



MILTECH 718

Ultra Compact Unmanaged/Lightly Managed 8 x 100/1000Base-T Embedded Military Board Level Ethernet Switch

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 MILTECH 718 is a rugged, cost-effective, ultracompact 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 single board-to-board connectors.

The MILTECH 718 consumes only 5W of power and uses 6-32VDC or 3.3V supply (two variations). Its ruggedized design feature mechanical packaging enhancements designed for MILSTD-461E, MILSTD-810F/G when installed in an appropriate enclosure.

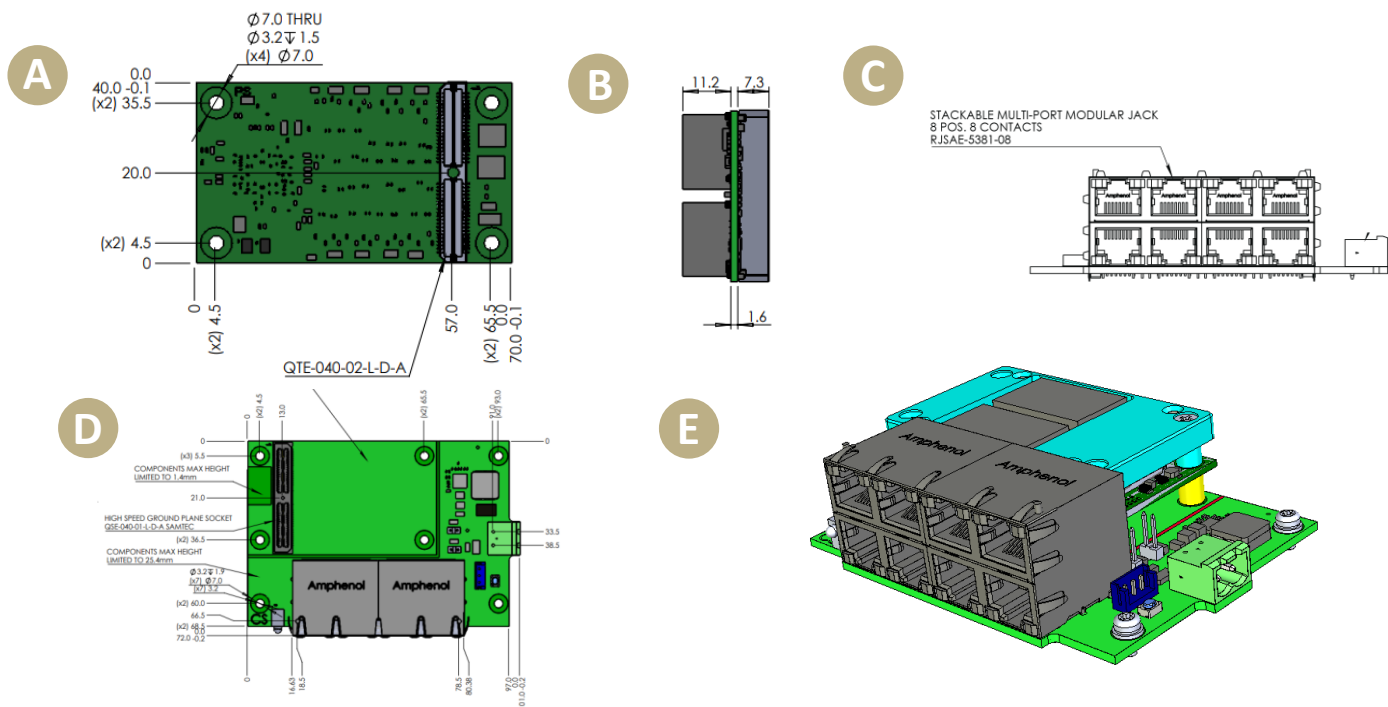
SPECIFICATIONS

ETHERNET PORTS:	• 8 x triple-speed 10/100/1000Base-T
MANAGEMENT:	• Lightly managed via optional SMI (MDC/MDIO) interface Note: unmanaged when SMI unused (default)
NETWORKING:	• Full wire-speed forwarding rate • Cut through switch fabric • Auto MDI, MDI-X • Jumbo frame up to 10K Bytes • 16K mac addresses
CONNECTOR INTERFACE:	• Power + LAN Connector: Samtec board to board connector: QTE-040-02-L-D-A
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-T • IEEE 802.3u 100Base-TX • IEEE 802.3x Flow Control • IEEE 802.1 Audio Video Bridging (AVB) and Time Sensitive Networking (TSN)
POWER:	• Voltage Input: 6-32V DC (PNs: 1-718-000/1-718-001) or 3.3V DC (PNs: 1-718-100/1-718-101) • Power Consumption: 5W Typical • Chassis grounding



SPECIFICATIONS

EMC/ENVIRONMENTAL:	Designed to Meet: • MIL-STD-461E • MIL-STD-810F/G *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 • Optional integrated cooling plate (see ordering information)
OPERATING TEMP:	• -40°C to +85°C (-40°F to +185°F) - Cold Start-Up
STORAGE TEMP:	• -45°C to +85°C (-49°F to +185°F)



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-718-000	Ultra Compact 1G Embedded Military Board Level Ethernet Switch, 8x10/100/1000Base-T, 6-32V DC IN
1-718-001	Ultra Compact 1G Embedded Military Board Level Ethernet Switch, 8x10/100/1000Base-T, 6-32V DC IN, with Cooling Plate
1-718-100	Ultra Compact 1G Embedded Military Board Level Ethernet Switch, 8x10/100/1000Base-T, 3.3V DC IN
1-718-101	Ultra Compact 1G Embedded Military Board Level Ethernet Switch, 8x10/100/1000Base-T, 3.3V DC IN, with Cooling Plate
1-718EV-000	Evaluation board for MILTECH718
1-718EV-001	Evaluation board MILTECH718 with conformal coating
1-CP718-000	Cooling Plate Kit for MILTECH-718