_ERR_15	Required keyword '{keyword}' not found in file '{fileName}'.
		The mandatory keyword was not specified in input file
E1916	CMN_ERR_16	(line {lineNum}) - Illegal use of Reserved Word '{reservedWord}'.
		A reserved word was used inappropriately
E1917	CMN_ERR_17	(line {lineNum}) - Found illegal {type} character (code {hexCode}).{message}

Code	Symbol	Message/Comments
		An invalid character of type of hex code was found in the input which could be converted to a space character as per the message
E1918	CMN_ERR_18	(line {lineNum}) - Unexpected '=' found
		A character '=' was found where not expected
E1919	CMN_ERR_19	(line {lineNum}) - Unexpected token '{text}' found in R/L/C section
		A token other than Len; R; L or C was found
E1920	CMN_ERR_20	(line {lineNum}) - Premature end of R/L/C section
		A complete line was not specified
E1921	CMN_ERR_21	(line {lineNum}) - Error parsing R/L/C section. Missing '='
		The character '=' was expected but not found
E1922	CMN_ERR_22	(line {lineNum}) - Illegal number found '{text}'
		An invalid numberic value was found
E1923	CMN_ERR_23	(line {lineNum}) - Numerical value expected
		A number was expected but not found
E1924	CMN_ERR_24	File Name Requires '.ami' Extension.
		An AMI file name requires a ".ami" extension

4.5 MESSAGE CODES 2000 TO 2499

Code	Symbol	Message/Comments
E2000	WVFRM_ERR_0	(line {lineNum}) - More than 100 {rowType}s are defined
B2001	WVFRM_ERR_1	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B2002	WVFRM_ERR_2	Unable to Parse {errorString}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2003	WVFRM_ERR_3	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2004	WVFRM_ERR_4	{fixtureName} Not Defined For {waveName} Waveform Beginning on Line {lineNum}
		Fixture (R_fixture; V_fixture) was not defined for waveform defined on line
E2005	WVFRM_ERR_5	Require at least 2 Data Points for {waveName} Waveform Beginning at Line {lineNum}
		The waveform defined on line contains less than 2 points
E2006	WVFRM_ERR_6	{First|Last} {Typ|Min|Max} Value Cannot Be 'NA' for {waveName} Waveform Beginning at Line {lineNum}
		A general message indicating that the (the first or the last) (typValue; min or max) value for the waveform defined on line cannot be NA
E2007	WVFRM_ERR_7	First {Typ|Min|Max} Value should be the same as the Last for {waveName} Waveform Beginning at Line {lineNum}
		The first (typValue; minValue; max) value should be the same as the last value for the waveform (GND_Pulse or POWER_Pulse) defined on line
W2008	WVFRM_ERR_8	Found some {waveName} ({Typ|Min|Max}) offsets less than 0 for Table Beginning at Line {lineNum}
		The waveform (GND Pulse Table) defined on line has some offsets less than 0
W2009	WVFRM_ERR_9	Found some {waveName} ({Typ|Min|Max}) offsets greater than 0 for Table Beginning at Line {lineNum}
		The waveform (POWER Pulse Table) defined on line has some offsets greater than 0
E2010	WVFRM_ERR_10	(line {lineNum}) - SubParameters are not allowed in Golden Waveforms
		No fixture or dut subparams can be specified for Golden Waveforms
E2011	WVFRM_ERR_11	(line {lineNum}) - Unknown Line Among {waveName} Data
		A line was found in the Waveform which does not seem to be a valid line
B2012	WVFRM_ERR_12	Unable to Allocate Memory: {sourceFile} {sourceLinenum}

Code	Symbol	Message/Comments
		The code failed to allocate memory
E2013	WVFRM_ERR_13	(line {lineNum}) - {subparam} specified after beginning of timing data
		A sub param was found after timing data was already specified
E2014	WVFRM_ERR_14	(line {lineNum}) - Duplicate definition for {keyword} {subparam}
		The sub parameter was multiply defined in waveform
E2015	WVFRM_ERR_15	(line {lineNum}) - Invalid {keyword} line
		A data line has a syntax error in waveform
W2016	WVFRM_ERR_16	(line {lineNum}) - Suspicious {waveName} {paramName} Value (\"{actualValue}\"), Numeric in Scale
		The numeric value for parameter of waveform was somewhat incorrect (possibly in the scale factor)
E2017	WVFRM_ERR_17	(line {lineNum}) - Invalid {waveName} Value (\"{badValue}\")
		A bad numeric value was found in waveform
E2018	WVFRM_ERR_18	(line {lineNum}) - More than {maxPoints} data points provided for {waveName} table
		More than data points were sepcified for waveform
E2019	WVFRM_ERR_19	'NA' not allowed for {lineNum} value
		The Time value in a wavefrom cannot have a value which is NA
E2020	WVFRM_ERR_20	(line {lineNum}) - Time value did not increase
		The Time values should always increase in a waveform
C2021	WVFRM_ERR_21	Model {modelName}: {Rise|Fall} Waveform [{waveNumber}] and its Composite Current don't have identical time points
		The "Rising" or "Falling" waveform ocurrence for model does not have identical timepoints with its [Composite Current] waveform
B2100	STRING_ERR_0	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B2101	STRING_ERR_1	Should not be here {sourceFile} {sourceLinenum}
		The code has a bug
B2200	TESTLOAD_ERR_0	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B2201	TESTLOAD_ERR_1	Unable to get IBIS structure
		Program data structures are corrupt
E2202	TESTLOAD_ERR_2	(line {lineNum}) - Orphan Test Load keyword.
		A [Test Load] keyword was found where not expected

Code	Symbol	Message/Comments
E2203	TESTLOAD_ERR_3	(line {lineNum}) - Orphan data line keyword.
		A data line for a [Test Load] keyword was found when no [Test Load] section was active
B2204	TESTLOAD_ERR_4	{sourceFile}:{sourceLinenum}:Illegal keyword.
		Program data structures are corrupt in program file
E2205	TESTLOAD_ERR_5	(line {lineNum}) - Orphan Data line.
		A data line for a [Test Load] keyword was found when no [Test Load] section was active
B2206	TESTLOAD_ERR_6	Unable to eat keyword : {sourceFile} {sourceLinenum}
		The code has a bugwhen trying to parse Testload
E2207	TESTLOAD_ERR_7	Unable to Save Test Load Name
		The code could not allocate the required memory
E2208	TESTLOAD_ERR_8	(line {lineNum}) - 'Test Load' Keyword Missing name
		The name was not specified on the [Test Load] keyword line
E2209	TESTLOAD_ERR_9	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For Keyword {keyword}: Expecting {numberOfItemsExpected}
		The keyword should have had items on the keyword line but only number of data items were found
E2210	TESTLOAD_ERR_10	(line {lineNum}) - Test Load Name Over {maxLength} Characters Long
		The name specified on the [Test Load] line is greater than (109) characters
E2211	TESTLOAD_ERR_11	(line {lineNum}) - Invalid Test Load Name (\"{name}\"), Reserved Word.
		A reserved word was used as the name for a [Test Load] section name
E2212	TESTLOAD_ERR_12	(line {lineNum}) - TestLoad Name Previously Defined (\"{name}\")
		A [Test Load] section with name is already defined
B2213	TESTLOAD_ERR_13	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2214	TESTLOAD_ERR_14	(line {lineNum}) - Unknown Line Among Test Load
		A line was found in the [Test Load] section wich was not a valid line
B2215	TESTLOAD_ERR_15	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
E2216	TESTLOAD_ERR_16	(line {lineNum}) - {Test_load_type} Already Defined For Test Load '{testloadName}'
		The Test_load_type is already defined for [Test Load]
E2217	TESTLOAD_ERR_17	(line {lineNum}) - '{Test_load_type}' Subparameter Missing Setting
		The value for the "Test_load_type" subparam is missing

Code	Symbol	Message/Comments
E2218	TESTLOAD_ERR_18	(line {lineNum}) - Invalid {Test_load_type} Line
		There is a syntax error on the "Test_load_type" data line
E2219	TESTLOAD_ERR_19	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2220	TESTLOAD_ERR_20	(line {lineNum}) - Invalid {subparam/keyword} (\"{badValue}\") (try \"{optionslist}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E2221	TESTLOAD_ERR_21	(line {lineNum}) - Invalid {Test_load_type} (\"{badValue}\")
		The Test_load_type has an illeagal value
E2222	TESTLOAD_ERR_22	(line {lineNum}) - {name} Name Over {maxLength} Characters Long
		[UNUSED}
E2223	TESTLOAD_ERR_23	(line {lineNum}) - Invalid {name} (\"{badValue}\"), Reserved Word.
		The Test Load subparam has an illegal value
E2224	TESTLOAD_ERR_24	Test Load '{testloadName}': {Test_load_type} Not Defined
		In the [Test Load[; the Test_load_type is not defined
E2225	TESTLOAD_ERR_25	Test Load '{testloadName}': If Td is specified then Zo must be specified also
		In the [Test Load} since Td is specified; then Zo must also be specified
E2226	TESTLOAD_ERR_26	Test Load '{testloadName}': V_term1 must be specified when Rp1_near or Rp1_far is specified
		In the [Test Load] since Rp1_near or Rp1_far are specified; V_term1 should be specified also
E2227	TESTLOAD_ERR_27	Test Load '{testloadName}': V_term2 must be specified when Rp2_near or Rp2_far is specified
		In the [Test Load] since Rp2_near or Rp2_far are specified; V_term2 should be specified also
W2228	TESTLOAD_ERR_28	Test Load '{testloadName}' : R_diff_near specified for Test_load_type which is not Differential
		In the [Test Load] which is not of type Differential; R_diff_near should not be specified
W2229	TESTLOAD_ERR_29	Test Load '{testloadName}' : R_diff_far specified for Test_load_type which is not Differential
		In the [Test Load] which is not of type Differential; R_diff_far should not be specified
W2230	TESTLOAD_ERR_30	Test Load '{testloadName}' : Receiver_model_inv specified for Test_load_type which is not Differential

Code	Symbol	Message/Comments
		In the [Test Load] which is not of type Differential; Receiver_model_inv should not be specified
B2231	TESTLOAD_ERR_31	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E2232	TESTLOAD_ERR_32	Test Load '{name}' references undefined models
		The Test Load references undefined models
E2233	TESTLOAD_ERR_33	Receiver_model '{rcvrModel}' in Test Load '{testloadName}' is not defined in the file
W2234	TESTLOAD_ERR_34	Driver_model '{rcvrModel}' in Test Load '{testloadName}' is not an input type.
		NOTE: Driver_model actually needs to be a Receiver_model
E2235	TESTLOAD_ERR_35	Receiver_model_inv '{rcvrModel}' in Test Load '{testloadName}' is not defined in the file
W2236	TESTLOAD_ERR_36	Receiver_model_inv '{rcvrModel}' in Test Load '{testloadName}' is not associated with a Differential Pin.
E2237	TESTLOAD_ERR_37	(line {lineNum}) - {subparam} Already Defined For Test Load
E2238	TESTLOAD_ERR_38	(line {lineNum}) - Invalid {subparam} Value (\"{value}\")
E2239	TESTLOAD_ERR_39	(line {lineNum}) - 'NA' Not Allowed For Typical Value
		The typical value in a Range cannot be NA
B2300	TESTDATA_ERR_0	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B2301	TESTDATA_ERR_1	Unable to get IBIS structure
		Program data structures are corrupt
E2302	TESTDATA_ERR_2	(line {lineNum}) - Orphan Test Data keyword.
E2303	TESTDATA_ERR_3	(line {lineNum}) - Orphan data line keyword.
E2304	TESTDATA_ERR_4	(line {lineNum}) - [Rising Waveform Near] Already Defined
E2305	TESTDATA_ERR_5	(line {lineNum}) - [Falling Waveform Near] Already Defined

Code	Symbol	Message/Comments
E2306	TESTDATA_ERR_6	(line {lineNum}) - [Rising Waveform Far] Already Defined
E2307	TESTDATA_ERR_7	(line {lineNum}) - [Falling Waveform Far] Already Defined
E2308	TESTDATA_ERR_8	(line {lineNum}) - [Diff Rising Waveform Near] Already Defined
E2309	TESTDATA_ERR_9	(line {lineNum}) - [Diff Falling Waveform Near] Already Defined
E2310	TESTDATA_ERR_10	(line {lineNum}) - [Diff Rising Waveform Far] Already Defined
E2311	TESTDATA_ERR_11	(line {lineNum}) - [Diff Falling Waveform Far] Already Defined
B2312	TESTDATA_ERR_12	{sourceFile}:{sourceLinenum}:Illegal keyword. *Program data structures are corrupt in program file*
E2313	TESTDATA_ERR_13	(line {lineNum}) - Orphan Data line.
B2314	TESTDATA_ERR_14	Unable to eat keyword : {sourceFile} {sourceLinenum}
E2315	TESTDATA_ERR_15	Unable to Save Test Data Name
E2316	TESTDATA_ERR_16	(line {lineNum}) - 'Test Data' Keyword Missing name
E2317	TESTDATA_ERR_17	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For Keyword {keyword}: Expecting {numberOfItemsExpected} *The keyword should have had items on the keyword line but only number of data items were found*
E2318	TESTDATA_ERR_18	(line {lineNum}) - Test Data Name Over {maxChars} Characters Long
E2319	TESTDATA_ERR_19	(line {lineNum}) - Invalid Test Data Name (\"{name}\"), Reserved Word.
E2320	TESTDATA_ERR_20	(line {lineNum}) - TestData Name Previously Defined (\"{name}\")

Code	Symbol	Message/Comments
B2321	TESTDATA_ERR_21	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2322	TESTDATA_ERR_22	(line {lineNum}) - Unknown Line Among Test Data
		A line was found in the [Test Data] section wich was not a valid line
B2323	TESTDATA_ERR_23	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
E2324	TESTDATA_ERR_24	{lineNum} Already Defined For Test Data '{keyword}'
E2325	TESTDATA_ERR_25	(line {lineNum}) - '{subparam}' Subparameter Missing Setting
E2326	TESTDATA_ERR_26	(line {lineNum}) - Invalid {subparam} Line
E2327	TESTDATA_ERR_27	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2328	TESTDATA_ERR_28	(line {lineNum}) - Invalid {subparam/keyword} (\"{badValue}\") (try \"{optionList}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E2329	TESTDATA_ERR_29	(line {lineNum}) - Invalid {subparam} (\"{value}\")
E2330	TESTDATA_ERR_30	(line {lineNum}) - {subparam} Name Over {maxChars} Characters Long
B2331	TESTDATA_ERR_31	Invalid {sourceFile} (\"{sourceLinenum}\"), Reserved Word.
E2332	TESTDATA_ERR_32	Test Data '{testdataName}': {testdataType} Not Defined
E2333	TESTDATA_ERR_33	Test Data '{testdataName}': Driver_model_inv can only be specified with Differential Test_data_type
E2334	TESTDATA_ERR_34	Test Data '{testdataName}': At least one Rising/Falling Waveform must be specified

