

Samtec Releases New FMC+ Connector Set Compliant to ANSI/VITA 57.4-2016

New Connectors Support Increased Multi-Gigabit Interfaces and Data Rates

New Albany, IN: Samtec, a privately held \$625MM global manufacturer of a broad line of electronic interconnect solutions, proudly announces the release of a high-speed board-to-board connector family compliant to the ANSI/VITA 57.4-2016 standard. Samtec's family of FMC+ connectors helps support the expanded interface and faster speeds of the latest FMC+ applications.

The new ANSI/VITA 57.4-2016 standard extends the capabilities of ANSI/VITA 57.1-2010 in support of the increased number and data rates of multi-gigabit interfaces found in advanced FPGA architectures. Highlights of the new standard include:

- Increases multi-gigabit interfaces from 10 to 32
- Increases multi-gigabit interface data rates from 10 Gbps to 28Gbps
- Maintain backwards compatibility with VITA 57.1 FMC modules

The new ANSI/VITA 57.4-2016 standard defines two mated connected pairs that embody the new FMC+ electromechanical interface. A new High Serial Pin Count (HSPC) connector contains 560 pins arranged in a 14x40 array. The HSPC connector supports up to 24 multi-gigabit interfaces. A second, optional High Serial Pin Count extension (HSPCe) connector contains 80 pins in a 4x20 array. The HSPCe connector supports up to 8 additional multi-gigabit interfaces.

The combination of HSPC and HSPCe connectors enable support of up to 32 multi-gigabit interfaces. With each multi-gigabit interface running up to 28 Gbps, the ANSI/VITA 57.4-2016 specifications provides maximum system level throughput of 896 Gbps via the 32 channels.

ANSI/VITA 57.4-2016 also supports backwards compatibility for ANSI/VITA 57.1-2010 FMC modules. The HSPC connector uses a customized polarization system enabling proper mating with FMC HPC and LPC connectors. HSPC connectors provide additional columns compared to legacy FMC connectors. This design approach enables additional signals without compromising board profiles or mechanics.

"Samtec's SEARAY™ High-Density Open Pin Field Arrays set the standard for high-speed mezzanine applications," said Matt Burns, Technical Marketing Manager at Samtec. "The Application Specific Product (ASP) versions of SEARAY™ adopted by VITA 57.4 support the growing FMC+ ecosystem in applications as diverse as high-speed ADCs and DACs, next generation RF connectivity, high-speed serial memory and high-density fiber optics."

To learn more about SEARAY™ High-Density Open Pin Field Arrays, please download the [SEARAY™ eBrochure](#) or visit www.samtec.com/searay. Additional details on Samtec's FMC/FMC+ solutions can be found at www.samtec.com/fmc.