

# Ruggedized Shock/Vibration Immune SATA Connector Family

## Available as an Option for the TRRUST-Stor™ Secure Storage Device

The Microsemi TRRUST-Stor™ solid state drive is now available with an optional ruggedized SATA connector that solves shock and vibration issues prevalent in defense and industrial applications. Specially designed for hostile environments, these connectors withstand conditions for which industry-standard SATA connectors are inadequate. A unique contact and pin design eliminates pin fretting and intermittent disconnects to assure long-term dependability. Available in several form factors, from board-mount to cable sets, the connector family provides a complete vibration-resistant solution for applications where solid performance and zero downtime are key requirements. These ruggedized connectors make TRRUST-Stor the ultimate solid state solution for mission critical applications.

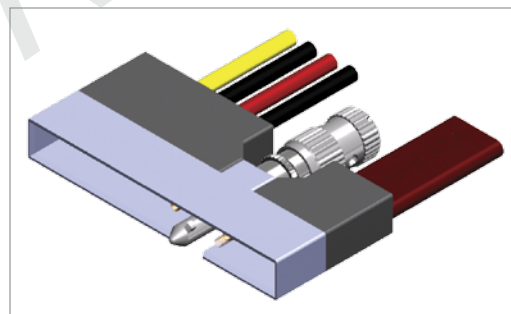
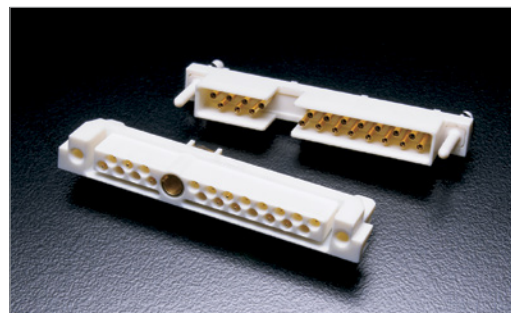
### Product Features

- Wire basket contact design
- 360° of contact points
- 50% lower contact resistance than conventional designs
- Vibration and shock immune
- Minimum of 100,000 insertions with little to no performance degradation
- Contact plating: 50 micro inches gold over nickel
- Available in right angle, vertical, straddle mount and cable set configurations
- Locking mechanism
- Supports SATA rates to 6 Gb/s
- PCB straddle mount has the same envelope and PCB footprint as part number 3M 5622-6309ML

### Applications

- Defense and aerospace
- Industrial applications
- Enterprise storage applications
- Ruggedized mobile systems
- Surveillance, avionics, navigation
- Ruggedized portable storage applications

\* This product is under development, is not qualified or characterized and is subject to change without notice.



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Ruggedized SATA Connector for SSD Flyer • 10/14 Rev. 4 • SSD1002 • MS6-017-14

## PCB Vertical Mount Through Hole Connector



The technical drawing on the left shows the Serial ATA connector with dimensions: 17.20 [0.677] for the height, 36.35 [1.431] for the width, and 5.06 [0.199] for the thickness. The 3D model on the right shows the connector with a blue body, a silver BNC connector, and a red cable.

*All linear dimensions are millimeters and parenthetically in inches*

Figure 1: Mechanical drawing of the PCB footprint for the 16-pin LQFP package. The drawing shows the top and bottom views of the package. The top view shows the package body with a length of 42.97 (1.695) and a width of 45.77 (1.802). The bottom view shows the pin array with a pitch of 0.65 (0.025) and a total width of 13.47 (0.530). The drawing also shows the pin dimensions, including the pin height of 1.27 (0.050) and the pin diameter of 0.15 (0.045). The drawing includes dimensions for the package body, the pin array, and the overall dimensions of the package.

*All linear dimensions are millimeters and parenthetically in inches*

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