The first 100 Gbps Schroff AdvancedTCA backplane from Pentair has been verified according to the design requirements of the PICMG 3.1 R3.0 specifications for 100 Gbps Ethernet. The high data transmission rates of 100 Gbps presented new challenges for connectors, printed circuit board material and backplane design.

**ADVANTAGES AND BENEFITS**

- Guaranteed 100 Gbps performance through extensive in house verification
- 2.5x higher data rate than the current 40 Gbps ATCA backplanes / systems with the same form factor
- Backward compatible to 40 Gbps / 10 Gbps ATCA backplanes
- Uses specially developed ZD connector and PCB material for high speed 100 Gbps requirements

**TECHNICAL DETAILS**

- 100 G backplane with 14 slots, dual-dual star topology, radial or bussed IPMB
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 700
- Conforms to AdvancedTCA Standard PICMG 3.0 rev.3.0 and PICMG 3.1 rev.3.0
SCHROFF 100 GBPS ADVANCEDTCA-BACKPLANE

TEST RESULTS

The following graphs show test results for the Insertion Loss and Return Loss of the Schroff 100 G backplane (blue line) in comparison to the requirements of the 100 Gbps specification IEEE802.3bj (red line) on one of the longest transmission paths. The COM (Channel Operation Margin) value of all differential pairs are min. 2 dB above the allowed limit in the PICMG3.1R3.0.

![Graphs showing test results for Insertion Loss and Return Loss](image)

ORDER DETAILS ABOUT ADVANCEDTCA 450/100 SERIES

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<td>11990-140</td>
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<td>Dual-Dual Star, 100 Gbps, bussed IPMB</td>
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<tr>
<td>11990-141</td>
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<td>Dual-Dual Star, 100 Gbps, radial IPMB</td>
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FOR FURTHER INFORMATION PLEASE VISIT: SCHROFF.BIZ/SYSTEMS/DOWNLOADS-EN