Code	Symbol	Message/Comments
E2335	TESTDATA_ERR_35	Test Data '{testdataName}': Differential Rising/Falling Waveform can be specified only with Differential Test_data_type
B2336	TESTDATA_ERR_36	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E2337	TESTDATA_ERR_37	Test Data '{testdataName}' references undefined models
E2338	TESTDATA_ERR_38	Driver_model '{modelName}' in Test Data '{testdataName}' is not defined in the file
W2339	TESTDATA_ERR_39	Driver_model '{modelName}' in Test Data '{testdataName}' is not an output type.
E2340	TESTDATA_ERR_40	Driver_model_inv '{modelName}' in Test Data '{testdataName}' is not defined in the file
W2341	TESTDATA_ERR_41	Driver_model_inv '{modelName}' in Test Data '{testdataName}' is not associated with a Differential Pin.
E2342	TESTDATA_ERR_42	Test Data '{testdataName}' references undefined Test Loads
E2343	TESTDATA_ERR_43	Test Load '{testloadName}' referenced in Test Data '{testdataName}' is not defined in the file
E2344	TESTDATA_ERR_44	Test_data_type in Test Data '{testdataName}' is not the same as Test_load_type in referenced Test Load '{testloadName}'
B2400	SUBMDL_ERR_0	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B2401	SUBMDL_ERR_1	Unable to get IBIS structure {sourceFile} {sourceLinenum}
		Program data structures are corrupt
E2402	SUBMDL_ERR_2	(line {lineNum}) - Orphan Sub Model keyword.
E2403	SUBMDL_ERR_3	(line {lineNum}) - Orphan data line keyword.
E2404	SUBMDL_ERR_4	(line {lineNum}) - [GND Pulse Table] Already Defined

Code	Symbol	Message/Comments
E2405	SUBMDL_ERR_5	(line {lineNum}) - [POWER Pulse Table] Already Defined
E2406	SUBMDL_ERR_6	(line {lineNum}) - [Submodel Spec] should be specified before other keywords for a model
B2407	SUBMDL_ERR_7	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B2408	SUBMDL_ERR_8	Unable to eat keyword : {sourceFile} {sourceLinenum}
E2409	SUBMDL_ERR_9	Unable to Save Sub Model Name
E2410	SUBMDL_ERR_10	(line {lineNum}) - 'Sub Model' Keyword Missing name
E2411	SUBMDL_ERR_11	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For Keyword {keyword}: Expecting {numberOfItemsExpected}
		The keyword should have had items on the keyword line but only number of data items were found
E2412	SUBMDL_ERR_12	(line {lineNum}) - Sub Model Name Over {maxChars} Characters Long
E2413	SUBMDL_ERR_13	(line {lineNum}) - Invalid Sub Model Name (\"{submodelName}\"), Reserved Word.
E2414	SUBMDL_ERR_14	(line {lineNum}) - SubModel Name Previously Defined (\"{submodelName}\")
B2415	SUBMDL_ERR_15	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2416	SUBMDL_ERR_16	(line {lineNum}) - Unknown Line Among Sub Model Data
		A line was found in the [Sub Model] section wich was not a valid line
E2417	SUBMDL_ERR_17	{lineNum} Already Defined For Submodel '{submodelName}'
E2418	SUBMDL_ERR_18	'{lineNum}' Subparameter Missing Setting

Code	Symbol	Message/Comments
E2419	SUBMDL_ERR_19	Invalid {lineNum} Line
E2420	SUBMDL_ERR_20	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2421	SUBMDL_ERR_21	Invalid {lineNum} (\"{type}\") (try \"{optionList}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E2422	SUBMDL_ERR_22	Invalid {lineNum} (\"{type}\")
E2423	SUBMDL_ERR_23	Submodel '{submodelName}': {Submodel_type} Not Defined
E2424	SUBMDL_ERR_24	Submodel {submodelName}: [Submodel Spec] is required when Submodel_type is Bus_hold
E2425	SUBMDL_ERR_25	Submodel {submodelName}: [Submodel Spec] V_trigger_r is required when Submodel_type is Bus_hold
E2426	SUBMDL_ERR_26	Submodel {submodelName}: [Submodel Spec] V_trigger_f is required when Submodel_type is Bus_hold
E2427	SUBMDL_ERR_27	SubModel {submodelName}: Both Pullup and Pulldown cannot be specified when Off_delay is specified.
E2428	SUBMDL_ERR_28	Submodel {submodelName}: [Ramp] is required when Submodel_type is Bus_hold
E2429	SUBMDL_ERR_29	Submodel {submodelName}: Either [Pullup] or [Pulldown] is required when Submodel_type is Bus_hold
E2430	SUBMDL_ERR_30	Submodel {submodelName}: [Submodel Spec] V_trigger_f is required when GND_Pulse is specified
E2431	SUBMDL_ERR_31	Submodel {submodelName}: [Submodel Spec] V_trigger_r is required when POWER_Pulse is specified

Code	Symbol	Message/Comments
E2432	SUBMDL_ERR_32	Submodel {submodelName}: GND Pulse Table or POWER Pulse Table or GND Clamp or POWER Clamp is required when Submodel_type is Dynamic_clamp
E2433	SUBMDL_ERR_33	Submodel {submodelName}: [Submodel Spec] Off_delay cannot be specified with Dynamic_clamp submodels
E2434	SUBMDL_ERR_34	Submodel {submodelName}: [Submodel Spec] is required when Submodel_type is Fall_back
E2435	SUBMDL_ERR_35	Submodel {submodelName}: [Submodel Spec] V_trigger_r is required when Submodel_type is Fall_back
E2436	SUBMDL_ERR_36	Submodel {submodelName}: [Submodel Spec] V_trigger_f is required when Submodel_type is Fall_back
E2437	SUBMDL_ERR_37	Submodel {submodelName}: Either [Pullup] or [Pulldown] is required when Submodel_type is Fall_back
E2438	SUBMDL_ERR_38	Submodel {submodelName}: Pullup and Pulldown cannot both be specified with Fall_back submodels
E2439	SUBMDL_ERR_39	Submodel {submodelName}: [Ramp] is required when Submodel_type is Fall_back
E2440	SUBMDL_ERR_40	Submodel {submodelName}: [Submodel Spec] Off_delay cannot be specified with Fall_back submodels
W2441	SUBMDL_ERR_41	Submodel {submodelName}: V_trigger_r ({Typ|Min|Max}) is less than the start of Rising Waveform
W2442	SUBMDL_ERR_42	Submodel {submodelName}: V_trigger_r ({Typ|Min|Max}) is greater than the end of Rising Waveform
W2443	SUBMDL_ERR_43	Submodel {submodelName}: V_trigger_f ({Typ|Min|Max}) is greater than the start of Falling Waveform

Code	Symbol	Message/Comments
W2444	SUBMDL_ERR_44	Submodel {submodelName}: V_trigger_f ({Typ|Min|Max}) is less than the end of Falling Waveform
E2445	SUBMDL_ERR_45	SubModel {subModelName} has [Initial Delay] sub parameter {subparam} specified but it has no {section} *SubModel has [Initial Delay] sub-parametr (V-T; I-T) specified but the corressponding [Rising/Falling Waveform] or [Composite Current] is missing*

4.6 MESSAGE CODES 2500 TO 2999

Code	Symbol	Message/Comments
E2500	SSWCH_ERR_0	(line {lineNum}) - Unknown sub parameter '{subparam}'
E2501	SSWCH_ERR_1	(line {lineNum}) - Unable to add Series_Switch_Groups.
		Internal memory allocation error
E2502	SSWCH_ERR_2	(line {lineNum}) - No Group names specified on this line
E2503	SSWCH_ERR_3	(line {lineNum}) - Unable to allocate new Series Switch Group name.
		Memory allocation for a Series Switch Group name failed while trying to parse a [Series Switch] section
E2504	SSWCH_ERR_4	(line {lineNum}) - Series switch Group name '{groupName}' over {maxChars} characters long
E2505	SSWCH_ERR_5	(line {lineNum}) - Series switch Group name cannot be 'On' or 'Off'
E2506	SSWCH_ERR_6	(line {lineNum}) - Duplicate Series switch Group name '{groupName}'
W2507	SSWCH_ERR_7	Component: {compName} Series Switch Function '{function}' is used but not defined
E2600	SSWCH_ERR_8	(line {lineNum}) - Unable to allocate new SSWCH.
		Memory allocation for a Series Switch failed while trying to parse a [Series Switch] section
E2601	SPINMPG_ERR_0	(line {lineNum}) - Extra data columns on this line.
E2602	SPINMPG_ERR_1	(line {lineNum}) - No Pin1 specified.
		The data line in a [Series Pin Mapping] section has no Pin1 specified
E2603	SPINMPG_ERR_2	(line {lineNum}) - No Pin2 specified.
		The data line in a [Series Pin Mapping] section has no Pin2 specified
E2604	SPINMPG_ERR_3	(line {lineNum}) - No Model specified.
		The data line in a [Series Pin Mapping] section has no Model specified
E2605	SPINMPG_ERR_4	(line {lineNum}) - [Series Pin Mapping] Data lines must contain either 3 or 4 columns.
		The data line in a [Series Pin Mapping] section should have 3 values (if no function group is specified) or 4 values (if a function group is specified)

Code	Symbol	Message/Comments
E2606	SPINMPG_ERR_5	(line {lineNum}) - [Series Pin Mapping] When 4 columns are specified, the heading 'function_table_group' must be used.
		If a data line in a [Series Pin Mapping] section has 4 values then the keyword line should also have the heading function_table_group defined
B2607	SPINMPG_ERR_6	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E2608	SPINMPG_ERR_7	Component '{compName}': [Series Pin Mapping] Pin1 '{pinName}' not previously declared in Pin section.
		The Pin1 referred to in the [Series Pin Mapping] section of Component was not defiend in the [Pin] section of the component
E2609	SPINMPG_ERR_8	Component '{compName}': [Series Pin Mapping] Pin1 '{pinName}' has an unknown model.
		[UNUSED}
E2610	SPINMPG_ERR_9	Component '{compName}': [Series Pin Mapping] Pin1 '{pinName}' has model '{model}' which neither TERMINATOR nor NC.
		[UNUSED}
E2611	SPINMPG_ERR_10	Component '{compName}': [Series Pin Mapping] Pin1 '{pinName}' has Model '{model}' with unknown type.
		[UNUSED}
E2612	SPINMPG_ERR_11	Component '{compName}': [Series Pin Mapping] Pin2 '{pinName}' not previously declared in Pin section.
		The Pin2 referred to in the [Series Pin Mapping] section of Component was not defiend in the [Pin] section of the component
E2613	SPINMPG_ERR_12	Component '{compName}': [Series Pin Mapping] Pin2 '{pinName}' has an unknown model.
		[UNUSED}
E2614	SPINMPG_ERR_13	Component '{compName}': [Series Pin Mapping] Pin2 '{pinName}' has model '{model}' which neither TERMINATOR nor NC.
		[UNUSED}
E2615	SPINMPG_ERR_14	Component '{compName}': [Series Pin Mapping] Pin2 '{pinName}' has Model '{modelName}' with unknown type.
		[UNUSED}
E2616	SPINMPG_ERR_15	Component '{compName}': [Series Pin Mapping] Pin1 '{pinName}': model type cannot be Series or Series_switch.
		[UNUSED}
E2617	SPINMPG_ERR_16	Component '{compName}': [Series Pin Mapping] Pin2 '{pinName}': model type cannot be Series or Series_switch.
		[UNUSED}

Code	Symbol	Message/Comments
E2618	SPINMPG_ERR_17	Component '{compName}': [Series Pin Mapping] Model '{modelName}' is not defined.
		The model referenced in the [Series Pin Mapping] of component is not defined
E2619	SPINMPG_ERR_18	Component '{compName}': [Series Pin Mapping] defined but [Pins] not defined.
		The component has a [Series Pin Mapping] section but no associated [Pin] section
E2620	SPINMPG_ERR_19	(line {lineNum}) - Unable to alloc new Series_Pin_Mapping.
		Internal memory allocation error
E2621	SPINMPG_ERR_20	Component '{compName}': [Series Pin Mapping] Model Selector '{modelSelectorName}' Model '{modelName}' is not of type Series_Switch.
		The model selector name referenced in the [Series Pin Mapping] section of component refers to a model which is not of type Series_switch
E2622	SPINMPG_ERR_21	Component '{compName}': [Series Pin Mapping] Model '{modelName}' is not of type Series_Switch.
		The model referenced in the [Series Pin Mapping] section of component is not of type Series_switch
E2623	SPINMPG_ERR_22	Component '{compName}': [Series Pin Mapping] Model Selector '{modelSelectorName}' Model '{modelName}' is not of type Series.
		The model selector name referenced in the [Series Pin Mapping] section of component refers to a model which is not of type Series_switch
E2624	SPINMPG_ERR_23	Component '{compName}': [Series Pin Mapping] Model '{modelName}' is not of type Series.
		The model referenced in the [Series Pin Mapping] section of component is not of type Series
W2625	SPINMPG_ERR_24	Component '{compName}': [Series Pin Mapping] Model Selector '{modelSelectorName}' Model '{modelName}' is of type Series so function_table_group '{groupName}' is ignored.
W2626	SPINMPG_ERR_25	Component '{compName}': [Series Pin Mapping] Model '{modelName}' is of type Series so function_table_group '{groupName}' is ignored.
E2627	SPINMPG_ERR_26	Component '{compName}': [Series Pin Mapping] Model Selector '{modelSelectorName}' Model '{modelName}' is of type Series_Switch so function_table_group is required.
E2628	SPINMPG_ERR_27	Component '{compName}': [Series Pin Mapping] Model '{modelName}' is of type Series_Switch so function_table_group is required.
E2629	SPINMPG_ERR_28	Component '{compName}': [Series Pin Mapping] Model Selector '{modelSelectorName}' Model '{modelName}' uses function {function} which is not defined.

