**BUFFER ISSUE RESOLUTION DOCUMENT (BIRD)**

**BIRD NUMBER: 167.1**

**ISSUE TITLE:**  *Table Corrections for Tx Jitter Parameters and Ignore\_Bits*

**REQUESTOR:**  *Michael Mirmak, Intel Corp.*

**DATE SUBMITTED:** *April 22, 2014*

**DATE REVISED:** *April 23, 2014*

**DATE ACCEPTED BY IBIS OPEN FORUM: May 23, 2014**

**STATEMENT OF THE ISSUE:**

Tables 25 and 31 in the IBIS 6.0 specification document incorrectly omit support for Type Float for four Reserved Parameters:

* Tx\_Jitter
* Tx\_Dj
* Tx\_Rj
* Tx\_Sj

Type Float is explicitly supported in the text descriptions for all four of these Reserved Parameters.

In addition, Ignore\_Bits was erroneously labeled in Table 31 as being illegal in AMI\_Version 5.1 and later.

The tables should be revised to reflect the intent of the specification as well as the text description content.

**ANALYSIS PATH/DATA THAT LED TO SPECIFICATION:**

This issue was discovered during checking of an early version of the ibischk6 parser. Bob Ross of Teraspeed Consulting Group identified the missing parameters in the document tables, including the incorrect labeling of Ignore\_Bits. Radek Biernacki of Agilent Technologies confirmed that the original BIRDs contained the correct type information for these four Reserved Parameters.

**ANY OTHER BACKGROUND INFORMATION:**

The title of BIRD167.1 was changed from “Add Type Float to Tx Jitter Parameters in Specification Tables”.

Table 25 should be changed as shown below.

Table – Allowable Data Types for Jitter and Noise Reserved Parameters

| **Reserved Parameter** | **Data Type** | | | | |
| --- | --- | --- | --- | --- | --- |
| **Float** | **UI** | **Integer** | **String** | **Boolean** |
| Rx\_Clock\_PDF | X | X |  |  |  |
| Rx\_Clock\_Recovery\_DCD | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Dj | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Mean | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Rj | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Sj | X | X |  |  |  |
| Rx\_DCD | X | X |  |  |  |
| Rx\_Dj | X | X |  |  |  |
| Rx\_Noise | X |  |  |  |  |
| Rx\_Receiver\_Sensitivity | X |  |  |  |  |
| Rx\_Rj | X | X |  |  |  |
| Rx\_Sj | X | X |  |  |  |
| Tx\_DCD | X | X |  |  |  |
| Tx\_Dj | X | X |  |  |  |
| Tx\_Jitter | X | X |  |  |  |
| Tx\_Rj | X | X |  |  |  |
| Tx\_Sj | X | X |  |  |  |
| Tx\_Sj\_Frequency | X |  |  |  |  |

Table 31 should be changed as shown below. Note the removal of note 2 for Ignore\_Bits.

Table 31 – Allowable Data Types for Reserved Parameters

| **Reserved Parameter** | **Data Type** | | | | |
| --- | --- | --- | --- | --- | --- |
| **Float** | **UI** | **Integer** | **String** | **Boolean** |
| AMI\_Version1 |  |  |  | X |  |
| DLL\_ID3 |  |  |  | X |  |
| DLL\_Path3 |  |  |  | X |  |
| GetWave\_Exists |  |  |  |  | X |
| Ignore\_Bits |  |  | X |  |  |
| Init\_Returns\_Impulse |  |  |  |  | X |
| Max\_Init\_Aggressors |  |  | X |  |  |
| Repeater\_Type3 |  |  |  | X |  |
| Rx\_Clock\_PDF | X | X |  |  |  |
| Rx\_Clock\_Recovery\_DCD3 | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Dj3 | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Mean3 | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Rj3 | X | X |  |  |  |
| Rx\_Clock\_Recovery\_Sj3 | X | X |  |  |  |
| Rx\_DCD3 | X | X |  |  |  |
| Rx\_Dj3 | X | X |  |  |  |
| Rx\_Noise3 | X |  |  |  |  |
| Rx\_Receiver\_Sensitivity | X |  |  |  |  |
| Rx\_Rj3 | X | X |  |  |  |
| Rx\_Sj3 | X | X |  |  |  |
| Supporting\_Files3 |  |  |  | X |  |
| Tx\_DCD | X | X |  |  |  |
| Tx\_Dj3 | X | X |  |  |  |
| Tx\_Jitter | X | X |  |  |  |
| Tx\_Rj3 | X | X |  |  |  |
| Tx\_Sj3 | X | X |  |  |  |
| Tx\_Sj\_Frequency3 | X |  |  |  |  |
| Use\_Init\_Output2 |  |  |  |  | X |

1. Required for AMI\_Version 5.1 and later, and illegal before AMI\_Version 5.1
2. Illegal for AMI\_Version 5.1 and later
3. Illegal before AMI\_Version 6.0