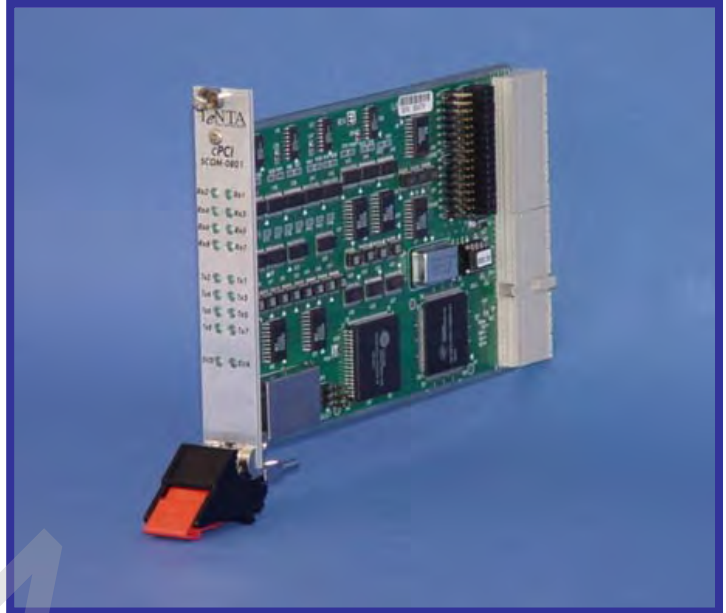


SCOM-080X

3U Serial Communication Card

3U CompactPCI®

- 4 or 8 Channels
- All Channels Optically Isolated
- Speeds up to 1.25 Mbps
- RS-232, RS-422, RS-485
- LED Indication for Power and Tx, Rx for Each Channel
- Isolated Power from cPCI Bus
- Optional SGLT-0055 Rear Signal Transition Card



The SCOM-0800 and SCOM-0801 are designed as general-purpose serial communication cards with standard RS-232 and RS-485 ports. Protocol is jumper selectable per channel. The I/O and power signals are distributed through J2 rear connector. The board form factor, physical dimensions and BUS interface comply with CompactPCI® Specification PICMG® 2.0 R2.1.

Ordering Information

AS00800-01	4-Channel 3U Serial Communication Card
AS00801-01	8-Channel 3U Serial Communication Card
AS00055-01	3U Rear Signal Transition Card

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CompactPCI®

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Technology for Productivity

Specifications

Physical

PCB Dimensions	100mm (3.9370") Height X 160mm (6.2992") Depth X 1.6mm (0.0629") Thickness
Form Factor	Plug in Eurocard, 3U Height, 8 HP Width (1 slot), IEEE (1101.1, 101.10 and P1101.11)
Rear Connectors	Metric 2.0mm grid, female connector type A is used for J1 (cPCI BUS) and J2 (Signal distribution).
Front Panel	128.5mm Height X 20.32mm Depth X 2.5 mm Thickness.
Weight	200 g (0.44 lb)

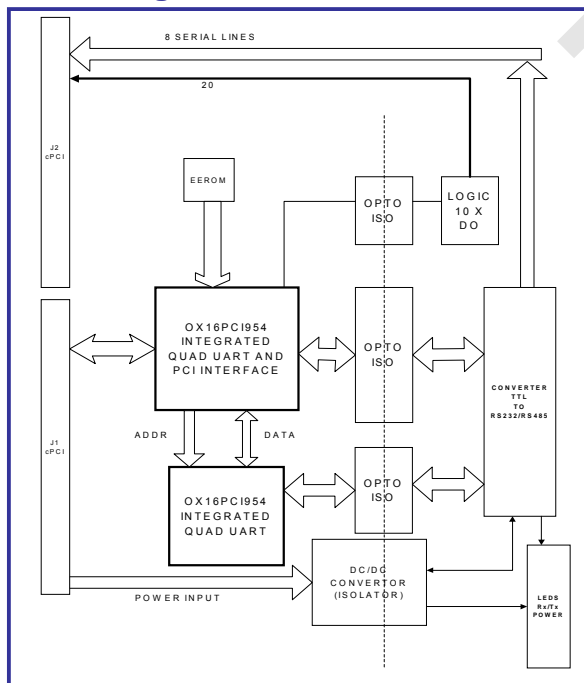
Environmental

Operating Temperature	0 to 70°C
Storage Temperature	-40 to +85 °C
Humidity	5-95% non-condensing

Functional

BUS Interface	Compact PCI, 32 bit (16 bit data transfer) 33MHz
Plug and Play	Supports auto-recognition of board on power-on and plug-in; includes Device ID, Vendor ID, and configuration
Front Panel Indicators	5V Bus, 5V Isolated, Tx and Rx for each channel

Block Diagram



Power

Digital Section	+5VDC @ 800 mA from J1
I/O Section	+5VDC @ 300 mA generated on board by DC/DC (1.5W)

Serial

Number of Outputs	4 or 8 – Configured as RS-232 or RS-422
RS-232 Standard	Compatible with EIA/TIA-232E and V.28 Specification
RS-422 Standard	Compatible with EIA standard RS-422/485
RS-232 Max Data Rate	120Kbps
RS-422 Max Data Rate	1.25Mbps
Isolation	Opto-isolation, Min 1500V

Serial

Number of Digital outputs	10
Voltage Level	TTL
Output Current	+/-20mA
Isolation	Opto-isolation, Min 1500V

cPCI J2 Signals

	A	B	C	D	E
22	Reserved	Reserved	Reserved	Reserved	Reserved
21	Reserved	Reserved	Reserved	Reserved	Reserved
20	TX_E-	TX_F-	TX_G-	TX_H-	
19	TX_E+	TX_F+	TX_G+	TX_H+	
18	AGND	AGND	AGND	AGND	AGND
17	RX_E-	RX_F-	RX_G-	RX_H-	B4
16	RX_E+	RX_F+	RX_G+	RX_H+	B3
15	AGND	AGND	AGND	AGND	B2
14	CK_B-				B1
13	CK_B+				B0
12	CK_A-				
11	CK_A+				
10	AGND	AGND	AGND	AGND	AGND
9	RX_A-	RX_B-	RX_C-	RX_D-	A4
8	RX_A+	RX_B+	RX_C+	RX_D+	A3
7	AGND	AGND	AGND	AGND	A2
6	TX_A-	TX_B-	TX_C-	TX_D-	A1
5	TX_A+	TX_B+	TX_C+	TX_D+	A0
4	24V	24Vret	24V	(spare)	Reserved
3	Reserved	Reserved	Reserved	Reserved	Reserved
2	Reserved	Reserved	Reserved	Reserved	Reserved
1				5V	5V

Jumper Configurations

Use these jumpers for desired protocol.

SCOM-0800	RS232	RS485
Ch. 1-4	JP39	JP40

SCOM-0801	RS232	RS485
Ch. 1-4	JP6	JP7
Ch. 5-8	JP8	JP9

Place jumper on these pins for each channel.

Pins	Rx	Tx
Ch. 1	1,2	9,10
Ch. 2	3,4	11,12
Ch. 3	5,6	13,14
Ch. 4	7,8	15,16
Ch. 5	1,2	9,10
Ch. 6	3,4	11,12
Ch. 7	5,6	13,14
Ch. 8	7,8	15,16



cPCI
SCOM-0801

Rx2 ● ● Rx1
Rx4 ● ● Rx3
Rx6 ● ● Rx5
Rx8 ● ● Rx7

Tx2 ● ● Tx1
Tx4 ● ● Tx3
Tx6 ● ● Tx5
Tx8 ● ● Tx7

5VD ● ● 5VA



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