NX Latch Retention Compliance
Test 555
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Purpose
To determine the compliance of Meritec’s NX latch with InfiniBand retention specifications per Table 30 of the InfiniBandTM Architecture Specification, Volume 2, Release 1.2.1, October 2006.

Results
All parts passed the requirement of a minimum retention force of 75 newtons or 16.86 pounds. The straight connectors required between 45 and 48 pounds to disconnect and the angled connectors required between 30 and 40 pounds to disconnect.

Samples Tested
Two (2) 4X angled and three (3) 4X straight latch Meritec connectors

Test Equipment
Instron Model 1000 Test Stand

Test Setup
The Instron was calibrated for a 100 lb. pull and the assemblies were held with two screw-action grippers. The cable assembly was plugged into a 4X Molex receptacle that was attached to Meritec’s Test Board # 681185-01. The test board and receptacle were then clamped securely into the Instron test instrument, with the bottom screw-action gripper clamped to the receptacle and board and the top screw-action gripper clamped to the backshell of the cable assembly under test. See figures 1 thru 4.
Figure 1) Instron Test Stand

Figure 2) Detail of clamping arrangement. The straight male connector and latch under test are located in the top clamp and the receptacle and test board are located in the bottom clamp.
Figure 3) Detail of clamping arrangement. The angled male connector and latch under test are located in the top clamp and the receptacle and test board are located in the bottom clamp.

Figure 4) Detail of clamping arrangement. The angled male connector and latch under test are located in the top clamp and the receptacle and test board are located in the bottom clamp.