# ET-8MS-OEM Industrial Ethernet Switch

*Sixnet Networking Series*

## ▶▶▶ 8+ Port OEM Industrial Ethernet Switch

The ET-8MS-OEM is a 8+ port industrial Ethernet switch designed for OEM embedded applications. It allows you to easily and quickly create your own custom switch or Ethernet enable your existing OEM system. This powerful off-the-shelf solution will save you time and money!

### *PRODUCT HIGHLIGHTS*

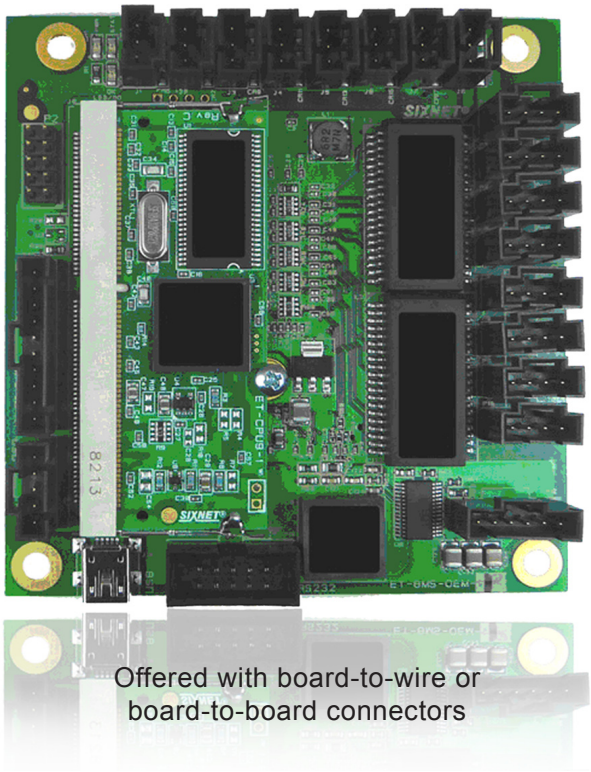
- Board level design for embedded applications
- 10 possible ports including one MII
- Eight 10/100 PHYs and magnetics on-board
- Two Gigabit available through external PHYs
- Board-to-board or board-to-wire connections
- Interface options for external LEDs
- PC/104 footprint 3.55 x 3.78” (9.0 x 9.6 cm)
- -40 to 75°C operating range

### *REAL-TIME SECURE PERFORMANCE*

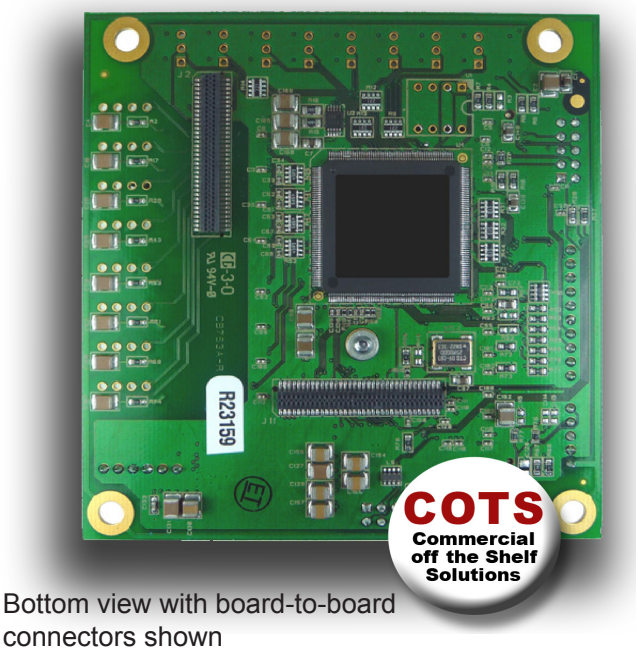
- Fast wire-speed switching
- Intelligent message routing - No collisions!
- Real-Time-Ring™ & Rapid Spanning Tree (RSTP) for fast redundant ring or mesh connections
- SNMPv1 and v2 network management
- SNMPv3 authentication & encryption for security
- SNMP notifications (traps) for report on event
- Priority Queuing (QoS/CoS) for real-time operation
- IGMP for Multicast filtering (snooping & querying)
- VLAN for convenient traffic segregation
- Broadcast & multicast storm protection
- RMON & port mirroring for advanced diagnostics
- Security with HTTPS, SSL, SSH, SNMPv3 & more
- Easy to use interfaces: web, CLI or Telnet
- Free firmware upgrades forever

### *Sixnet Knows Industrial*

We have been designing industrial hardware such as Remote Terminal Units for over 30+ years and have used this expertise to design the toughest Ethernet switches on the market. Don’t trust your critical communications to so-called industrial hardware from commercial switch manufacturers. Sixnet switches give you proven assurance that your system will keep running for years to come.



