



MILTECH™ 309

Military Grade Ethernet Switch On Board (ESoB)

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 MILTECH309 is a rugged, cost-effective, ultra-compact board-level Ethernet switching solution that is the smallest solution available on the market today. Equipped with 8 Fast Ethernet 10/100 ports, this board-level switch is ideal for integrating in to system level solutions through board-to-board connectors.

The MILTECH 309 consumes only 2W of power and uses 5VDC, which can be supplied through a USB connection. Its ruggedized design feature mechanical packaging enhancements designed for MILSTD-461E, MILSTD-810F/G/GM and IP68 compliance when installed in an appropriate enclosure.

SPECIFICATIONS

ETHERNET PORTS:	<ul style="list-style-type: none"> • 8 x switched 10/100 (Fast Ethernet) ports
NETWORKING:	<ul style="list-style-type: none"> • Full wire-speed forwarding rate • Store-and-forward mechanism • Auto MDI-II, MDI-X • Auto-Negotiation Protocol • Address Look-Up
CONNECTORS:	<ul style="list-style-type: none"> • Power + LAN Connector: Samtec board to board connector: ERM8-010-02.0-L-DV-K-TR
STANDARDS:	<ul style="list-style-type: none"> • MILSTD-461E, MILSTD-810F/G/GM, IP68 when installed in an appropriate chassis
PERFORMANCE:	<ul style="list-style-type: none"> • 128K Byte of SRAM for Frame Buffering • 2.0Gbps High-Performance Memory Bandwidth • LED indication (Speed, Link/Activity) per port - Optional • Wire-Speed Reception and Transmission • Integrated Address Look-Up Engine • Automatic Address Learning



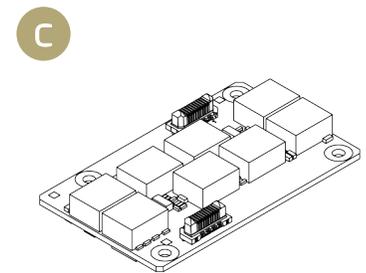
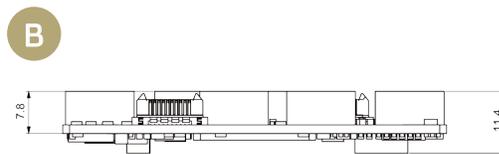
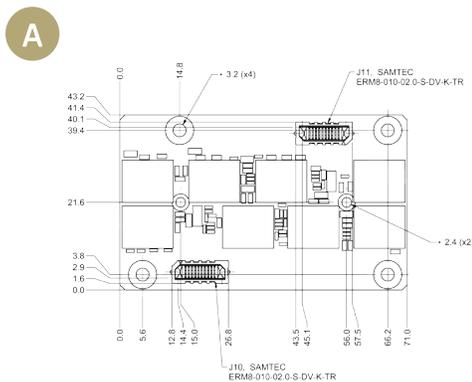


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SPECIFICATIONS

STANDARDS COMPLIANCE:	<ul style="list-style-type: none"> IEEE 802.3 10 Mbps 10BASE-T (Ethernet) IEEE 802.3u 100BASE-TX 100 Mbps (Fast Ethernet) IEEE 802.3x Flow Control
POWER:	<ul style="list-style-type: none"> Voltage Input: 5Vdc Nominal - Optional USB Sourcing Power Consumption: 2W Typical Chassis grounding
ELECTROMAGNETIC:	<ul style="list-style-type: none"> MIL-STD-461E Electromagnetic compatibility CE-102 CS-114 CS-115 CS-116 RE-102 RS-103 *When installed in an appropriate chassis
ENVIRONMENTAL:	<ul style="list-style-type: none"> MILSTD-810F/G/GM 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:	<ul style="list-style-type: none"> Dimensions: 71mm (L) x 43.18mm(W) x 11.4mm(H) Dimensions: 2.79"(L) x 1.69"(W) x 0.43"(H) Weight: 40g
INSTALLATION:	<ul style="list-style-type: none"> 6 x mounting holes for board to board mounting
COOLING:	<ul style="list-style-type: none"> No Moving Parts. Passive Cooling
OPERATING TEMP:	<ul style="list-style-type: none"> -45°C to +85°C (-49°F to +185°F) - Cold Start-Up
STORAGE TEMP:	<ul style="list-style-type: none"> -45°C to +85°C (-49°F to +185°F)



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-309-000	<ul style="list-style-type: none"> MILTECH309, MIL-STD military, 8 x 10/100TX, ESoB
1-309EV-000	<ul style="list-style-type: none"> Evaluation board for MILTECH309