Code	Symbol	Message/Comments
E2630	SPINMPG_ERR_29	Component '{compName}': [Series Pin Mapping] Model '{modelName}' uses function {function} which is not defined.
E2631	SPINMPG_ERR_30	Component '{compName}': [Series Pin Mapping] Model Selector '{modelSelectorName}' Model '{modelName}' is of unknown type.
		The model selector name referenced in the [Series Pin Mapping] section of component refers to a model whose model type is not known
E2632	SPINMPG_ERR_31	Component '{compName}': [Series Pin Mapping] Model '{modelName}' is of unknown type.
		The model referenced in the [Series Pin Mapping] section of component is of unknown model type
E2700	SMSPEC_ERR_0	(line {lineNum}) - Sub Model Specification: Already Defined for this sub model
B2701	SMSPEC_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B2702	SMSPEC_ERR_2	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B2703	SMSPEC_ERR_3	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2704	SMSPEC_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2705	SMSPEC_ERR_5	Submodel {submodelName}: Empty Submodel Spec
		The [Submodel Spec] of submodel has no data defined
E2706	SMSPEC_ERR_6	(line {lineNum}) - Unknown Line Among Sub Model Spec Data
		A line was found in the [Sub Model Spec] section wich was not a valid line
E2707	SMSPEC_ERR_7	(line {lineNum}) - {range} Already Defined For Submodel '{submodelName}'
		The range (V_trigger_r; V_trigger_f or Off_delay) was multiply defined for submodel
E2708	SMSPEC_ERR_8	(line {lineNum}) - 'NA' not allowed for Typical value
		The typical value in a Range cannot be NA
W2709	SMSPEC_ERR_9	{value1}({corner1}) is not less than {value2}({corner2}) for Model Spec defined on line {lineNum}
		[UNUSED}

Code	Symbol	Message/Comments
E2800	SMOS_ERR_0	(line {lineNum}) - More than 100 [Series_MOSFET]s are defined
B2801	SMOS_ERR_1	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B2802	SMOS_ERR_2	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2803	SMOS_ERR_3	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2804	SMOS_ERR_4	Model {modelName}: Vds not specified for [Series MOSFET] defined on line {lineNum}
		Vds was not specified in the [Series MOSFET] section defined on line for model
E2805	SMOS_ERR_5	Model {modelName}: Vds should be >= 0 for [Series MOSFET] defined on line {lineNum}
		The Vds specified in the [Series MOSFET] section defined on line for model has a value which is less than 0
E2806	SMOS_ERR_6	Model {modelName} {keyword}: Found two Series_MOSFETs with identical Vds value {Vds}
E2807	SMOS_ERR_7	(line {lineNum}) - Unknown data line in Series_MOSFET
E2808	SMOS_ERR_8	(line {lineNum}) - Vds is already defined
		Vds was specified more than once in a [Series MOSFET] section
B2809	SMOS_ERR_9	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
E2810	SMOS_ERR_10	(line {lineNum}) - Invalid {Vds} Line
E2811	SMOS_ERR_11	Invalid {lineNum} Value (\"{value}\")
E2900	SINFO_ERR_0	(line {lineNum}) - {On|Off} Series Info: Already Defined for this model
B2901	SINFO_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B2902	SINFO_ERR_2	Should Not Be Here: {sourceFile},{sourceLinenum}

Code	Symbol	Message/Comments
		The code has a bug
B2903	SINFO_ERR_3	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E2904	SINFO_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E2905	SINFO_ERR_5	Model {modelName} {On|Off}: No series data found
E2906	SINFO_ERR_6	Model {modelName}: [Series_MOSFET] is not allowed in conjunction with the [Off] keyword
E2907	SINFO_ERR_7	Model {modelName} {On|Off}: Rl_series cannot be specified if L_series is not specified
E2908	SINFO_ERR_8	Model {modelName} {On|Off}: Rc_series cannot be specified if C_series is not specified
E2909	SINFO_ERR_9	Model {modelName} {On|Off}: Lc_series cannot be specified if C_series is not specified

4.7 MESSAGE CODES 3000 TO 3499

Code	Symbol	Message/Comments
E3000	SECT_ERR_0	(line {lineNum}) - Duplicate Len sub param in R/L/C section
		There should be a single Len sub param in R/L/C section
E3001	SECT_ERR_1	(line {lineNum}) - Len should not be less than zero
		The value of the Len subparam cannot be less than 0
E3002	SECT_ERR_2	(line {lineNum}) - Len should be specified before R
		The Len subaparam should be defined before the R subparam
E3003	SECT_ERR_3	(line {lineNum}) - Duplicate R sub param in R/L/C section
		There should be a single R subparam in an R/L/C section
E3004	SECT_ERR_4	(line {lineNum}) - R should not be less than zero
		The value of the R subparam cannot be less than 0
E3005	SECT_ERR_5	(line {lineNum}) - Len should be specified before L
		The Len subaparam should be defined before the L subparam
E3006	SECT_ERR_6	(line {lineNum}) - Duplicate L sub param in R/L/C section
		There should be a single L subparam in an R/L/C section
E3007	SECT_ERR_7	(line {lineNum}) - L should not be less than zero
		The value of the L subparam cannot be less than 0
E3008	SECT_ERR_8	(line {lineNum}) - Len should be specified before C
		The Len subaparam should be defined before the C subparam
E3009	SECT_ERR_9	(line {lineNum}) - Duplicate C sub param in R/L/C section
		There should be a single C subparam in an R/L/C section
E3010	SECT_ERR_10	(line {lineNum}) - C should not be less than zero
		The value of the C subparam cannot be less than 0
E3011	SECT_ERR_11	(line {lineNum}) - Empty R/L/C section found
E3012	SECT_ERR_12	(line {lineNum}) - L and C must be specified when Len != 0
		The L and C subparam are mandatory if the value of the Len subparam is non zero
E3013	SECT_ERR_13	(line {lineNum}) - Premature end of R/L/C section. Trailing '/' missing
		An R/L?C section should be terminated with a trailing '/'
B3014	SECT_ERR_14	Unable to Allocate Memory: {sourceFile} {sourceLinenum}

Code	Symbol	Message/Comments
		The code failed to allocate memory
E3100	ROW_ERR_0	(line {lineNum}) - Unable to find Pin in Package Model Pin_Number list.
E3101	ROW_ERR_1	(line {lineNum}) - Repeated ROW .
E3102	ROW_ERR_2	(line {lineNum}) - Expected Pin at matrix row index {row},found at matrix row index {row}.
E3103	ROW_ERR_3	(line {lineNum}) - Unable to convert row data.
W3104	ROW_ERR_4	(line {lineNum}) - Suspicious row data.
E3105	ROW_ERR_5	(line {lineNum}) - More row data than allowed for this row.
E3106	ROW_ERR_6	(line {lineNum}) - Unable to add row data.
		The code failed to allocate the required memory
E3107	ROW_ERR_7	(line {lineNum}) - Only {maxCols} columns of data allowed for this Row .
B3108	ROW_ERR_8	{sourceFile}:{sourceLinenum}:(uiNewColCount <= pLastRow->uiColumnCount
B3109	ROW_ERR_9	{sourceFile}:{sourceLinenum}:pRow->uiColumnCount > uiNewColumnCount
E3110	ROW_ERR_10	(line {lineNum}) - No Column Index.
E3111	ROW_ERR_11	(line {lineNum}) - This Row Column Index defines an entry in the lower matrix triangle.
B3112	ROW_ERR_12	{sourceFile}:{sourceLinenum}:(uiColIndex > pLastRow->uiColumnCount)
E3113	ROW_ERR_13	(line {lineNum}) - Duplicate Row column index {columnIndex}.
E3114	ROW_ERR_14	(line {lineNum}) - No row data.

Code	Symbol	Message/Comments
E3115	ROW_ERR_15	(line {lineNum}) - Excessive data ,only Index and Value should be specified for a Sparse_matrix.
E3116	ROW_ERR_16	Expected {lineNum} columns of Row data for [Row] {declaredColumns} in Matrix ending previous to this line,found {row} column{actualColumns}.
E3117	ROW_ERR_17	(line {lineNum}) - Expected at least one column of Row data for [Row] {pinName} in Matrix ending previous to this line.
E3118	ROW_ERR_18	(line {lineNum}) - [Row] {pinName} must contain a self-coupled index and entry.
E3119	ROW_ERR_19	(line {lineNum}) - Unable to add new matrix row.
E3120	ROW_ERR_20	(line {lineNum}) - Unknown PIN NUMBER.
E3121	ROW_ERR_21	(line {lineNum}) - PIN NUMBER string too long.
E3122	ROW_ERR_22	(line {lineNum}) - Unable to add new matrix row,expected column count = 0.
E3123	ROW_ERR_23	(line {lineNum}) - Unable to create pin entry array.
E3200	RCVTH_ERR_0	(line {lineNum}) - Receiver Threshold: Already Defined for this model
		There should be at most one [Receiver Thresholds] section in a model
B3201	RCVTH_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B3202	RCVTH_ERR_2	Should Not Be Here: {sourceFile}, {sourceLinenum}
		The code has a bug
B3203	RCVTH_ERR_3	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E3204	RCVTH_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items

Code	Symbol	Message/Comments
		were found
E3205	RCVTH_ERR_5	Model {modelName} Receiver Thresholds: Reference Supply must be specified when Threshold Sensitivity is specified
		The Reference_supply parameter is mandatory when the Threshold_sensitivity parameter is specified in the [Receiver Thresholds] section but it is not so for Model
W3206	RCVTH_ERR_6	Model {modelName} Receiver Thresholds: Vcross_low must be specified for differential receivers (Pin {pinName})
		The [Receiver Thresholds] section for Model does not have Vcross_low specified which is required for Pin which is a differential pin and associated with this model
W3207	RCVTH_ERR_7	Model {modelName} Receiver Thresholds: Vcross_high must be specified for differential receivers (Pin {pinName})
		The [Receiver Thresholds] section for Model does not have Vcross_high specified which is required for Pin which is a differential pin and associated with this model
W3208	RCVTH_ERR_8	Model {modelName} Receiver Thresholds: Vdiff_ac must be specified for differential receivers (Pin {pinName})
		The [Receiver Thresholds] section for Model does not have Vdiff_ac specified which is required for Pin which is a differential pin and associated with this model
W3209	RCVTH_ERR_9	Model {modelName} Receiver Thresholds: Vdiff_dc must be specified for differential receivers (Pin {pinName})
		The [Receiver Thresholds] section for Model does not have Vdiff_dc specified which is required for Pin which is a differential pin and associated with this model
W3210	RCVTH_ERR_10	Model {modelName} Receiver Thresholds: Tdiffslew_ac must be specified for differential receivers (Pin {pinName})
		The [Receiver Thresholds] section for Model does not have Tdiffslew_ac specified which is required for Pin which is a differential pin and associated with this model
W3211	RCVTH_ERR_11	Model {modelName} Receiver Thresholds: Vth must not be specified for differential receivers
		[UNUSED}
W3212	RCVTH_ERR_12	Model {modelName} Receiver Thresholds: Vth_min must not be specified for differential receivers
		[UNUSED}
W3213	RCVTH_ERR_13	Model {modelName} Receiver Thresholds: Vth_max must not be specified for differential receivers
		[UNUSED}
W3214	RCVTH_ERR_14	Model {modelName} Receiver Thresholds: Vinh_ac must not be specified for differential receivers
		[UNUSED}
W3215	RCVTH_ERR_15	Model {modelName} Receiver Thresholds: Vinl_ac must not be specified for differential receivers

Code	Symbol	Message/Comments
		[UNUSED}
W3216	RCVTH_ERR_16	Model {modelName} Receiver Thresholds: Vinh_dc must not be specified for differential receivers
		[UNUSED}
W3217	RCVTH_ERR_17	Model {modelName} Receiver Thresholds: Vinl_dc must not be specified for differential receivers
		[UNUSED}
W3218	RCVTH_ERR_18	Model {modelName} Receiver Thresholds: Tslew_ac must not be specified for differential receivers
		[UNUSED}
W3219	RCVTH_ERR_19	Model {modelName} Receiver Thresholds: Vth must be specified for single ended receivers
		Model is associated with single ended pins and hence Vth is mandatory
W3220	RCVTH_ERR_20	Model {modelName} Receiver Thresholds: Vinh_ac must be specified for single ended receivers
		Model is associated with single ended pins and hence Vinh_ac is mandatory
W3221	RCVTH_ERR_21	Model {modelName} Receiver Thresholds: Vinl_ac must be specified for single ended receivers
		Model is associated with single ended pins and hence Vinl_ac is mandatory
W3222	RCVTH_ERR_22	Model {modelName} Receiver Thresholds: Vinh_dc must be specified for single ended receivers
		Model is associated with single ended pins and hence Vinh_dc is mandatory
W3223	RCVTH_ERR_23	Model {modelName} Receiver Thresholds: Vinl_dc must be specified for single ended receivers
		Model is associated with single ended pins and hence Vinl_dc is mandatory
W3224	RCVTH_ERR_24	Model {modelName} Receiver Thresholds: Tslew_ac must be specified for single ended receivers
		Model is associated with single ended pins and hence Tslew_ac is mandatory
W3225	RCVTH_ERR_25	Model {modelName} Receiver Thresholds: Vcross_low must not be specified for single ended receivers
		[UNUSED}
W3226	RCVTH_ERR_26	Model {modelName} Receiver Thresholds: Vcross_high must not be specified for single ended receivers
		[UNUSED}
W3227	RCVTH_ERR_27	Model {modelName} Receiver Thresholds: Vdiff_ac must not be specified for single ended receivers
		[UNUSED}

Code	Symbol	Message/Comments
W3228	RCVTH_ERR_28	Model {modelName} Receiver Thresholds: Vdiff_dc must not be specified for single ended receivers
		[UNUSED}
W3229	RCVTH_ERR_29	Model {modelName} Receiver Thresholds: Tdiffslew_ac must not be specified for single ended receivers
		[UNUSED}
E3230	RCVTH_ERR_30	(line {lineNum}) - Unknown Line Among Receiver Threshold Data
		A line was found in the [Receiver Threshold] section wich was not a valid line
E3231	RCVTH_ERR_31	(line {lineNum}) - {paramName} Already Defined For Receiver Threshold
		The parameter has been defined more than once in a [Receiver Thresholds] section
E3232	RCVTH_ERR_32	(line {lineNum}) - Invalid {paramName} Line
		The data line for of [Receiver Thresholds] has an incorrect syntax
E3233	RCVTH_ERR_33	(line {lineNum}) - Invalid {paramName} Value (\"{paramValue}\")
		An invalid value was specified for parameter in a [Receiver Thresholds] section
E3234	RCVTH_ERR_34	(line {lineNum}) - Unknown Reference_supply {paramValue} specified
		The only allowed values for Reference_supply parameter are "Pullup_reference"; "Pulldown_reference"; "Power_clamp_reference"; "Gnd_clamp_reference"; "Ext_reference" but an invalid value was found
B3300	QUERY_ERR_0	Out of Memory
		Internal memory allocation error
B3400	PKGMDL_ERR_0	{sourceFile}:{sourceLinenum}:PKGMDL_Init unable to get IBIS?
		Program data structures are corrupt in program file
E3401	PKGMDL_ERR_1	(line {lineNum}) - Orphan Package Model keyword.
E3402	PKGMDL_ERR_2	(line {lineNum}) - Orphan Data Line.
B3403	PKGMDL_ERR_3	{sourceFile}:{sourceLinenum}:Illegal keyword.
		Program data structures are corrupt in program file
E3404	PKGMDL_ERR_4	(line {lineNum}) - Orphan Data line.
B3405	PKGMDL_ERR_5	{sourceFile}:{sourceLinenum}:Illegal line type received.
		Program data structures are corrupt in program file
B3406	PKGMDL_ERR_6	COMMAND.COM not available?

