

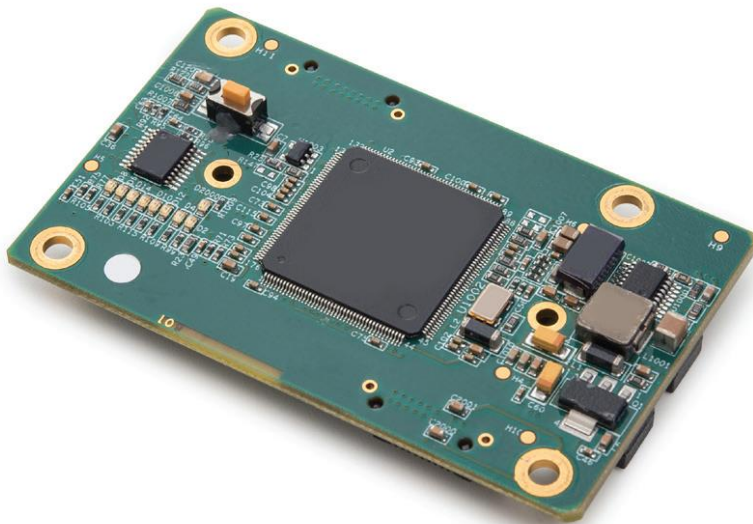


MILTECH 309

Military Grade Ethernet Switch On Board (ESoB)

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 incompact platforms that must operate in extreme environmental conditions.

The MILTECH 309 is a rugged, cost-effective, ultracompact 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 into 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:	• 8 x switched 10/100TX (Fast Ethernet) ports
NETWORKING:	• Full wire-speed forwarding rate • Store-and-forward mechanism • Auto MDI-II, MDI-X • Auto-Negotiation Protocol • Address Look-Up
CONNECTORS:	• Module Power + LAN Connectors: 2 x Samtec board to board connectors, P/N ERM8-010-02.0-L-DV-P • Mating Carrier Power + LAN Connectors: 2 x Samtec board to board connectors, P/N ERF8-010-07.0-L-DV-K

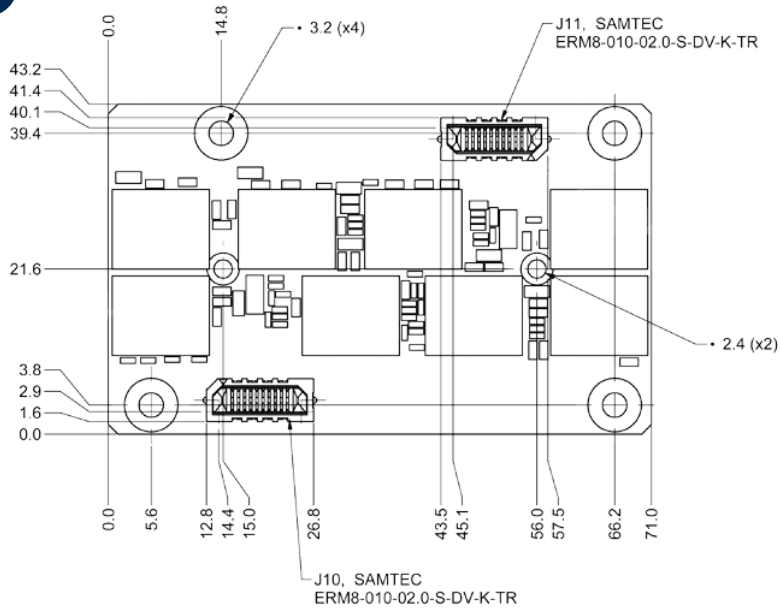


SPECIFICATIONS

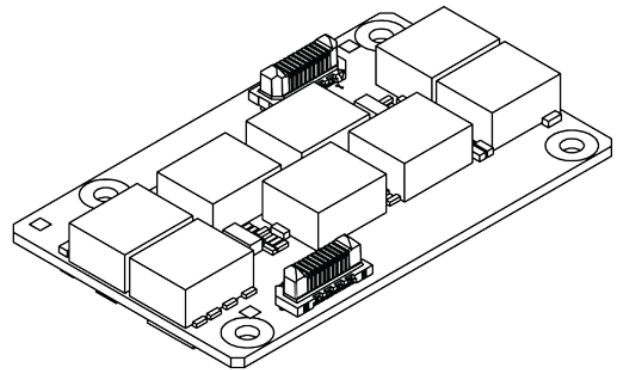
PERFORMANCE:	• 128K Byte of SRAM for Frame Buffering • 2.0Gbps High-Performance Memory Bandwidth • LED indication (Speed, Link/Activity) per port - Optional • Wire-Speed Reception and Transmission • Integrated Address Look-Up Engine • Automatic Address Learning
STANDARDS COMPLIANCE:	• IEEE 802.3 10 Mbps 10BASE-T Ethernet • IEEE 802.3u 100BASE-TX 100 Mbps (Fast Ethernet) • IEEE 802.3x Flow Control
POWER:	• Voltage Input: 5Vdc Nominal - Optional USB Sourcing • Power Consumption: 2W Typical
ELECTROMAGNETIC:	• Design to meet MIL-STD-461 when installed in appropriate chassis
ENVIRONMENTAL:	• Design to meet MIL-STD-810 when installed in appropriate chassis
PHYSICAL:	• 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:	• 6 x mounting holes for board to board mounting
COOLING:	• No Moving Parts. Passive Cooling
OPERATING TEMP:	• -40°C to +85°C (-40°F to +185°F) - Cold Start-Up
STORAGE TEMP:	• -40°C to +85°C (-40°F to +185°F)



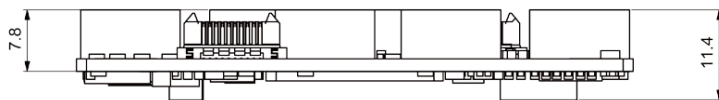
A



B



C



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
1-309-000	MILTECH309, MIL-STD, 8 x 10/100TX, ESoB
1-309EV-000	Evaluation board for MILTECH309