

VITA 42 Status

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Overview

- **Next generation PMC I/O module**
- **Adds switched fabric J5/J6 connectors**
- **Base standard 42.0 – Trial use standard**
- **Fabric agnostic:**
 - **42.1 Parallel RapidIO – Now approved**
 - **42.2 Serial RapidIO – Now approved**
 - **42.3 PCI Express – Passed working group ballot**
 - **42.4 HyperTransport**
 - **42.5 VITA 55 Aurora**
- **A number of carriers and modules released in 2005, more at Bus & Board, and even more planned for later in 2006**

User I/O Standards

Structure:

- **VITA 42.10**
 - **Defines I/O pin assignments for common interfaces**
 - **Does not define carrier card requirements**
 - **Chris Eckert of SBS no longer available – the committee thanks him for his excellent work to date**
 - **Any volunteers for a draft editor for 42.10 ?**

- **VITA 41, 46, others**
 - **Recommend defining “dot standard” as part of new carrier card definitions for mapping mezzanine I/O to backplane**
 - **XMC community should show up in those groups**

- **Same issues may apply to user I/O aspects of VITA 56 EMC**

Connector Testing

- Existing XMC standard supports bit rates up to 3.125 Gbps
- Various fabrics (Serial RapidIO, PCI Express, Aurora / VSP, ASI) have planned extensions to higher speeds
- Mercury Computer Systems has performed tests on the XMC connector at higher speeds
- Randy Banton has the test results to present