Code	Symbol	Message/Comments
		Could not fire the command interpreter for the underlying OS
B3407	PKGMDL_ERR_7	/bin/sh not available?
		Could not fire the command interpreter for the underlying OS
B3408	PKGMDL_ERR_8	tmpnam() failed.
		There is a bug in the code
B3409	PKGMDL_ERR_9	fopen({fileName}) failed.
		Open of a temp file failed
E3410	PKGMDL_ERR_10	Define_Package_Model '{defPkgModel}' is duplicated within the .ibs file.
E3411	PKGMDL_ERR_11	Resistance_Matrix cannot be specified when Number_Of_Sections is specified for Package Model {defPkgModel}.
E3412	PKGMDL_ERR_12	Inductance_Matrix cannot be specified when Number_Of_Sections is specified for Package Model {defPkgModel}.
E3413	PKGMDL_ERR_13	Inductance matrix not found for Package Model '{defPkgModel}'.
E3414	PKGMDL_ERR_14	Capacitance_Matrix cannot be specified when Number_Of_Sections is specified for Package Model {defPkgModel}.
E3415	PKGMDL_ERR_15	Capacitance matrix not found for Package Model '{defPkgModel}'.
E3416	PKGMDL_ERR_16	(line {lineNum}) - Unable to create new PKGMDL.
E3417	PKGMDL_ERR_17	Package Model keyword 'Define_Package_Model' not found or blank.
E3418	PKGMDL_ERR_18	OEM keyword not found for Package Model '{pkgModelName}'.
E3419	PKGMDL_ERR_19	Description keyword not found for Package Model '{pkgModelName}'.
E3420	PKGMDL_ERR_20	(line {lineNum}) - Blank Number_of_Pins value.

Code	Symbol	Message/Comments
E3421	PKGMDL_ERR_21	(line {lineNum}) - Duplicate Number_of_Pins keyword.
W3422	PKGMDL_ERR_22	(line {lineNum}) - Suspicious Number_of_Pins value.
E3423	PKGMDL_ERR_23	(line {lineNum}) - Bad Number_of_Pins value.
E3424	PKGMDL_ERR_24	(line {lineNum}) - Number_of_Pins = 0.
E3425	PKGMDL_ERR_25	(line {lineNum}) - Blank Number_of_Sections value.
E3426	PKGMDL_ERR_26	(line {lineNum}) - Duplicate Number_of_Sections keyword.
E3427	PKGMDL_ERR_27	(line {lineNum}) - Number of Sections should be specified before Pin Numbers
W3428	PKGMDL_ERR_28	(line {lineNum}) - Suspicious Number_of_Sections value.
E3429	PKGMDL_ERR_29	(line {lineNum}) - Bad Number_of_Sections value.
E3430	PKGMDL_ERR_30	(line {lineNum}) - Number_of_Sections = 0.
E3431	PKGMDL_ERR_31	Number_of_Pins keyword not found or value bad for Package Model '{pkgModelName}'.
E3432	PKGMDL_ERR_32	(line {lineNum}) - Pin Numbers name string too long. will be truncated.
E3433	PKGMDL_ERR_33	(line {lineNum}) - Number of Pins is zero,unable to add Pin Number.
E3434	PKGMDL_ERR_34	(line {lineNum}) - Unable to allocate Pin_Numbers array.
E3435	PKGMDL_ERR_35	(line {lineNum}) - More Pin Numbers names than Number of pins.
E3436	PKGMDL_ERR_36	(line {lineNum}) - Unable to allocate PIN.

Code	Symbol	Message/Comments
		Memory allocation for a new pin failed in the [Package Model] section
E3437	PKGMDL_ERR_37	(line {lineNum}) - Duplicate Pin .
E3438	PKGMDL_ERR_38	(line {lineNum}) - Detected the start of an orphan R/L/C section
E3439	PKGMDL_ERR_39	(line {lineNum}) - Cannot Nest Forks
E3440	PKGMDL_ERR_40	(line {lineNum}) - Detected the start of an orphan 'Fork'
E3441	PKGMDL_ERR_41	(line {lineNum}) - Detected the start of an orphan 'Endfork'
E3442	PKGMDL_ERR_42	(line {lineNum}) - Empty Fork/Endfork found
E3443	PKGMDL_ERR_43	(line {lineNum}) - Endfork found without enclosing Fork
E3444	PKGMDL_ERR_44	(line {lineNum}) - A new Pin {pinName} has been defined before terminating a previous Fork with the corresponding Endfork
W3445	PKGMDL_ERR_45	(line {lineNum}) - Found a Pin Name '{pinName}' containing '='. Possible syntax error
W3446	PKGMDL_ERR_46	(line {lineNum}) - Found a Pin Name '{pinName}' containing '/'. Possible syntax error
W3447	PKGMDL_ERR_47	(line {lineNum}) - Found a Pin Name '{pinName}'. Possible syntax error
E3448	PKGMDL_ERR_48	(line {lineNum}) - Unable to allocate Pin_Sections array.
E3449	PKGMDL_ERR_49	(line {lineNum}) - No Sections were defined for this pin even though [Number of Sections] was defined.
E3450	PKGMDL_ERR_50	Some Fork sub parameters were not terminated with Endfork
E3451	PKGMDL_ERR_51	Pin '{pin}' has {actualSections} sections. This is greater than the Number of Sections

Code	Symbol	Message/Comments
		{specSections} specified
E3452	PKGMDL_ERR_52	Required keyword Pin_Numbers not found for Package Model '{pkgModelName}'.
E3453	PKGMDL_ERR_53	No Pin Numbers names found for Package Model '{pkgModelName}'.
E3454	PKGMDL_ERR_54	Number of Pins not the same as count of Pin Numbers names found for Package Model '{pkgModelName}'.
E3455	PKGMDL_ERR_55	Required Model_Data keyword not found for package {defPkgModel}.
E3456	PKGMDL_ERR_56	Model_Data cannot be specified when Number_Of_Sections is specified for package {defPkgModel}.
E3457	PKGMDL_ERR_57	Required End_Model_Data keyword not found for package {defPkgModel}.
E3458	PKGMDL_ERR_58	End_Model_Data cannot be specified when Number_Of_Sections is specified for package {defPkgModel}.
E3459	PKGMDL_ERR_59	Required End_Package_Model keyword not found.
E3460	PKGMDL_ERR_60	(line {lineNum}) - Duplicate Resistance Matrix.
E3461	PKGMDL_ERR_61	(line {lineNum}) - Duplicate Inductance Matrix.
E3462	PKGMDL_ERR_62	(line {lineNum}) - Duplicate Capacitance Matrix.
B3463	PKGMDL_ERR_63	{sourceFile}:{sourceLinenum}:Illegal current matrix.
E3464	PKGMDL_ERR_64	(line {lineNum}) - Multiple Bandwidth keywords.
E3465	PKGMDL_ERR_65	(line {lineNum}) - Bandwidth keyword in wrong location.

Code	Symbol	Message/Comments
E3466	PKGMDL_ERR_66	(line {lineNum}) - Row keyword in wrong location.
E3467	PKGMDL_ERR_67	Keyword '{keyword}' not found or blank for Package Model '{pkgModelName}'.
E3468	PKGMDL_ERR_68	(line {lineNum}) - Duplicate '{keyword}' keyword found.
E3469	PKGMDL_ERR_69	(line {lineNum}) - Extraneous data on '{keyword}' line.
B3470	PKGMDL_ERR_70	Unable to remove({fileName}).
		Temporary file could not be removed.
E3471	PKGMDL_ERR_71	[Merged Pins] should be defined after [Pin Numbers] and before [Model Data]
		[Merged Pins] should be defined after [Pin Numbers] and before [Model Data]
E3472	PKGMDL_ERR_72	Package Model {pkgModelName}: [Merged Pins] can only be specified if [Model Data] is also specified
		Package has a [Merged Pins] section but no [Model Data] section
E3473	PKGMDL_ERR_73	[Merged Pins] Pin {pinName} not found in the [Pin Numbers] section
		The Merged Pin is not defined in the [Pin Numbers] section of the Package
E3474	PKGMDL_ERR_74	[Merged Pins] connecting Pin {pinName} must not be defined in [Pin Numbers] section
		The Pin connected to a Merging Pin was found in the [Pin Numbers] section of the Package
E3475	PKGMDL_ERR_75	No connecting pins found for [Merged Pins] defined on line {lineNum}
		No Pins were connected to the Merging Pin defined in the [Merged Pins] section on line

4.8 MESSAGE CODES 3500 TO 3999

Code	Symbol	Message/Comments
B3600	NODE_ERR_0	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
W3601	NODE_ERR_1	Component {compName}: Empty [Node Declarations] found
		The Component has an empty [Node Declarations] section
E3700	MTX_ERR_0	(line {lineNum}) - Unable to allocate MTX.
		The code failed to allocate the required memory
E3701	MTX_ERR_1	(line {lineNum}) - Matrix type not specified.
E3702	MTX_ERR_2	(line {lineNum}) - Unknown matrix type '{type}'.
E3703	MTX_ERR_3	(line {lineNum}) - Bandwidth only allowed for Banded Matrices
E3704	MTX_ERR_4	(line {lineNum}) - Bad Bandwidth value.
		An invalid numberc value was specified
E3705	MTX_ERR_5	(line {lineNum}) - Suspicious Bandwidth value.
E3706	MTX_ERR_6	(line {lineNum}) - Bandwidth must be less than Number_of_Pins .
B3707	MTX_ERR_7	(line {lineNum}) - gpMtx is NULL,cannot reset banded wrap type.
E3708	MTX_ERR_8	(line {lineNum}) - Bandwidth for this Banded, circle-back matrix exceeds the limit of {maxBandwidth}.
B3709	MTX_ERR_9	(line {lineNum}) - gpMtx->eMatrixType is alreaded banded wrap
B3710	MTX_ERR_10	(line {lineNum}) - gpMtx->eMatrixType is not a banded type,cannot reset banded wrap type.
B3711	MTX_ERR_11	(line {lineNum}) - gpMtx is NULL,cannot determine banded wrap type.
B3712	MTX_ERR_12	(line {lineNum}) - gpMtx->eMatrixType is not a banded type, cannot determine banded wrap

Code	Symbol	Message/Comments
		type.
B3713	MTX_ERR_13	(line {lineNum}) - gpMtx is NULL,cannot determine row count.
B3714	MTX_ERR_14	(line {lineNum}) - gpMtx is NULL,cannot determine bandwidth.
B3715	MTX_ERR_15	(line {lineNum}) - gpMtx is not banded type, cannot determine bandwidth.
E3716	MTX_ERR_16	The {matrixType} Matrix is Banded and requires the 'Bandwidth' keyword.
E3717	MTX_ERR_17	(line {lineNum}) - Expected {declaredRows} Rows,found {actualRows} for Matrix ending previous to this line.
B3718	MTX_ERR_18	(line {lineNum}) - gpMtx->eMatrixType is unknown,cannot determine CheckColumnCount.
E3719	MTX_ERR_19	Package {pkgModelName}: The {Resistance|Inductance|Capacitance} Matrix has diagonal element {value} at row {rowNum} which is negative
W3720	MTX_ERR_20	Package {pkgModelName}: The {Resistance|Inductance} Matrix has diagonal element {diagVal} at row {rowNum} whose magnitude is less than off diagonal element {offDiagVal} at col {colNum}
E3721	MTX_ERR_21	Package {pkgModelName}: The {Capacitance} Matrix has diagonal element {diagVal} at row {rowNum} whose magnitude is less than the sum of off diagonal elements {offDiagVal}
E3722	MTX_ERR_22	Package {pkgModelName}: The {Capacitance} Matrix has off-diagonal element {offDiagVal} at row {rowNum} col {colNum} which is positive
E3800	MSPEC_ERR_0	(line {lineNum}) - Model Specification: Already Defined for this model
B3801	MSPEC_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B3802	MSPEC_ERR_2	Should Not Be Here: {sourceFile},{sourceLinenum}

Code	Symbol	Message/Comments
		The code has a bug
B3803	MSPEC_ERR_3	Unable to Parse {subparam}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E3804	MSPEC_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
W3805	MSPEC_ERR_5	(line {lineNum}) - {subparam} should not be specified for model type {modelType}
		Indicates an illegal combination of Model Spec and the of the associated model. Vinl; Vinh; Vinl+; Vinl-; Vinh+ and Vinh- should be specified with model types which are input or I/O; S_overshoot_high; S_overshoot_low; D_overshoot_high; D_overshoot_low and D_overshoot_time should not be specified for Series and Series_switch; Pulse_high; Pulse_low and Pulse_time should be specified ith model types which are input or I/O; Vref; Rref; Cref; Vmeas; Vref_rising; Rref_rising; Cref_rising; Vmeas_rising; Vref_falling; Rref_falling; Cref_falling and Vmeas_falling should not be specified with Input; Input_ECL; Terminator; Series and Series_switch model types; Rref_diff and Cref_diff should be specified with Input_diff; I/O_diff; Output_diff and 3-state_diff.
E3806	MSPEC_ERR_6	(line {lineNum}) - Unknown Line Among Model Spec Data
		A line was found in the [Model Spec] section wich was not a valid line
E3807	MSPEC_ERR_7	(line {lineNum}) - {subparam} Already Defined For Model '{modelName}'
		The sub parameter is defined more than once in the [Model Spec] section of model
E3808	MSPEC_ERR_8	(line {lineNum}) - 'NA' not allowed for Typical value
		The typical value in a Range cannot be NA
W3809	MSPEC_ERR_9	All {lineNum} Hystereis Thresholds should be specified for Model Spec defined on line {modelSpecLinenum}
		Not all hysteresis thresholds (Vinl+; Vinl-; Vinh+; Vinh-) were defined in the [Model Spec] section which was defined on line
W3810	MSPEC_ERR_10	{subparam} is greater than zero for Model Spec defined on line {modelSpecLinenum}
		[UNUSED}
W3811	MSPEC_ERR_11	{subparam} is less than zero for Model Spec defined on line {modelSpecLinenum}
		[UNUSED}
E3812	MSPEC_ERR_12	{subparam1} requires {subparam2} to be specified for Model Spec defined on line {lineNum}
		A generic error message which indicates that must be specified when is sepcified for [Model Spec] defined on . D_overshoot_low requires S_overshoot_low and D_overshoot_time; D_overshoot_high requires S_overshoot_high and D_overshoot_time; Pulse_low requires Pulse_time and Thresholds or Hysteresis Thresholds; Pulse_high requires Pulse_time and Thresholds or Hysteresis Thresholds.
E3813	MSPEC_ERR_13	{subparam1} must be specified when {subparam2} is specified for [Model Spec] defined on line {modelSpecLinenum}

