Meritec's VPX3 is a deployable backplane cable interconnection system which has superior signal integrity to meet the requirements of the RTM3 (VITA 46.30 and 46.31). These backplane cables are used in place of rear transition modules to allow the user to Design, Test, and Deploy.

### Features & Benefits
- Deployable with locking rails included with the housing kit.
- The locking rails are over 0.6 inches lower than the current deployment rails for RTM2 which allows improved cable routing.
- Housings are molded of dielectric material for weight savings over the previous zinc die-castings for RT2.
- New design installs over existing guideposts.
- Locking feature has no exposed conductive surfaces and can be installed without a tool.
- Housing can be pre-populated with wafers and gang installed in the RTM3 modules.
- Optional tools are available for ease of removal of the entire housing and wafers from the VPX backplane connectors.
- Allows for hybrid applications along with the multi-gig Connectors on the same backplane.
- RoHS Compliant products available.

### Specifications

#### Electrical
- 25 Gb/s Impedance: 100 ± 5.0 ohms
- Insertion loss: <10 dB up to 13.5 GHz
- Return loss: <10 dB up to 13.5 GHz
- Crosstalk: <-30 dB up to 13.5GHz, wafer to wafer
- Above Electrical Specifications are based on measured data for an assembly including 2 board wafers mated with RTM3 connectors and 12 inches of cable.

#### Mechanical
- Tools available to assist both insertion and extraction of a populated 6U or 3U housing.
- Preliminary shock and vibration testing has been conducted on 3U hardware evaluating mechanical aspects of the system. Final results on 6U are pending.

#### Environmental
- Operating temperature: -40 °C to +105 °C
Exploded View of the New VPX3® System

- 6U Locking Rails
- Tool-less Hold Down
- 6U Rear Housing
- Open VPX Backplane
- 6U Connector
- 3U Locking Rails
- Odd VPX Wafer
- Even VPX Wafer
- 3U Rear Housing
- 3U Connector

Use of Tools for Insertion/Extraction of the Populated Housing

- Tools combine to become a pushing tool
- VPX3® Extraction Tool
- Locks into housing for assisted extraction