MILTECH™ 718

Ultra Compact 8 x 1GbE Embedded Military Board Level Ethernet Switch

PRODUCT DESCRIPTION

One of the most exciting advancement in technology over the last decade has been unmanned vehicles including:

- Unmanned aerial vehicles (UAVs) or Drones
- Land autonomous vehicles (UGVs)
- Robots
- Other unmanned support vehicles

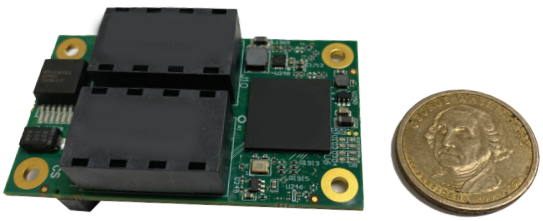
These vehicles must be agile, compact and highly intelligent. In order to support this sophisticated intelligence, these platforms may have to carry and connect a variety of Ethernet-based devices including computers, sensors, and targeting systems - all in compact platforms that must operate in extreme environmental conditions.

The MILTECH718 is a rugged, cost-effective, ultra-compact board-level Ethernet switching solution (70x40mm). Equipped with 8GbE 10/100/1000Mbps ports, this board - level switch is ideal for integrating system level solutions through board-to-board connectors.

The MILTECH718 consumes only 5W of power and uses 9-32VDC. Its ruggedized design feature mechanical packaging enhancements designed for MILSTD-461E, MILSTD-810F/G and IP68 compliance when installed in an appropriate enclosure.

SPECIFICATIONS

ETHERNET PORTS:	• 8 x triple-speed 10/100/1000Mbps
NETWORKING:	• Full wire-speed forwarding rate • Cut through switch fabric • Auto MDI, MDI-X • Jumbo frame up to 10K Bytes • 16K mac addresses
CONNECTORS:	• Power + LAN Connector: Samtec board to board connector: QTE-040-02-L-D-A
STANDARDS:	• MILSTD-461E, MILSTD-810F/G, IP68 when installed in an appropriate chassis
PERFORMANCE:	• 2Mbit packet buffer • 25Gbps High-Performance Bandwidth • LED indication (Speed, Link/Activity) per port - Optional • Wire-Speed Reception and Transmission • Integrated Address Look-Up Engine • Automatic Address Learning
STANDARDS COMPLIANCE:	• IEEE 802.3ab 1000BASE-TX • IEEE 802.3u 100BASE-TX • IEEE 802.3x Flow Control



NON ITAR

AS9100D CERTIFIED ISO 9001

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Ultra Compact 1G Embedded Military Board Level Ethernet Switch

SPECIFICATIONS

POWER:	• Voltage Input: 9-32Vdc Nominal • Power Consumption: 5W Typical • Chassis grounding
ELECTROMAGNETIC:	• MIL-STD-461E Electromagnetic compatibility • CE-102 | CS-114 | CS-115 | CS-116 | RE-102 | RS-103 *When installed in an appropriate chassis
ENVIRONMENTAL:	• MILSTD-810F/G • Random vibration (514.5I) | Bench Handling (516.6VI) | High Temp.(501.5I,II) | Low Temp.(502.5I) | Humidity (507.5II) | Air Pressure (500.5I,II) | Blowing Rain (506.5I) | Immersion (512.5I) | Salt Atmosphere (509.5I) | Blowing Dust (510.5I) | Loose Cargo Vibration (514.6II) | Wind Analysis • IP68 *When installed in an appropriate chassis
PHYSICAL:	• Dimensions: 70mm (L) x 40mm(W) • Dimensions: 2.75"(L) x 1.57"(W)
INSTALLATION:	• 4 x mounting holes for board to board mounting
COOLING:	• No Moving Parts. Passive Cooling
OPERATING TEMP:	• -40°C to +80°C (-40°F to +176°F) - Cold Start-Up
STORAGE TEMP:	• -45°C to +85°C (-49°F to +185°F)

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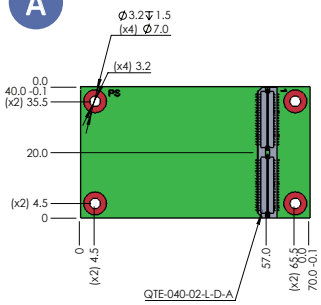

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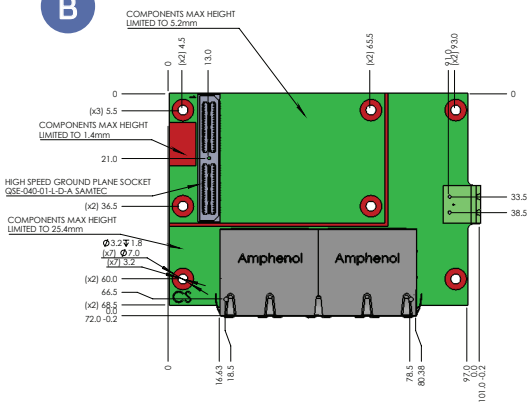

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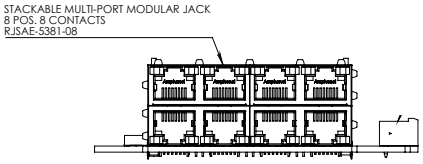

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-718-000	• Ultra Compact 1G Embedded Military Board Level Ethernet Switch, 8 x 10/100/1000TX, ESoB
1-718EV-000	• Evaluation board for MILTECH718