Code	Symbol	Message/Comments
		A generic error message which indicates that must be specified when is specified for [Model Spec] defined on . D_overshoot_area_h requires D_overshoot_ampl_h and D_overshoot_area_l requires D_overshoot_ampl_l.
W3814	MSPEC_ERR_14	orphan {subparam} found for Model Spec defined on line {modelSpecLinenum}
		A lone was specified for [Model Spec] defined on without other associated subparameters. Pulse_time was specified without Pulse_high or Pulse_low; or D_overshoot_time was specified without D_overshoot_high or D_overshoot_low
E3815	MSPEC_ERR_15	{subparam1} must be specified when {subparam2} is specified
		A generic error which indicates that must also be specified when is specified in a [Model Spec] section.Vmeas_rising requires Vmeas_falling and vice versa; Vref_rising requires Vref_falling and vice versa; Rref_rising requires Rref_falling and vice versa; Cref_rising requires Cref_falling and vice versa
E3816	MSPEC_ERR_16	{subparam1} must not be specified when {subparam2} is specified
		A generic error which indicates that must not be specified when is specified in a [Model Spec] section.Vmeas should not be specified when Vmeas_rising/falling are specified; Rref should not be specified when Rref_rising/falling are specified; Vref should not be specified when Vref_rising/falling are specified; Cref should not be specified when Cref_rising/falling are specified.
W3817	MSPEC_ERR_17	{subparam1}({rangeType1}) is not less than {subparam2}({rangeType2}) for Model Spec defined on line {lineNum}
		The should be less than for the [Model Spec] section defined on . D_overshoot_low should be less than S_overshoot_low; Pulse_low should be less than Vinl+; Pulse_low should be less than Vinh;
W3818	MSPEC_ERR_18	{subparam1}({rangeType1}) is not greater than {subparam2}({rangeType2}) for Model Spec defined on line {lineNum}
		The should be greater than for the [Model Spec] section defined on . D_overshoot_high should be greater than S_overshoot_high; Pulse_high should be greater than Vinl-; Pulse_high should be greater than Vinl
W3819	MSPEC_ERR_19	{subparam1}({rangeType1}) is not less than or equal to {subparam2}({rangeType2}) for Model Spec defined on line {lineNum}
		Unused
W3820	MSPEC_ERR_20	{subparam1}({rangeType1}) is not greater than or equal to {subparam2}({rangeType2}) for Model Spec defined on line {lineNum}
		The should not be less than for the [Model Spec] section defined on . Vinh+ should not be less than Vinh-; Vinl+ should not be less than Vinl-;
E3821	MSPEC_ERR_21	Weak_R and Weak_I cannot be specified together in Model Spec
		Both Weak_R and Weak_I values cannot be specified in a Model Spec
E3822	MSPEC_ERR_22	(Weak_R and Weak_V) or (Weak_I and Weak_V) must be specified in Model Spec
		Either the combination Weak_R; Weak_V or the combination Weak_I;Weak_V must be specified in a Model Spec
B3900	RNG_ERR_0	Unable to Parse {text}: {sourceFile} {sourceLinenum}

Code	Symbol	Message/Comments
		A generic error message which indicates that a parsing error related to
E3901	RNG_ERR_1	(line {lineNum}) - No {minimum|maximum} Value Was Provided for {subparam}
E3902	RNG_ERR_2	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
W3903	RNG_ERR_3	(line {lineNum}) - Typ value is not in between Min and Max
B3904	RNG_ERR_4	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory

4.9 MESSAGE CODES 4000 TO 4499

Code	Symbol	Message/Comments
B4000	MSEL_ERR_0	{sourceFile}:{sourceLinenum}:MSEL_Init unable to get IBIS?
		Program data structures are corrupt in program file
E4001	MSEL_ERR_1	(line {lineNum}) - Orphan Model Selector keyword.
		An unexpected [Model Selector] section was found
E4002	MSEL_ERR_2	(line {lineNum}) - Orphan Data Line.
		A [Model Selector] related data line was found outside of a [Model Selector] section
B4003	MSEL_ERR_3	{sourceFile}:{sourceLinenum}:Illegal keyword.
		Program data structures are corrupt in program file
B4004	MSEL_ERR_4	{sourceFile}:{sourceLinenum}:Illegal line type received.
		Program data structures are corrupt in program file
E4005	MSEL_ERR_5	Model Selector: '{modelSelectorName}' has no models defined
		The [Model Selector] section did not have any models defined in it
W4006	MSEL_ERR_6	Model Selector: '{modelSelectorName}' has only one model defined
		The [Model Selector] section has only one model defined in it
E4007	MSEL_ERR_7	(line {lineNum}) - Unable to create new MSEL.
		The code failed to allocate the required memory
E4008	MSEL_ERR_8	(line {lineNum}) - Unable to create new MSEL Model.
		The code failed to allocate the required memory
E4009	MSEL_ERR_9	Unable to Save Model Selector Name
		The code failed to allocate the required memory
E4010	MSEL_ERR_10	(line {lineNum}) - 'Model Selector' Keyword Missing name
		A [Model Selector] section should have a name defined on the keyword line
E4011	MSEL_ERR_11	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For Keyword {keyword}: Expecting {numberOfItemsExpected}
		The keyword should have had items on the keyword line but only number of data items were found
E4012	MSEL_ERR_12	(line {lineNum}) - Model Selector Name Over {maxChars} Characters Long
E4013	MSEL_ERR_13	(line {lineNum}) - Invalid Model SelectorName (\"{modelSelectorName}\"), Reserved Word.

Code	Symbol	Message/Comments
E4014	MSEL_ERR_14	(line {lineNum}) - Model Selector Name Previously Defined (\"{modelSelectorName}\")
		A [Model Selector] section with name should be defined at most once
B4015	MSEL_ERR_15	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E4016	MSEL_ERR_16	(line {lineNum}) - 'Model Selector' Keyword: Missing model name
E4017	MSEL_ERR_17	(line {lineNum}) - Model Name Over {maxChars} Characters Long
		[UNUSED}
E4018	MSEL_ERR_18	(line {lineNum}) - Invalid Model Name (\"NA\")
E4019	MSEL_ERR_19	(line {lineNum}) - Model Descriptor string '{descriptor}' is too long,truncating to {length} characters.
B4020	MSEL_ERR_20	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E4021	MSEL_ERR_21	'{modelSelectorName}' is the name of a Model and a Model Selector
		The Model Selector name is also the name of a Model in the file
W4022	MSEL_ERR_22	Model {modelName} in Model Selector {modelSelectorName} is Differential,but this Model Selector contains Single Ended models too
W4023	MSEL_ERR_23	Model {modelName} in Model Selector {modelSelectorName} is Single Ended, but this Model Selector contains Differential models too
E4024	MSEL_ERR_24	Model '{modelName}' in Model Selector '{modelSelectorName}' is not defined in the file
		The model referred to in the [Model Selector] section is not defined in the ibis file
E4025	MSEL_ERR_25	(line {lineNum}) - Model '{modelName}'. already used in this Model Selector
		A model name can be referred to at most once in a [Model Selector] section
W4026	MSEL_ERR_26	Model Selector '{modelSelectorName}' is not associated with any Pin or Series Pin Mapping
		The [Model Selector] has not been associated with any Pin or Series Pin Mapping (ie; it is unreferenced in the ibis file)
E4100	IBIS_ERR_0	Unable to create IBIS.
		Internal memory allocation error
E4101	IBIS_ERR_1	Required keyword 'Component' not found.

Code	Symbol	Message/Comments
		The [Component] keyword is mandatory in an IBIS file
E4200	DRVSH_ERR_0	(line {lineNum}) - Driver Schedule: Already Defined for this model
		More than one [Driver Schedule] section should not be defined for a model
B4201	DRVSH_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B4202	DRVSH_ERR_2	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B4203	DRVSH_ERR_3	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E4204	DRVSH_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E4205	DRVSH_ERR_5	Model '{modelName}': The [Driver_Schedule] has no models defined
		The [Driver Schedule] section for model is empty
W4206	DRVSH_ERR_6	Model '{model}': The [Driver_Schedule] has only one model defined
		The [Driver Schedule] section for model refers to only one model
E4207	DRVSH_ERR_7	Model {refModel} used in the Driver Schedule of Model {modelName} is not defined
		The model referred to in the [Driver Schdule] section of model is not defined
E4208	DRVSH_ERR_8	Model {refModel} used in the Driver Schedule of Model {modelName} cannot itself have a Driver Schedule
		The model referred to in the [Driver Schdule] section of model cannot itself have an associated driver schedule
E4209	DRVSH_ERR_9	Model {refModel} used in the Driver Schedule of Model {modelName} should be an output model
		The model referred to in the [Driver Schdule] section of model should be an output model type
E4210	DRVSH_ERR_10	Unable to Set Model Name in Driver Schedule
		Internal memory allocation error
E4211	DRVSH_ERR_11	(line {lineNum}) - 'Driver Schedule' Missing model Name
E4212	DRVSH_ERR_12	(line {lineNum}) - Model Name Over {maxChars} Characters Long

Code	Symbol	Message/Comments
E4213	DRVSH_ERR_13	(line {lineNum}) - Model Name in Driver Schedule is the same as enclosing Model (\"{modelName}\")
E4214	DRVSH_ERR_14	(line {lineNum}) - Invalid Model Name in Driver Schedule (\"{modelName}\"), Reserved Word.
		A reserved word was used as a model name in a [Driver Schedule] section
E4215	DRVSH_ERR_15	(line {lineNum}) - Model Name (\"{modelName}\") previously used in this Driver Schedule
		The model has been referred to more than once in a [Driver Schdedue] section
E4216	DRVSH_ERR_16	(line {lineNum}) - Unable to create new Driver Schedule Model.
		Internal memory allocation error
B4300	EBDMDL_ERR_0	{sourceFile}:{sourceLinenum}:EBDMDL_Init unable to get IBIS?
		Program data structures are corrupt in program file
E4301	EBDMDL_ERR_1	(line {lineNum}) - Orphan Electrical Board Description keyword.
E4302	EBDMDL_ERR_2	(line {lineNum}) - Orphan Data Line.
E4303	EBDMDL_ERR_3	(line {lineNum}) - Detected previous unterminated Forks
B4304	EBDMDL_ERR_4	{sourceFile}:{sourceLinenum}:Illegal keyword.
		Program data structures are corrupt in program file
B4305	EBDMDL_ERR_5	{sourceFile}:{sourceLinenum}:Illegal line type received.
		Program data structures are corrupt in program file
E4306	EBDMDL_ERR_6	Board Description '{ebdModel}' is duplicated within the .ebd file.
E4307	EBDMDL_ERR_7	(line {lineNum}) - Unable to create new EBDMDL.
		Memory allocation for a new EBD model failed
E4308	EBDMDL_ERR_8	Ebd Model keyword 'Begin_Board_Description' not found or blank.
E4309	EBDMDL_ERR_9	(line {lineNum}) - Duplicate [Number of Pins] keyword
		There should only be a single [Number of Pins] section in an EBD model
E4310	EBDMDL_ERR_10	(line {lineNum}) - Blank Number_of_Pins value.

Code	Symbol	Message/Comments
		The number of pins was not specified with the [Number of Pins] keyword
E4311	EBDMDL_ERR_11	(line {lineNum}) - Duplicate Number_of_Pins keyword.
		More than one [Number of Pins] keyword was found
W4312	EBDMDL_ERR_12	(line {lineNum}) - Suspicious Number_of_Pins value.
		The number of pins value has a partially incorrect format
E4313	EBDMDL_ERR_13	(line {lineNum}) - Bad Number_of_Pins value.
		The number of pins value could not be parsed
E4314	EBDMDL_ERR_14	(line {lineNum}) - Number_of_Pins = 0.
		The number of pins was specified as 0
E4315	EBDMDL_ERR_15	Number_of_Pins keyword not found or value bad for Ebd Model '{ebdModel}'.
E4316	EBDMDL_ERR_16	(line {lineNum}) - No Pin_name found .
E4317	EBDMDL_ERR_17	(line {lineNum}) - Pin name string too long. will be truncated.
E4318	EBDMDL_ERR_18	(line {lineNum}) - Number of Pins is zero,unable to add Pin Number.
E4319	EBDMDL_ERR_19	(line {lineNum}) - Unable to allocate Pin_Name array.
		The code failed to allocate the required memory
E4320	EBDMDL_ERR_20	(line {lineNum}) - More Pin Numbers names than Number of pins.
E4321	EBDMDL_ERR_21	(line {lineNum}) - Unable to allocate PIN.
		The code failed to allocate the required memory
E4322	EBDMDL_ERR_22	(line {lineNum}) - Duplicate Pin .
E4323	EBDMDL_ERR_23	(line {lineNum}) - No signal_name found
E4324	EBDMDL_ERR_24	(line {lineNum}) - signal_name too long. will be truncated.
E4325	EBDMDL_ERR_25	(line {lineNum}) - Unexpected data after signal_name.

Code	Symbol	Message/Comments
E4326	EBDMDL_ERR_26	Required keyword Pin_List not found.
E4327	EBDMDL_ERR_27	No Pin Numbers names found.
E4328	EBDMDL_ERR_28	Pin '{pinName}' was not referenced on any Electrical Path
W4329	EBDMDL_ERR_29	Pin '{pinName}' was referenced on Electrical Paths but is implicitly connected to a power or a gnd plane
E4330	EBDMDL_ERR_30	Pin '{pin}' was referenced {count} times on Electrical Paths
E4331	EBDMDL_ERR_31	Number of Pins not the same as count of Pin Numbers names found .
E4332	EBDMDL_ERR_32	Required End_Board_Description keyword not found.
E4333	EBDMDL_ERR_33	Keyword '{keyword}' not found or blank for Ebd Model '{ebdModel}'.
E4334	EBDMDL_ERR_34	(line {lineNum}) - Duplicate '{keyword}' keyword found.
E4335	EBDMDL_ERR_35	(line {lineNum}) - Extraneous data on '{keyword}' line.
E4336	EBDMDL_ERR_36	(line {lineNum}) - Duplicate [Pin List] keyword found.
E4337	EBDMDL_ERR_37	(line {lineNum}) - Unable to find 'signal_name' after [Pin List] keyword.
E4338	EBDMDL_ERR_38	(line {lineNum}) - 'signal_name' column header not found.
E4339	EBDMDL_ERR_39	(line {lineNum}) - Unrecognized data after 'signal_name'
E4340	EBDMDL_ERR_40	(line {lineNum}) - Unexpected '=' found

Code	Symbol	Message/Comments
E4341	EBDMDL_ERR_41	(line {lineNum}) - Unexpected '/' found
E4342	EBDMDL_ERR_42	(line {lineNum}) - Detected the start of an orphan R/L/C section
B4343	EBDMDL_ERR_43	Internal program bug in {sourceFile} at {sourceLinenum}
		[UNUSED]
E4344	EBDMDL_ERR_44	(line {lineNum}) - Detected the start of an orphan 'NC'
E4345	EBDMDL_ERR_45	(line {lineNum}) - Detected the start of an orphan 'Fork'
E4346	EBDMDL_ERR_46	(line {lineNum}) - Detected the start of an orphan 'Endfork'
E4347	EBDMDL_ERR_47	(line {lineNum}) - Empty Fork/Endfork found
E4348	EBDMDL_ERR_48	(line {lineNum}) - Endfork found without enclosing Fork
E4349	EBDMDL_ERR_49	(line {lineNum}) - No Pin Name found after Pin sub param
E4350	EBDMDL_ERR_50	(line {lineNum}) - No ref_designatior.pin found after Node sub param
E4351	EBDMDL_ERR_51	(line {lineNum}) - Detected an orphan 'Node' sub param
E4352	EBDMDL_ERR_52	(line {lineNum}) - Unknown token found: '{text}'
E4353	EBDMDL_ERR_53	(line {lineNum}) - Unable to create new EBDPATH.
		The code failed to allocate the required memory
E4354	EBDMDL_ERR_54	(line {lineNum}) - Duplicate Path_Description '{path}'
E4355	EBDMDL_ERR_55	EBD Model '{ebdModel}' has no paths defined
E4356	EBDMDL_ERR_56	Path Descriptor '{path}' has no segments

