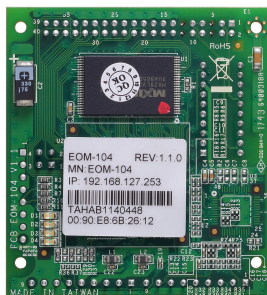# EOM-104 Series

4-port embedded managed Ethernet switch modules

Features and Benefits

- 10/100BaseT(X) and 100BaseFX Ethernet interfaces
- Turbo Ring and RSTP/STP for network redundancy
- SNMP and email alerts for event trapping and notifications
- Two-thirds the size of a business card
- Low power consumption
- -40 to 75°C operating temperature range

Certifications

Introduction

The EOM-104 Series is designed for device manufacturers who would like to embed Ethernet modules in their products to enhance performance and reliability. The EOM-104 Series provides an easy and cost-effective integrated solution for adding an Ethernet switch module to an existing product.

The modules support 10/100M Ethernet transmission and come with Turbo Ring's fast recovery time of under 20 ms. The EOM-104 Series provides a rich set of peripherals, such as Turbo Ring Enable and GPIO programming pins, and is an ideal solution for embedded Ethernet applications.

Specifications

Ethernet Interface

Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100BaseFX IEEE 802.3x for flow control IEEE 802.1p for Class of Service IEEE 802.1D-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol

Ethernet Software Features

Protocols	BOOTP, DHCP Client, HTTP, RARP, RMON, SMTP, SNMPv1/v2c/v3, Syslog, Telnet, TFTP
MIB	Bridge MIB, Ethernet-like MIB, MIB-II, P-BRIDGE MIB, RMON MIB Groups 1, 2, 3, 9, RSTP MIB

Switch Properties

MAC Table Size	1 K
Packet Buffer Size	512 kbits

Datasheet

Ethernet Interface

10/100BaseT(X) Port	EOM-104: 4 EOM-104-FO: 2
100BaseFX Port	EOM-104-FO: 2 EOM-104-FO 20PCS: 2 EOM-104-FO Evaluation Kit: 2
Connector	1 connector with 2 x 20 pins, 2 connectors with 1 x 9 pins, and 1 connector with 2 x 2 pins

Serial Interface

Console Port	RS-232 (TxD, RxD, DTR, DSR)

Ethernet Interface

GPIO	4 x Programmable I/O pins

Power Parameters

Input Current	EOM-104: 0.48 A @ 3.3 VDC EOM-104-FO: 1.1 A @ 3.3 VDC

Physical Characteristics

Dimensions	54 x 60 x 8.25 mm (2.13 x 2.36 x 0.32 in)
Weight	21 g (0.046 lb)

Environmental Limits

Operating Temperature	-40 to 75°C (-40 to 167°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A

Warranty

Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	EOM-104: 1 x EOM-104 module EOM-104 20PCS: 20 x EOM-104 module EOM-104 Evaluation Kit: 1 x EOM-104 module with evaluation board EOM-104-FO: 1 x EOM-104-FO module EOM-104-FO 20PCS: 20 x EOM-104-FO module EOM-104-FO Evaluation Kit: 1 x EOM-104-FO module with evaluation board
Power Supply	EOM-104/104-FO Evaluation Kit: 1 x universal power adapter, 2 x power cord
Cable	1 x Null modem serial cable, 1 x Ethernet crossover cable (EOM-104/104-FO Evaluation Kit) 1 x accessory pack (EOM-104/104-FO, EOM-104/104-FO Evaluation Kit) 20 x accessory pack (EOM-104 20PCS, EM-104-FO 20PCS)
Documentation	1 x document and software CD 1 x warranty card

Dimensions

Unit: mm (inch)

54.0 (2.1)

48.3 (1.9)

60.0 (2.4)

48.3 (1.9)

JP1

1   39

2   40

2 4

JP3

1 3

J1   J2

1   9   1   9
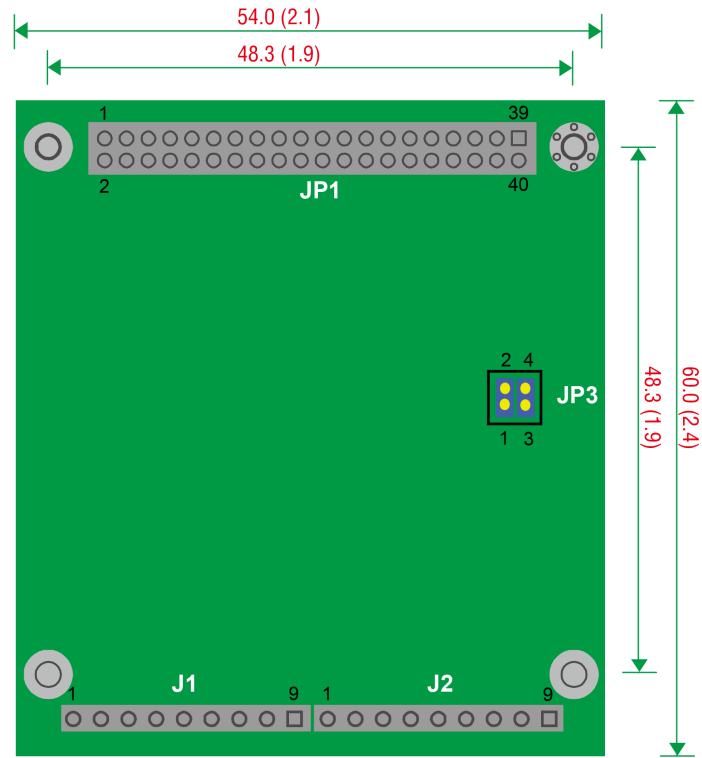
Ordering Information

Model Name	10/100BaseT(X) Ports	100BaseFX Ports	20 pcs per package	Evaluation Kit	Operating Temp.
EOM-104	4	–	–	–	-40 to 75°C
EOM-104 20PCS	4	–	✓	–	-40 to 75°C
EOM-104 Evaluation Kit	4	–	–	1	-40 to 75°C
EOM-104-FO	2	2	–	–	-40 to 75°C
EOM-104-FO 20PCS	2	2	✓	–	-40 to 75°C
EOM-104-FO Evaluation Kit	2	2	–	1	-40 to 75°C

Accessories (sold separately)

Software

MXview	Industrial network management software designed for converged automation networks