



EOM-G103-PHR-PTP Series Quick Installation Guide

First Edition, January 2015

Product Overview

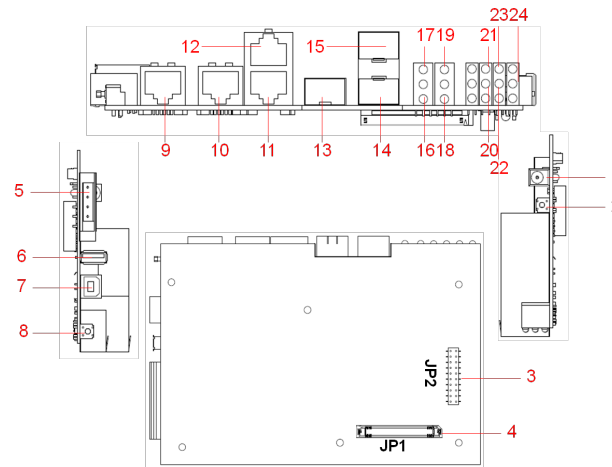
The EOM-G103-PHR-PTP full Gigabit managed redundancy modules are compliant with the latest IEC 62439-3 standards and provide an easy and cost-effective integrated solution for adding a redundancy module to a non-IEC 62439-3 supported product. The modules support two IEC 62439-3 Ethernet ports (SGMII/SERDES(1000Base-X) interface) for constructing PRP or HSR networks and one standard Ethernet port (SGMII/SERDES(1000Base-X) interface) for connecting with standard IEEE 802.3 Ethernet devices. The EOM-G103-PHR-PTP series also provides an extra standard Ethernet port (SGMII/SERDES(1000Base-X) interface) for building up a local access Ethernet console port to easily maintain, control, and manage certain devices right at the local site.

Package Checklist

The EOM-G103-PHR-PTP series evaluation kit packet contains the following items:

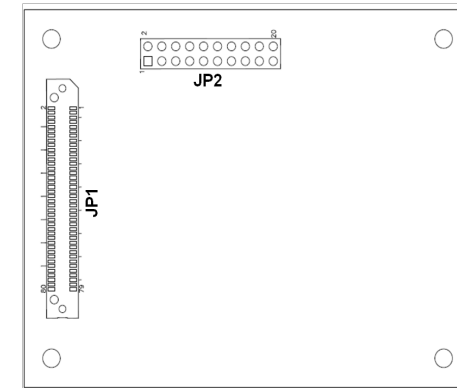
- 1 EOM-G103-PHR-PTP embedded module
- 1 EOM-G103-PHR-PTP evaluation board
- 1 universal power adapter
- 2 power cords
- 1 cross-over Ethernet cable
- 1 USB-IF complaint cable
- Warranty card

Layout of the Evaluation Board



1. 12 VDC power jack
2. System reboot button
3. JP2 connector for connecting to EOM-G103 JP2
4. JP1 connector for connecting to EOM-G103 JP1
5. Terminal block for DI and Relay
6. USB storage (ABC-02-USB-T)
7. USB console
8. Reset to default button
9. Ethernet Console port: 10/100/1000BaseT(X)
10. Interlink port: 10/100/1000BaseT(X)
11. PRP/HSR redundant port B: 10/100/1000BaseT(X)
12. PRP/HSR redundant port A: 10/100/1000BaseT(X)
13. Interlink port: 100/1000BaseFX
14. PRP/HSR redundant port B: 100/1000BaseFX
15. PRP/HSR redundant port A: 100/1000BaseFX
16. Interlink port LED
17. Ethernet console port LED
18. Port B LED
19. Port A LED
20. HSR mode LED
21. PRP mode LED
22. Fault LED
23. STATE LED
24. Power LED

Layout of the EOM-G103-PHR-PTP Series



Hardware Installation Procedure

(Before installing the EOM-G103, please check to make sure that all items in the Package Checklist are in the box.)

Step 1: Connect the EOM-G103-PHR-PTP module into the sockets on the top of the evaluation board

Step 2: Connect the power source to the evaluation board

Connect the 12 VDC power line to the evaluation board's power jack.

Step 3: Connect the network cable to the evaluation board

Use the RJ45 Ethernet cable to connect the Ethernet cable to the evaluation Ethernet console port.

Step 4: Set up the connected device IP address

Configure the IP address for the connected device so that the device belongs to the EOM-G103's Subnet. The default IP address of the EOM-G103 is 192.168.127.253 and the subnet mask is 255.255.255.0.

Step 5: Configure the EOM-G103 Series

Please refer to the EOM-G103 user's manual

Pin Assignment

JP1 (2x40 connector pin assignment)

PIN	SIGNAL	PIN	SIGNAL
1	GND	41	PRP_LED
2	GND	42	DI
3	DTR (UART)	43	FAULT_LED
4	DCD (UART)	44	Reserved
5	RTS (UART)	45	STAT_R_LED
6	DSR (UART)	46	Reserved
7	TXD (UART)	47	STAT_G_LED
8	CTS (UART)	48	Reserved
9	GND	49	TX_DIS_G3 (SFP)
10	RXD (UART)	50	GND
11	GXB_RX_P_0 (SGMII)	51	PRESENT_G3 (SFP)
12	GND	52	Reserved
13	GXB_RX_N_0 (SGMII)	53	LOS_G3(SFP)
14	GXB_TX_P0 (SGMII)	54	Reserved
15	GND	55	TX_DIS_G2 (SFP)
16	GXB_TX_N0 (SGMII)	56	GND
17	GXB_RX_P_1 (SGMII)	57	PRESENT_G2 (SFP)
18	GND	58	SDA-(I2C)
19	GXB_RX_N_1 (SGMII)	59	LOS_G2(SFP)
20	GXB_TX_P1 (SGMII)	60	SCK-(I2C)
21	GND	61	TX_DIS_G1 (SFP)
22	GXB_TX_N1 (SGMII)	62	GND
23	GXB_RX_P_2 (SGMII)	63	PRESENT_G1 (SFP)
24	GND	64	MDIO-PHY (SMI)
25	GXB_RX_N_2 (SGMII)	65	LOS_G1(SFP)
26	GXB_TX_P2 (SGMII)	66	MDC-PHY (SMI)
27	GND	67	TX_DIS_G0 (SFP)
28	GXB_TX_N2 (SGMII)	68	GND
29	GXB_RX_P_3 (SGMII)	69	PRESENT_G0 (SFP)
30	GND	70	Reserved
31	GXB_RX_N_3 (SGMII)	71	LOS_G0(SFP)
32	GXB_TX_P3 (SGMII)	72	Reserved
33	GND	73	Reserved
34	GXB_TX_N3 (SGMII)	74	GND
35	COUP_LED	75	Reserved
36	GND	76	USB-HOST-DP
37	QB_LED	77	Reserved
38	DO(1)	78	USB-HOST-DM
39	HSR_LED	79	Reserved
40	DO(0)	80	GND

JP2 (2x10 connector pin assignment)

PIN	SIGNAL	PIN	SIGNAL
1	Reserved	11	3.3V
2	Reserved	12	GND
3	Reserved	13	GND
4	Reserved	14	GND
5	Reserved	15	GND
6	Reserved	16	GND
7	3.3V	17	Reset_PHY
8	3.3V	18	Reset
9	3.3V	19	Reserved
10	3.3V	20	Reset to Default

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