Code	Symbol	Message/Comments
E4357	EBDMDL_ERR_57	Path {path} or a branch does not terminate after NC
E4358	EBDMDL_ERR_58	Pin '{pin}' used in Path '{path}' not defined
E4359	EBDMDL_ERR_59	Reference Designator '{refdes}' used in Path '{path}' not defined
E4360	EBDMDL_ERR_60	(line {lineNum}) - Could not allocate path element
		The code failed to allocate the required memory
E4361	EBDMDL_ERR_61	(line {lineNum}) - Pin_name string too long. will be truncated.
W4362	EBDMDL_ERR_62	(line {lineNum}) - Found a Pin Name '{pinName}' containing '/'. Possible syntax error
W4363	EBDMDL_ERR_63	(line {lineNum}) - Found a Pin Name '{pinName}' containing '='. Possible syntax error
W4364	EBDMDL_ERR_64	(line {lineNum}) - Found a Pin Name '{pinName}'. Possible syntax error
E4365	EBDMDL_ERR_65	(line {lineNum}) - Cannot allocate path element
		The code failed to allocate the required memory
E4366	EBDMDL_ERR_66	(line {lineNum}) - Cannot allocate path element pin
		The code failed to allocate the required memory
E4367	EBDMDL_ERR_67	(line {lineNum}) - Cannot allocate path element node
		The code failed to allocate the required memory
E4368	EBDMDL_ERR_68	(line {lineNum}) - Invalid Node specified. Missing '.'
E4369	EBDMDL_ERR_69	(line {lineNum}) - Node Reference designator string too long. will be truncated.
E4370	EBDMDL_ERR_70	(line {lineNum}) - Node Pin name string too long. will be truncated.
W4371	EBDMDL_ERR_71	(line {lineNum}) - Found a Node '{nodeName}' containing '='. Possible syntax error

Code	Symbol	Message/Comments
W4372	EBDMDL_ERR_72	(line {lineNum}) - Found a Node '{nodeName}' containing '/'. Possible syntax error
W4373	EBDMDL_ERR_73	(line {lineNum}) - Found a Node '{nodeName}'. Possible syntax error
E4374	EBDMDL_ERR_74	(line {lineNum}) - Cannot allocate reference designator *The code failed to allocate the required memory*
E4375	EBDMDL_ERR_75	(line {lineNum}) - Reference Designator name '{refdes}' too long. Will be truncated
E4376	EBDMDL_ERR_76	(line {lineNum}) - Duplicate Reference Designator '{refdes}'
E4377	EBDMDL_ERR_77	(line {lineNum}) - No Reference Designator name found
E4378	EBDMDL_ERR_78	(line {lineNum}) - File name '{fileName}' too long. Will be truncated
E4379	EBDMDL_ERR_79	(line {lineNum}) - No file name found
E4380	EBDMDL_ERR_80	(line {lineNum}) - Component name '{compName}' too long. Will be truncated
E4381	EBDMDL_ERR_81	Reference Designator '{refdes}' refers to the Component '{compName}' itself being defined
E4382	EBDMDL_ERR_82	(line {lineNum}) - Unknown data after component name
E4383	EBDMDL_ERR_83	(line {lineNum}) - No Component name found
E4384	EBDMDL_ERR_84	(line {lineNum}) - Invalid file name '{fileName}'. It has no extension
E4385	EBDMDL_ERR_85	(line {lineNum}) - Unknown file extension'{extension}'. Should be '.ibs' or '.ebd'
E4386	EBDMDL_ERR_86	(line {lineNum}) - File_name '{fileName}' contains an upper case character '{character}'.
E4387	EBDMDL_ERR_87	File_name '{fileName}' contains a character '{character}' that is illegal for DOS.

Code	Symbol	Message/Comments
E4388	EBDMDL_ERR_88	(line {lineNum}) - File_name '{fileName}' contains more than one period.
E4389	EBDMDL_ERR_89	Pin '{pin}' not found on Component '{compName}' in file '{fileName}'
E4390	EBDMDL_ERR_90	Component '{component}' not found in file '{fileName}'
E4391	EBDMDL_ERR_91	Unable to allocate PINREF.
		The code failed to allocate the required memory
E4392	EBDMDL_ERR_92	Unable to allocate FILEREF.
		The code failed to allocate the required memory
E4393	EBDMDL_ERR_93	Length of Pin '{pin}' referenced for Component '{compName}' is too long
E4394	EBDMDL_ERR_94	Ebd file '{ebdFilename}' recursively references the component {compName} in the calling Ebd file '{calledFilename}'

4.10 MESSAGE CODES 4500 TO 4999

Code	Symbol	Message/Comments
B4500	DLY_ERR_0	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to missing values
E4501	DLY_ERR_1	(line {lineNum}) - No {Rise|Fall_on|off_dly} Value Was Provided for {subparam}
E4502	DLY_ERR_2	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
B4503	DLY_ERR_3	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
E4504	DLY_ERR_4	(line {lineNum}) - At least two delays must be specified
		At least two numeric delays should be specified in a data line in a [Driver Schedule] section
E4505	DLY_ERR_5	(line {lineNum}) - {delayname1} and {delayname2} cannot be specified together
		delay and delay cannot be specified together in a data line in a [Driver Schedule] section (Rise_on_dly with Fall_off_dly and Rise_off_dly with Fall_on_dly)
E4506	DLY_ERR_6	(line {lineNum}) - {delayname} is less than zero
		The delay is less than 0 in a [Driver Schedule] section
E4507	DLY_ERR_7	(line {lineNum}) - [Driver Schedule] requires {delayname1} < or > {delayname2}
		Delay (Rise_on_dly) should not be equal to Delay (Rise_off_dly)
E4508	DLY_ERR_8	(line {lineNum}) - [Driver Schedule] requires {delayname1} < or > {delayname2}
		Delay (Fall_on_dly) should not be equal to Delay (Fall_off_dly)
E4509	DLY_ERR_9	(line {lineNum}) - [Driver Schedule] requires ({"Rise_on_dly"} < {"Rise_off_dly"} AND {"Fall_on_dly"} > {"Fall_off_dly"}) OR ({"Rise_on_dly"} > {"Rise_off_dly"} and {"Fall_on_dly"} < {"Fall_off_dly})
		(Rise_on_dly should be less than Rise_off_dly and Fall_on_dly should be greater than Fall_off_dly) OR (Rise_on_dly should be greater than Rise_off_dly and Fall_on_dly should be less than Fall_off_dly)
E4600	ALGMOD_ERR_0	Expected a branch but found '{child}' as a leaf of '{parent}'
		[UNUSED]
E4601	ALGMOD_ERR_1	(line {lineNum}) - Algorithmic Model: Already Defined for this model
		An [Algorithmic Model] section should be defined at most once for a model
B4602	ALGMOD_ERR_2	Unable to Allocate Memory: {sourceFile} {sourceLinenum}

Code	Symbol	Message/Comments
		The code failed to allocate memory
B4603	ALGMOD_ERR_3	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B4604	ALGMOD_ERR_4	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E4605	ALGMOD_ERR_5	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E4606	ALGMOD_ERR_6	The Number of Bits should be 32 or 64 for Platform {platform} and Compiler {compiler} for Algorithmic Model defined on line {lineNum}
		On the __bits line for the [Algorithmic Model] section defined on the bits should be 32 or 64
E4607	ALGMOD_ERR_7	Duplicate Sub-Parameter: Platform {platform} Compiler {compiler} Bits {bits} for Algorithmic Model defined on line {lineNum}
		A duplicate __ line for the [Algorithmic Model] defined on line has been found
B4608	ALGMOD_ERR_8	Unable to Parse {subparam}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E4609	ALGMOD_ERR_9	(line {lineNum}) - Unknown Line in Algorithmic Model
		A line was found in the [Algorithmic Model] section wich was not a valid line
E4610	ALGMOD_ERR_10	(line {lineNum}) - Could not parse Platform,Compiler,Bits for [Algorithmic Model] Executable Sub-parameter
		There was an error parsing the Platform_Compiler_Bits line
E4611	ALGMOD_ERR_11	(line {lineNum}) - Platform name too long {platform}
		The string is longer than 44 characters
E4612	ALGMOD_ERR_12	(line {lineNum}) - Compiler name too long {compiler}
		The string is longer than 44 characters
E4613	ALGMOD_ERR_13	(line {lineNum}) - Could not parse the Bits in {platform_bits_compiler} for [Algorithmic Model] Executable Sub-parameter
		Expected an integer for the number of bits in string
E4614	ALGMOD_ERR_14	Filename too long {fileName}
		The File_name subparameter string is longer than 44 characters
E4615	ALGMOD_ERR_15	Empty [Algorithmic Model] defined for Model {modelName}
		There was no data defined in an [Algorithmic Model] section for model

Code	Symbol	Message/Comments
E4616	ALGMOD_ERR_16	Code file {fileName} not found. It was defined in [Algorithmic Model] for Model {modelName}
		The code file associated with the[Algorithmic Model] section of model was not found
E4617	ALGMOD_ERR_17	AMI Parameter file {fileName} should have '.ami' extension.
		The Parameter file for the [Algorithmic Model] section defined for model should have an '.ami' extension
E4618	ALGMOD_ERR_18	AMI parameter file {fileName} not found. It was defined in [Algorithmic Model] for Model {modelName}
		The parameter file associated with the[Algorithmic Model] section of model was not found
E4619	ALGMOD_ERR_19	The Parameter file has mismatched parenthesis
		The number of open parenthesis '(' should be equal to the number of close parenthesis ')'
E4620	ALGMOD_ERR_20	The AMI parameter file should start with a parenthesis
		The first character in a parameter file should be an open parenthesis '('
B4621	ALGMOD_ERR_21	Internal error while parsing Parameter file
		There is a bug in the code which parses AMI parameter file
E4622	ALGMOD_ERR_22	No Reserved_Parameters found
		No (Reserved_Parameters) section was found
E4623	ALGMOD_ERR_23	Unknown branch {badSection} found
		An unknown section was found
E4624	ALGMOD_ERR_24	Unknown parameter {paramName} found as a child of {section}
		An unknown parameter was found in section
E4625	ALGMOD_ERR_25	{paramName} parameter is mandatory
		Parameter is mandatory
E4626	ALGMOD_ERR_26	{subparam}: Illegal format for {paramName}
		The format of (Usage; Default; Type) of parameter is incorrect
E4627	ALGMOD_ERR_27	Illegal {subparam} value {badValue} specified for {paramName}
		The value of (Usage; Default;Type) of parameter is illegal
E4628	ALGMOD_ERR_28	Found a branch {branchName} expecting a leaf for {paramName}
		A list was expected for param but a branch was found instead
E4629	ALGMOD_ERR_29	Unexpected parameter {subparam} specified for {paramName}
		[UNUSED}
E4630	ALGMOD_ERR_30	{subparam} is mandatory for {paramName}

Code	Symbol	Message/Comments
		(Usage; Type or Default) is mandatory for parameter
U4631	ALGMOD_ERR_31	{subparam1} or {subparam2} should be specified for Parameter {keyword}
		[UNUSED}
E4632	ALGMOD_ERR_32	{subparam}: Illegal Format for {paramName}. Expected {expected} number(s)
		The values for of parameter are incorrect. number of numeric values were expected
E4633	ALGMOD_ERR_33	{subparam}: Illegal Format for {paramName}. Expected {expected} integer(s)
		[UNUSED}
E4634	ALGMOD_ERR_34	Invalid syntax of branch or leaf. At least 2 elements expected in a list
		Any list should have at least 2 elements
E4635	ALGMOD_ERR_35	Too few nodes in branches or leaves
		There was a syntax error during parsing
E4636	ALGMOD_ERR_36	Algorithmic Model is not allowed for model {modelName} which is of type {modelType}
		Model is of type which is either Terminator; Series or Series_switch for which Algorithmic Model cannot be defined
E4637	ALGMOD_ERR_37	AMI_Version should be the first parameter under Reserved_Parameters
		If AMI_Version is specified; it should be the first parameter defined under the Reserved_Parameters sectioon
E4638	ALGMOD_ERR_38	AMI_Version {amiVersion} is not valid
		An invalid AMI Version was specified
E4639	ALGMOD_ERR_39	{paramName}: Both Format/Value and Default cannot be specified
		For AMI parameter a Format of type Value and a Default were specified
E4640	ALGMOD_ERR_40	{paramName}: {subparam} defined multiple times
		For AMI parameter the sub parameter was defined multiple times
E4641	ALGMOD_ERR_41	{paramName}: Either Format/Value or Default should be specified
		For AMI Parameter either a Format of type Value or a Default value must be specified
E4642	ALGMOD_ERR_42	{paramName}: defined multiple times
		The AMI parameter was defined multiple times
E4643	ALGMOD_ERR_43	Reserved_Parameters should precede Model_Specific
		The Reserved_Parameters section should be defined before the Model_Specific section in an AMI file
E4644	ALGMOD_ERR_44	{paramName}: Unexpected leaf {leafName} found
		An unexpected leaf was found under AMI parameter

Code	Symbol	Message/Comments
E4645	ALGMOD_ERR_45	Illegal format for {format} for param {paramName}. Expected {count} {type}
		The Format specified for parameter was found to be invalid. A total of tokens of type were expected.
E4646	ALGMOD_ERR_46	Use_Init_Output is only allowed for AMI version 5.0
		The Use_Init_Output section is not allowed for AMI Versions greater than 5.0
E4647	ALGMOD_ERR_47	{paramName} defined multiple times in Reserved_Parameters
		The parameter was defined multiple times under Reserved_Parameters section
E4648	ALGMOD_ERR_48	{paramName}: The {format} value {value} for Type {type} is invalid
		A generic message which indicates that for AMI Parameter for Format subparam the value specified for Type is invalid
E4649	ALGMOD_ERR_49	{subparam} is not allowed for {paramName}
		A generic message which indicates that the subparameter cannot be specified for AMI Parameter
E4650	ALGMOD_ERR_50	{paramName}: {subparam1} cannot be specified when {subparam2} is specified
		A generic message which indicates that for AMI Parameter ; the subparameter cannot be used in conjunction with subparameter
E4651	ALGMOD_ERR_51	{paramName}: The number of {tableFeature1} {count1} does not match the number of {tableFeature2} {count2} in Table
		A generic message which indicates that for AMI Parameter of Format Table; table feature has a count which does not match the count of table feature ; ie; number of lables; number of columns; number of types are mismatched
E4652	ALGMOD_ERR_52	Illegal format for Labels in Format Table for param {paramName}. Expected a string
		The Labels in Table definition for parameter were not found to be strings
E4653	ALGMOD_ERR_53	Labels should be defined before data rows in Format Table for param {paramName}.
		The Lables in Table definition for parameter were not defined before the rows of the table
E4654	ALGMOD_ERR_54	{paramName}: Format Table should contain at least one row
		The Table definition for parameter did not have any rows defined
E4655	ALGMOD_ERR_55	{paramName}: Format Table does not have same number of entries in all rows
		The Table definition for parameter contains rows with different number of columns
E4656	ALGMOD_ERR_56	{paramName}: Format Table cannot contain a branch
		The Table definition for parameter was found to contain a non leaf
E4657	ALGMOD_ERR_57	{paramName}: Format {format} typ value ({typValue}) is not in between min value ({minValue}) and max value ({maxValue})
		[UNUSED}