Offered with board-to-wire or board-to-board connectors




Bottom view with board-to-board connectors shown

Ideal for Commercial Off the Shelf Solutions

industrial networking

# ET-8MS-OEM Industrial Ethernet Switch Specifications

### *ETHERNET PERFORMANCE*

- Managed switch
- Store & forward wire-speed switching
- Automatic address learning, aging and migration
- Full duplex operation with flow control (no collisions)
- All IEEE 802.3 Ethernet protocols supported
- 8192 MAC addresses supported
- Memory bandwidth 32 Gbps
- Typical latency (varies on load)
  - @ 100 Mbps: 5 µs + frame time
  - @ 10 Mbps: 16 µs + frame time
- Ethernet isolation 1500 VRMS 1 minute

### *ETHERNET PORTS*

- 10 possible Ethernet ports total
- 8 fast Ethernet with on-board PHYs and magnetics; available through board-to-board or wire connectors
- 2 Gigabit Ethernet (require external PHYs and magnetics); available through board-to-board connector
- 1 MII port (shared with 1 Gigabit port above) for interface to an external CPU or PHY or fiber optic transceiver; available through board-to-board connector
- Ports support plug and play operation
  - Auto-negotiation for 10 or 100 Mbps
  - Auto-MDI/MDIX-crossover for either cable type
  - Auto-polarity corrects for crossed +/- signals

### *ETHERNET COMPLIANCE*

- IEEE 802.3 (10Mbps Ethernet supports legacy devices)
- IEEE 802.3u (Fast Ethernet 100Mbps for newer devices)
- IEEE 802.3z (Gigabit Ethernet 1000Mbps)
- IEEE 802.3x (Full-Duplex with Flow Control)
- IEEE 802.1D/w, 802.1p, 802.1Q and much more

### *POWER INPUT*

- Power input voltage: 3.3 or 5.0 VDC (regulated)
- Input power (typ. 8 ports active at 100 Mbps) 4 W

### *ENVIRONMENTAL*

- Operating temperature: -40 to +75°C (cold startup at -40)
- Storage temperature: -40 to +85 °C
- Humidity (non-condensing) 5 to 95% RH
- Vibration and shock: IEC68-2-6, -2-27 and -2-32

### *STANDARDS COMPLIANCE*

- Electrical safety - EN61010-1
- EMC - FCC part 15, ICES-003; EN61000-6-4, -2
- RoHS and WEEE compliant

### *PHYSICAL*

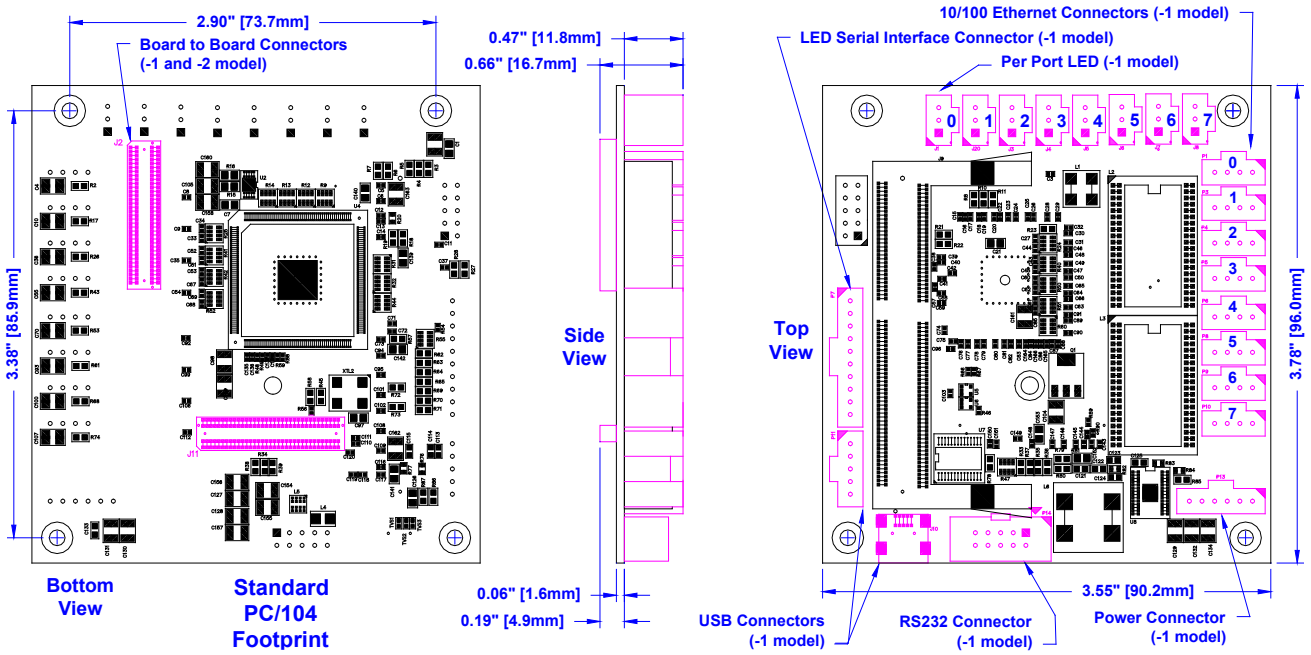
- Weight – 4 oz. (0.11 kg)
- Dimensions – 3.55 x 3.78” (9.0 x 9.6 cm)

### *ORDERING GUIDE*

| | |
|---|---|
| **ET-8MS-OEM-1** | OEM switch with all connectors |
| **ET-8MS-OEM-2** | OEM switch with board-to-board connectors only (bottom of board) |

A test fixture is also available. Contact Sixnet for details.

### *MECHANICAL DRAWING*




All specifications are subject to change. Consult factory for latest info.

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