



# IBIS Open Forum Review

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Design Automation IBIS Summit

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# IBIS Organization

- TechAmerica (from EIA, GEIA, ITAA, AeA)
  - System Standards and Technology Council (SSTC)
  - Vice President, **Chris Denham**
  - 13 committees including IBIS Open Forum
- IBIS officers 2009 - 2010
  - Chair: **Bob Ross**, Teraspeed Consulting Group
  - Vice-Chair: **Lance Wang**, IO Methodology
  - Secretary: **Randy Wolff**, Micron Technology
  - Webmaster: **Syed Huq**, Cisco Systems
  - Postmaster: **Mike LaBonte**, Cisco Systems
  - Librarian: **Anders Ekholm**, Ericsson

# Task Groups 2009 - 2010

- IBIS Model Review – **Lynne Green**, Green Streak Programs
  - Free model review with about 7 reviewers
- Quality – **Mike LaBonte**, Cisco Systems
  - IBIS Quality Specification Version 2.0
  - IBIS Quality Checklist update
  - Correlation project
- Interconnect – **Michael Mirmak**, Intel
  - Touchstone Specification advances
  - Model Connection Protocol (MCP) introduction
- Advanced Technology Modeling – **Arpad Muranyi**, Mentor Graphics
  - IBIS-AMI (Algorithmic Model Interface) advances
  - IBIS-ISS (Interconnect Subcircuit Specification) draft



# “ibischk5” Parser (2009)

- Ibischk5, Version 5.0.3
  - Free executables: <http://www.eda.org/pub/ibis/ibischk5/>
  - Supports IBIS Version 5.0 (ratified 2008)
    - Algorithmic model interface for Serdes analysis
    - Power delivery system SSO and gate modulation
    - EMI parameters
    - Other – (area based thresholds)
- Checks all [IBIS Ver]s of IBIS files
- Over \$100,000 of contracted work since 1993
- Supports .ibs, .pkg, .ebd, and .ami formats directly or through linkages



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# “tschk2” Parser (2009)

- Checks Touchstone Version 1.0 (TS1) and Version 2.0 (TS2)
  - Error and Warning numbers
  - Free executables: <http://www.eda.org/pub/ibis/tschk2/>
- Converts TS1 to TS2, TS2 to TS1 where practical with **-canonical\*** flags
- Provides comment headers and real, imaginary format (RI) with **-describe** flag
- Source code package includes 440+ test cases
- C++, well documented
- Thanks to contractor Agilent Technologies



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## Other 2009 – 2010 Accomplishments

- 5 Summit Meetings
  - DAC2009, Shanghai, Tokyo, DesignCon2010
  - Co-located European IBIS Summit with SPI2010
- Touchstone Version 2.1 proposals
  - (Sparse Matrix Mapping, Binary Format Support)
- IBIS bug reports and fixes
- IBIS web pages to eda.org
- Financial position ahead of budget
  - 9+ ibischk5 parsers (5 more in 2010)
  - 2 tschk2 parsers (1 more in 2010)
  - Projecting 31-33 members



# Future Plans

- Summits
  - China – Shenzhen (November 2010)
  - Taiwan – Taipei (new, November 2010)
  - Japan – Tokyo, hosted by JEITA (November 2010)
  - USA – Santa Clara (February 2011)
  - Italy – Naples (May 2011)
  - USA – San Diego (June 2011)
- IBIS Version 5.1, ibischk5 Version 5.0.4 and more
  - IBIS-AMI update
- Touchstone 2.1 and tschk2 Version 2.1.0 parser
- IBIS-ISS completion
- Model Connection Protocol (MCP)
- IBIS Correlation Specification



# IBIS Open Forum Observations

- Remains very active
  - Successful with minimal funding
  - Leading industrial experts
  - Broad company participation
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- Thank you – IBIS officers, task group leaders and members