Code	Symbol	Message/Comments
E4658	ALGMOD_ERR_58	{paramName}: Format {format} min value ({minValue}) should be less than or equal to max value ({maxValue})
		[UNUSED}
E4659	ALGMOD_ERR_59	{paramName}: Format {format} {formatPart} ({value}) cannot be negative
		[UNUSED}
E4660	ALGMOD_ERR_60	{paramName}: Default value ({default}) is not in between Format {format} min value ({minValue}) and max value ({maxValue})
		[UNUSED}
E4661	ALGMOD_ERR_61	{paramName}: Default value ({default}) does not match Format Corner typ value ({typValue}) or min value ({minValue}) or max value ({maxValue})
		[UNUSED}
E4662	ALGMOD_ERR_62	{paramName}: Default value ({default}) is not in Format List
		For Format List for parameter ; the Default value must match one of the values defined in the list
E4663	ALGMOD_ERR_63	{paramName}: Table Format requires (Type Float) or (Type UI) or (Type Integer Float Float) or (Type Integer UI Float)
		For parameter ; for Format Table; the Type sub parameter can only be (Type Float) or (Type UI) or (Type Integer Float Float) or (Type Integer UI Float)
E4664	ALGMOD_ERR_64	Error Parsing ami file. An invalid token was found when a Leaf Node was expected
		A token was found when a Leaf node was expected during parsing
E4665	ALGMOD_ERR_65	{paramName}: Invalid parameter name. Type Tap requires Parameter name to be a signed integer
		The Parameter Name associated with type Tap should be a signed integer string
E4666	ALGMOD_ERR_66	{paramName}: Duplicate sub-branch {branchName} found
		ALGMOD_ERR_66
W4667	ALGMOD_ERR_67	{paramName}: A branch name cannot be the same as a sub-branch name
		[UNUSED}
E4668	ALGMOD_ERR_68	An unexpected token found around: {text}
		There was a syntax error during parsing near string
E4669	ALGMOD_ERR_69	Parameter '{paramname}' is not supported in AMI_Version {version}
		The Parameter is not specified in AMI files with version
E4670	ALGMOD_ERR_70	Parameter '{paramname}': The number of values in ListTip ({listtipnum}) does not match the number of values in List ({listnum})
		The Parameter is of Format List but the number of entries in the List does not match the number of entries in the associated ListTip

Code	Symbol	Message/Comments
E4671	ALGMOD_ERR_71	Parameter '{paramname}': Duplicate value '{listipval}' found in ListTip but the corresponding values in List ('{listval1}', '{listval2}') are not the same
		The Parameter is of Format List but there are two entries and which have the same associated ListTip value
E4672	ALGMOD_ERR_72	Parameter Repeater_Type {formatordefault} can only have values 'Redriver' or 'Retimer'
		The (Format or Default) value associated with AMI Parameter Repeater_Type can only be 'Redriver' or 'Retimer'
E4673	ALGMOD_ERR_73	Parameter GetWaveExists should be true when a Repeater_Type Retimer is specified
		If an AMI parameter Repeater_Type with value Retimer is specified in a parameter file; then the GetWaveExists parameter in the same file should have a value of True
E4674	ALGMOD_ERR_74	Parameter '{paramname}' value '{paramvalue}' contains back slashes '\\'
		The parameter (DLL_Path or Supporting_Files) has a value which contains a backslash '\' character
E4675	ALGMOD_ERR_75	Parameter '{paramname}' value '{paramvalue}' ends with a slash '/'
		The parameter (DLL_Path or Supporting_Files) has a value which ends with a slash '/' character
E4676	ALGMOD_ERR_76	Parameter '{paramname}' value '{paramvalue}' is invalid
		The parameter has an invalid value
E4677	ALGMOD_ERR_77	Parameter '{paramname}' row has more than 1 value: '{noofvalues}'
		The number of values in the table associated with parameter (Supporting Files) is more than 1 on some row (there should be one value on each row)
E4678	ALGMOD_ERR_78	Parameter '{paramname}' value cannot be dot '"."'
		The parameter (Supporting_Files) cannot have a value which is just a string containing a dot (".")
E4679	ALGMOD_ERR_79	Parameter '{paramname}' path '{paramvalue}' not found
		The parameter (Supporting_Files) specifies a path to a file which does not exist
E4680	ALGMOD_ERR_80	Parameter '{paramname}' ListTip value is not string '{listipval}'
		The parameter has an associated ListTip which has a non string value
E4681	ALGMOD_ERR_81	Parameter '{paramname}' ListTip value is invalid ''
		The parameter has ListTip specified in which one of the values is the empty (null) string
E4682	ALGMOD_ERR_82	Missing Root Name
		[UNUSED}
E4683	ALGMOD_ERR_83	Referenced parameter '{parmname}' not found in file '{fileName}'. {subparam} '{subparamname}' Ignored.
		[UNUSED}

Code	Symbol	Message/Comments
E4684	ALGMOD_ERR_84	No Reserved_Parameters or Model_Specific branches found
		[UNUSED}
E4685	ALGMOD_ERR_85	Reserved_Parameters branch is not allowed for non AMI parameter files
		[UNUSED}
E4686	ALGMOD_ERR_86	{paramname}: Usage should be Info or In for parameters in AMI files. ({subparam} '{subparamname}')
		[UNUSED}
E4687	ALGMOD_ERR_87	{paramname}: Usage should be Info for parameters in non-AMI files. ({subparam} '{subparamname}')
		[UNUSED}
E4688	ALGMOD_ERR_88	{paramname}: cannot be of Format Table, Guassian, Dual-Dirac, DjRj. ({subparam} '{subparamname}')
		[UNUSED}
E4689	ALGMOD_ERR_89	[Algorithmic Model] Sub parameter {subparam} is not allowed for model {modelname} which is of type {modeltype}
		Modle of type cannot use the subparam (Executable; Executable_Rx; Executable_Tx)
E4690	ALGMOD_ERR_90	Reserved Parameter {paramname} is '{input|output} only' and may not be used since another '{output|input} only' Reserved Parameter has already been used earlier in this file
		The Parameter is of type (Rx; Tx) but the parameter file has already been found to have an oppsite input out type
E4691	ALGMOD_ERR_91	Sub parameter {subparam} is associated with a parameter file {paramfile} which was found to have a direction '{input|output}-only'
		The (Executable_Rx) has to be associated with a parameter file of type and the (Executable_Tx) has to be associated with a parameter file of type
E4692	ALGMOD_ERR_92	{paramname}: Illegal {type} value {value} specified in {subparam}
		The value of type specified for subparam of parameter is invalid
E4693	ALGMOD_ERR_93	({paramtype} '{paramname}'): Usage cannot be Dep for referenced parameter '{filename}' in AMI file when the file is not referenced in the [Algorithmic Model] section of the containing Model
		The referenced parameter (Parameter; Converter Parameter) has a Usage Dep in Parameter file but is not referenced from within an [Algorithmic Model] section of a model
E4694	ALGMOD_ERR_94	({paramtype} '{paramname}'): Usage cannot be Dep for referenced parameter'{filename}' in AMI file when the file does not have a Resolve_Exists parameter with value True
		The referenced parameter (Parameter; Converter Parameter) has a Usage Dep in Parameter file but the file does not have Resolve Exists parameter with a value True
E4695	ALGMOD_ERR_95	A branch name cannot be empty

Code	Symbol	Message/Comments
		Every branchname in a parameter file should be a non empty string
E4696	ALGMOD_ERR_96	{paramname} is only allowed in IBIS Version 6.1 or greater
		Parameter is only allowed for IBIS versions greater than equal to 6.1
E4697	ALGMOD_ERR_97	PAM4_UpperThreshold and PAM4_LowerThreshold must be specified when Modulation is PAM4
		PAM4_UpperThreshold and PAM4_LowerThreshold must be specified when Modulation is PAM4 and the parameter file is of type Rx_only
W4698	ALGMOD_ERR_98	{value1} should be less than {value2}
		value1 (PAM4_CenterThreshold) should be less than value2(PAM4_UpperThreshold) and value1(PAM4_LowerThreshold) should be less than value2(PAM4_CenterThreshold)
E4699	ALGMOD_ERR_99	Model {modelname} of type {modeltype} is associated with a parameter file {filename} which was found to have a direction '{direction}-only'
		Model is of type but is associated with a Parameter file which was found to have direction (Rx; Tx)
E4700	ALGMOD_ERR_100	Model {modelname} of type {modeltype} is a receiver associated with parameter file {filename} which has Modulation PAM4 defined but PAM4_UpperThreshold and PAM4_LowerThreshold are not specified
		Model of type is a Receiver and is associated with a Parameter file which defines a PAM4 Modulation but does not define PAM4_UpperThreshold and PAM4_LowerThreshold
E4701	ALGMOD_ERR_102	Code file {filename} does not contain required AMI_Init() function
		An Executable file does not define the AMI_Init() function
E4703	ALGMOD_ERR_103	Code file {filename} does not contain required AMI_Close() function
		An Executable file does not define the AMI_Close() function
E4704	ALGMOD_ERR_104	Code file {filename} does not contain AMI_GetWave() function, required because GetWave_Exists=True in AMI file {amifilename}
		An Executable file does not define the AMI_GetWave() function which is required because the associated AMI parameter file has defined the parameter GetWave_Exists as true
E4705	ALGMOD_ERR_105	Code file {filename} does not contain AMI_Resolve() function, required because Resolve_Exists=True in AMI file {amifilename}
		An Executable file does not define the AMI_GetResolve() function which is required because the associated AMI parameter file has defined the parameter Resolve_Exists as true
E4706	ALGMOD_ERR_106	Code file {filename} does not contain AMI_Resolve_Close() function, required because Resolve_Exists=True in AMI file {amifilename}
		An Executable file does not define the AMI_GetResolveClose() function which is required because the associated AMI parameter file has defined the parameter Resolve_Exists as true
E4750	CMPNTEMI_ERR_0	

Code	Symbol	Message/Comments
		[UNUSED}
E4751	CMPNTEMI_ERR_1	(line {lineNum}) - {name} Already Defined For EMI Component
		CMPNTEMI_ERR_1
B4752	CMPNTEMI_ERR_2	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E4753	CMPNTEMI_ERR_3	(line {lineNum}) - [Emi Component] is already defined for this Component
		A [Begin EMI Component] section can be defined at most once in a component
E4754	CMPNTEMI_ERR_4	(line {lineNum}) - Unexpected data '{text}' found after the Keyword
		Some extraneous data was specified after the [Begin EMI Component] keyword where none was expected.
E4755	CMPNTEMI_ERR_5	(line {lineNum}) - Orphan keyword line.
		A [Begin EMI Component] keyword was found where it was not expected
E4756	CMPNTEMI_ERR_6	(line {lineNum}) - Orphan data line
		A data line identified as belonging to a [Begin EMI Component] section was found outside of such a section
B4757	CMPNTEMI_ERR_7	{sourceFile}:{sourceLinenum}:Illegal keyword passed to EMI Component.
		Program data structures are corrupt in program file
B4758	CMPNTEMI_ERR_8	{sourceFile}:{sourceLinenum}:Data for End EMI Component.
		Program data structures are corrupt in program file
B4759	CMPNTEMI_ERR_9	{sourceFile}:{sourceLinenum}:Unknown keyword received data.
		Program data structures are corrupt in program file
B4760	CMPNTEMI_ERR_10	{sourceFile}:{sourceLinenum}:Illegal line type passed to EMI Component.
		Program data structures are corrupt in program file
E4761	CMPNTEMI_ERR_11	(line {lineNum}) - [End EMI Component] expected
		A [Begin EMI Component] section should be terminated by a n [End EMI Component] keyword
W4762	CMPNTEMI_ERR_12	(line {lineNum}) - Empty Emi Component block found
		A [Begin EMI Component] was terminated with an [End EMI Component] keyword with no intervening data
E4763	CMPNTEMI_ERR_13	(line {lineNum}) - Unable to create new EMI Component.
		Memory allocation failed when trying to parse a [Begin EMI Component]
E4764	CMPNTEMI_ERR_14	(line {lineNum}) - C_Heatsink_gnd cannot be specified since C_Heatsink_float is already specified

Code	Symbol	Message/Comments
		A heat sink can be either floating or grounded
E4765	CMPNTEMI_ERR_15	(line {lineNum}) - C_Heatsink_float cannot be specified since C_Heatsink_gnd is already specified
		A heat sink can be either floating or grounded
E4766	CMPNTEMI_ERR_16	(line {lineNum}) - Unknown Line after [Begin EMI Component]
		A line was found in the [Begin EMI Component] section wich was not a valid line
B4767	CMPNTEMI_ERR_17	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
E4768	CMPNTEMI_ERR_18	(line {lineNum}) - '{paramName}' Subparameter Missing Setting
		The sub parameter has no associated value specified
E4769	CMPNTEMI_ERR_19	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
E4770	CMPNTEMI_ERR_20	(line {lineNum}) - Invalid {subparam/keyword} (\{badValue}\") (try \"{options}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E4771	CMPNTEMI_ERR_21	(line {lineNum}) - Invalid {paramName} (\{paramValue}\")
		The sub parameter has an invalid value specified
B4772	CMPNTEMI_ERR_22	Could not allocate memory in file {sourceFile} at line {sourceLinenum}
		Memory allocation failed
E4773	CMPNTEMI_ERR_23	(line {lineNum}) - Invalid {paramName} Line
		The sub parameter line has an invalid syntax
E4774	CMPNTEMI_ERR_24	(line {lineNum}) - [Pin Domain EMI]: Already Defined for this EMI Component
		The [Pin Domain EMI] section should be defined at most one in a [Begin EMI Component] section
E4775	CMPNTEMI_ERR_25	(line {lineNum}) - Expected 'percentage' parameter after keyword
		A [Pin Domain EMI] keyword should be followed by the the column header 'percentage'
E4776	CMPNTEMI_ERR_26	(line {lineNum}) - Unknown parameter '{badValue}': Expected 'percentage'
		A [Pin Domin EMI] keyword should be followed by the column header 'percentage' but an unexpected column header was found
E4777	CMPNTEMI_ERR_27	(line {lineNum}) - domain_name '{domainName}' is redefined
		The domain name was defined multiple times in a [Pin Domain EMI] section

Code	Symbol	Message/Comments
E4778	CMPNTEMI_ERR_28	(line {lineNum}) - Invalid percentage '{badValue}'. {maxLength}
		The percentage for a domain_name was specified using more than characters(where maxLength is 5)
E4779	CMPNTEMI_ERR_29	(line {lineNum}) - [Pin EMI]: Already defined for this EMI Component.
		A [Pin EMI] section should be dfined at most once in a [Begin EMI Component] section
E4780	CMPNTEMI_ERR_30	(line {lineNum}) - Unable to find column headers after [Pin EMI] keyword.
		The [Pin EMI] keyword should be followed by the column headers domain_name and clock_div
E4781	CMPNTEMI_ERR_31	(line {lineNum}) - '{columnHeader}' column header not found or out of order.
		The column header was expected on the [Pin EMI] keyword definition line but was not found or found out of order
E4782	CMPNTEMI_ERR_32	(line {lineNum}) - Unable to add data for [Pin EMI] keyword.
		There was an error parsing the data line specified in a [Pin EMI] section
E4800	MDLEMI_ERR_0	(line {lineNum}) - EMI Model: Already Defined for this model
		There can be at most one [Begin EMI Model] section in a model
E4801	MDLEMI_ERR_1	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {paramName}: Expecting {numberOfItemsExpected}
		The sub parameter should have had items on the keyword line but only number of data items were found
B4802	MDLEMI_ERR_2	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
B4803	MDLEMI_ERR_3	Should Not Be Here: {sourceFile},{sourceLinenum}
		The code has a bug
B4804	MDLEMI_ERR_4	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
E4805	MDLEMI_ERR_5	(line {lineNum}) - {paramName} is already specified for the EMI Model
		The subparameter has already been defined in a [Begin EMI Model] section
E4806	MDLEMI_ERR_6	(line {lineNum}) - '{paramName}' Subparameter Missing Setting
		The subparameter does not have a value specified
E4807	MDLEMI_ERR_7	(line {lineNum}) - Invalid {subparam/keyword} (\"{badValue}\") (try \"{options}\")
		A generic error message which indicates that a wrong value was specified for a particular . The user must specify from one of the
E4808	MDLEMI_ERR_8	(line {lineNum}) - Invalid {paramName} (\"{badparamValue}\")

Code	Symbol	Message/Comments
		The subparameter has an invalid value
E4900	PINEMI_ERR_0	(line {lineNum}) - Unable to add the line of Pin EMI data
		Memory allocation for a Pin EMI data structure failed
E4901	PINEMI_ERR_1	(line {lineNum}) - pin_name not found
		A data line in the [Pin EMI] section did not have the pin name specified
E4902	PINEMI_ERR_2	(line {lineNum}) - domain_name not found
		A data line in the [Pin EMI] section did not have the domain name specified
E4903	PINEMI_ERR_3	(line {lineNum}) - clock_div not found
		A data line in the [Pin EMI] section did not have clock div specified
E4904	PINEMI_ERR_4	(line {lineNum}) - clock_div should be at most {maxChars} characters long
		The value of clock_div can be at most 5 characters long
E4905	PINEMI_ERR_5	(line {lineNum}) - Unexpected data '{text}' after clock_div
		There was some extraneous data found at the end of a data line in the [Pin EMI] section
E4906	PINEMI_ERR_6	(line {lineNum}) - Duplicate Pin '{pinName}'
		The pin is referred to multiple times in a [Pin EMI] section
B4907	PINEMI_ERR_7	{sourceFile}:{sourceLinenum}:Unable to get IBIS?
		Program data structures are corrupt in program file
E4908	PINEMI_ERR_8	Component '{compName}': domain_name '{domainName}' found in [Pin Domain EMI] section was not associated with any pin_name in the [Pin EMI] section
		In component ; a domain name was defined in the [Pin Domain EMI] section but was not found to be associated with any pin in the [Pin EMI] section
E4909	PINEMI_ERR_9	Component '{compName}': pin_name '{pinName}' found in [Pin EMI] section was not found in the [Pin] section
		The pin referred to in the [Pin EMI] section of Component was not defined in the [Pin] section of the component
E4910	PINEMI_ERR_10	(line {lineNum}) - Unable to allocate new Pin EMI.
		Memory allocation error for a Pin EMI failed while trying to parse the [Pin EMI] section
E4911	PINEMI_ERR_11	(line {lineNum}) - Component '{compName}': Pin '{pinName}' is of model '{modelName}' and cannot be referened in a [Pin EMI] section
		The pin referred to in the [Pin EMI] section of component has a model type of "GND"; "NC"; "POWER"; "CIRCUITCALL" or "NA" and hence cannot be referenced in a [Pin EMI] section

4.11 MESSAGE CODES 5000 TO 5499

Code	Symbol	Message/Comments
E5000	CCORNER_ERR_0	(line {lineNum}) - [C Comp Corner] Already defined for this model
		A [C Comp Corner] section can only be defined once in a Model
B5001	CCORNER_ERR_1	Unable to Allocate Memory: {sourceFile} {sourceLinenum}
		The code failed to allocate memory
B5002	CCORNER_ERR_2	Should Not Be Here: {sourceFile}, {sourceLinenum}
		The code has a bug
B5003	CCORNER_ERR_3	Unable to Parse {text}: {sourceFile} {sourceLinenum}
		A generic error message which indicates that a parsing error related to
E5004	CCORNER_ERR_4	(line {lineNum}) - Incorrect Number of Line Items ({numberOfItemsFound}) For {keyword}: Expecting {numberOfItemsExpected}
		The keyword should have had items on the keyword line but only number of data items were found
E5005	CCORNER_ERR_5	(line {lineNum}) - Unknown line found among [C Comp Corner] data
		A line was found in the [C Comp Corner] section wich was not a valid line
E5006	CCORNER_ERR_6	(line {lineNum}) - [C Comp Corner] parameter {paramName} is already defined
		The subparameter occurs more than once in a [C Comp Corner] section
E5007	CCORNER_ERR_7	(line {lineNum}) - Typ value cannot be NA
		The typical value in a Range cannot be NA
W5008	CCORNER_ERR_8	(line {lineNum}) - {paramName}: Min value is not the smallest value listed
		[UNUSED}
W5009	CCORNER_ERR_9	(line {lineNum}) - {paramName}: Max value is not the largest value listed
		[UNUSED}
E5010	CCORNER_ERR_10	Model {modelName}: Empty [C Comp Corner] section
		There were no data lines in a [C Comp Corner] section for model
W5011	CCORNER_ERR_11	Model {modelName}: [C Comp Corner] C_comp should not be specified when C_comp_pullup, C_comp_pulldown, C_comp_power_clamp or C_comp_gnd_clamp is specified
		In model C_comp subparameter was sepcified in a [C Comp Corner] section even though the other sub parameters were also specified
E5012	CCORNER_ERR_12	(line {lineNum}) - [C Comp Corner] parameter {paramName}: {Typ|Min|Max} value cannot be negative
		The Corner value for sub parameter in a [C Comp Corner] section was less than 0
E5100	REPPIN_ERR_0	(line {lineNum}) - Unable to alloc REPPIN.

Code	Symbol	Message/Comments
		The code failed to allocate memory
E5101	REPPIN_ERR_1	(line {lineNum}) - Too many Repeater Pin data columns.
		Extraneous data was found while parsing a [Repeater_Pin] data line
E5102	REPPIN_ERR_2	(line {lineNum}) - No Repeater_Pin column entry.
		The pin column was missing while parsing a [Repeater_Pin] data line
E5103	REPPIN_ERR_3	(line {lineNum}) - No Repeater tx_non_inv_pin column entry.
		The tx_non_inv_pin column was missing while parsing a [Repeater_Pin] data line
E5104	REPPIN_ERR_4	(line {lineNum}) - Repeater_Pin column pin same as tx_non_inv_pin column pin.
		The pin specified cannot be the same as the tx_non_inv_pin specified on a [Repeater_Pin] data line
E5105	REPPIN_ERR_5	Component '{componentname}': Repeater_Pin '{pinname}' not previously declared in Pin section.
		The pin specified in a [Repeater Pin] section was not defined in the [Pin] section of Component
E5106	REPPIN_ERR_6;	Component '{componentname}': Repeater tx_non_inv_pin '{noninvpinname}' not previously declared in Pin section.
		The tx_non_inv_pin specified in a [Repeater Pin] section was not defined in the [Pin] section of Component
W5107	REPPIN_ERR_7	Component '{componentname}': Repeater_Pin '{pinname}' is not unique.
		The same pin is referenced more than once in the [Repeater Pin] section of Component
E5108	REPPIN_ERR_8	Component '{componentname}': Repeater tx_non_inv_pin '{noninvpinname}' already in use as a Repeater_pin.
		The tx_non_inv_pin was previously defined as a pin in the [Repeater Pin] section of Component
E5109	REPPIN_ERR_9	Component '{componentname}': Repeater_pin '{pinname}' already in use as an tx_non_inv_pin.
		The pin was previously defined as a tx_non_inv_pin in the [Repeater Pin] section of Component
E5110	REPPIN_ERR_10	Component '{componentname}': Repeater tx_non_inv_pin '{noninvpinname}' is not unique.
		The same tx_non_inv_pin is referenced more than once in the [Repeater Pin] section of Component
E5111	REPPIN_ERR_11	Component '{componentname}': Repeater_Pin '{pinname}' is not previously declared in Diff Pin section.
		The pin specified in a [Repeater Pin] section of component is not defined in the [Diff Pin] section of the component.
E5112	REPPIN_ERR_12	Component '{componentname}': Repeater tx_non_inv_pin '{noninvpinname}' is not

Code	Symbol	Message/Comments
		previously declared in Diff Pin section.
		The tx_non_inv_pin specified in a [Repeater Pin] section of component is not defined in the [Diff Pin] section of the component.
E5113	REPPIN_ERR_13	Component '{componentname}': Repeater_Pin '{pinname}' is not associated with a model which is of type Input or Input_Diff
		The pin specified in a [Repeater Pin] section of component is associated with a model which is not of type Input or Input_Diff
E5114	REPPIN_ERR_14	Component '{componentname}': Repeater tx_non_inv_pin '{noninvpinname}' is not associated with a model which is of type Output or Ouptut_Diff
		The tx_non_inv_pin specified in a [Repeater Pin] section of component is associated with a model which is not of type Output or Output_Diff
B5115	REPPIN_ERR_15	{fileName}:{linenumber}:Unable to get IBIS?
		Program data structures are corrupt in program file at
E5116	REPPIN_ERR_16	Component '{componentname}': Repeater_Pin '{pinname}' is associated with a model '{modelname}' which has no Algorithmic Model
		The pin specified in the [Repeater Pin] section of component is associated with a model which has no [Algorithmic Model] defined
E5117	REPPIN_ERR_17	Component '{componentname}': Repeater tx_non_inv_pin '{noninvpinname}' is associated with a model '{modelname}' which has no Algorithmic Model
		The tx_non_inv_pin specified in the [Repeater Pin] section of component is associated with a model which has no [Algorithmic Model] defined
E5118	REPPIN_ERR_18	Component '{componentname}': Repeater_Pin '{pinname}' is associated with a model '{modelname}' whose AMI Parameter file '{fileName}' does not have a Repeater_Type defined
		The pin specified in the [Repeater Pin] section of component is associated with a model whose [Algortihmic Model] refers to an AMI Parameter file which does not have the parameter Repeater_Type defined in it
B5200	PARAMFILE_ERR_0	{fileName}:{linenumber}:Unable to get IBIS.
		[UNUSED}
B5201	PARAMFILE_ERR_1	Unable to alloc PFILE.
		[UNUSED}
W5202	PARAMFILE_ERR_2	Parameter file name {fileName} does not seem to have an extension
		[UNUSED}
E5203	PARAMFILE_ERR_3	(line {lineNum}) - Parameter file name {fileName} invalid. '.ibs', '.ebd' or '.pkg' extensions are not allowed
		[UNUSED}
E5204	PARAMFILE_ERR_4	(line {lineNum}) - Parameter file {fileName} not found.

Code	Symbol	Message/Comments
		[UNUSED}
B5300	MPINS_ERR_0	Unable to Allocate Memory: {filename} {linenum}
		Memory allocation failed in program file at
E5301	MPINS_ERR_1	Unable to alloc MPIN
		Memory allocation failed
E5302	MPINS_ERR_2	Unable to save [Merged Pins] Pin
		Parsing of [Merged Pins] failed
E5303	MPINS_ERR_3	Unable to parse [Merged Pins] Pin not found
		The MergingPin was not defined on the [Merged Pins] line
E5304	MPINS_ERR_4	Incorrect Number of Line Items ({numberOfItemsFound}) For {keyName}: Expecting {numberOfItemsExpected}
		The should have had items on the keyword line but only were found
E5305	MPINS_ERR_5	[Merged Pins] Pin Name {pinName} over {maxLength} characters long
		The Pin defined in [Merged Pins] is too long. Should be at most long
E5307	MPINS_ERR_7	[Merged Pins] section already defined for Pin {pinName}
		A [Merged Pins] section already exists for Pin
E5308	MPINS_ERR_8	Pin {mergedPinName} has already been connected to a Merging Pin {mergingPinName}
		The merged Pin is already connected to merging Pin
E5400	IDLY_ERR_0	[Initial_Delay] Already defined for this model
E5401	IDLY_ERR_1	Unable to Allocate Memory: {filename} {linenum}
		Memory allocation failed in program file at
B5402	IDLY_ERR_2	Should Not Be Here: {filename}, {linenum}
		The code has a bug in file at line
B5403	IDLY_ERR_3	Unable to Parse {keyword}: {filename} {linenum}
		Could not parse keyword at file at line
E5404	IDLY_ERR_4	Incorrect Number of Line Items ({numberOfItemsFound}) For {keyName}: Expecting {numberOfItemsExpected}
		The should have had items on the keyword line but only were found
E5405	IDLY_ERR_5	Unknown line found among [Initial_Delay] data
		An unrecognized line was found in the [Initial Delay] section
E5406	IDLY_ERR_6	[Initial_Delay] parameter {paramname} is already defined

Code	Symbol	Message/Comments
		The [Initial Delay] parameter (V_T; I_T) has already been defined
E5407	IDLY_ERR_7	Typ value cannot be NA
		The typical value in a Range cannot be NA
E5410	IDLY_ERR_10	{Model} {modelname}: Empty [Initial_Delay] section defined on line {linenum}
		An empty [Initial Delay] section was defined for Model on line
E5411	IDLY_ERR_11	[Initial_Delay] parameter {paramname}: {subparam} value cannot be negative
		The [Initial Delay] parameter (V_T; I_T) has a (Typ; Min; Max) which is negative

4.12 MESSAGE CODES 5500 TO 5999

Code	Symbol	Message/Comments
B5500	EXEFILE_ERR_0	{sourceFile}:{sourceLinenum}:Unable to get IBIS.
		Program data structures are corrupt in program file
B5501	EXEFILE_ERR_1	Unable to alloc EFILE.
		Memory allocation for a EFILE structure failed
E5502	EXEFILE_ERR_2	Code file {filename} not found.
		The code file '%s' was not found
W5503	EXEFILE_ERR_3	'{filename}' extension may be required.
		The code file may require a .so or .dll extension
W5600	CHKEXE_ERR_0	Unable to load code file: {filename}
		There was an error when loading the code file in memory
W5601	CHKEXE_ERR_1	Unable to lookup symbol {symbolname} in code file: {filename}
		There was an error when trying to locate a symbol in the code file
W5602	CHKEXE_ERR_2	Unable to unload code file: {filename}
		There was an error when unloading the code file from memory