

# OCTAL 1000BASE-T TO SGMII CONVERTER

CTC-ENET-OCTAL-1G

PDS-249-3



## Amphenol Aerospace adds Gigabit Ethernet to SGMII Converter to the Integrated Electronic Products Line.

This product line is rugged, flexible, and affordable with many options available. This 1000BASE-T to SGMII Converter couples SerDes technology and protocol conversion with a new level of ruggedization.

### 1000BASE-T COPPER INTERFACE

- D38999 Shell Size 23
- (100) Size 22 contacts

### SGMII INTERFACE

- Samtec Q Series® High Speed Cable Assembly
- Consult factory for specific type required

### POWER SPECIFICATIONS

- 5V power connection in Samtec connector
- Low power consumption
  - Less than 5 watts

### BENEFITS

- 8 ports of Gigabit Ethernet
- Conversion of 1000BASE-T to SGMII
- Compliant with IEEE 802.3ab Ethernet Standards and Specifications
- Hermetic option available with a helium leak rate of 10<sup>-4</sup> cc/sec

### RUGGEDIZATION

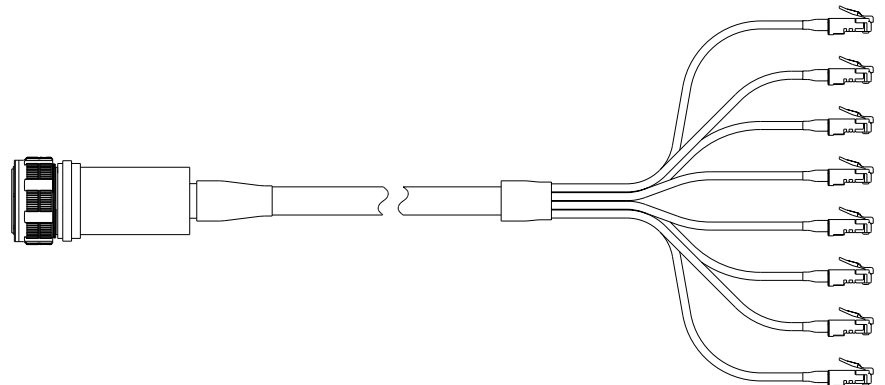
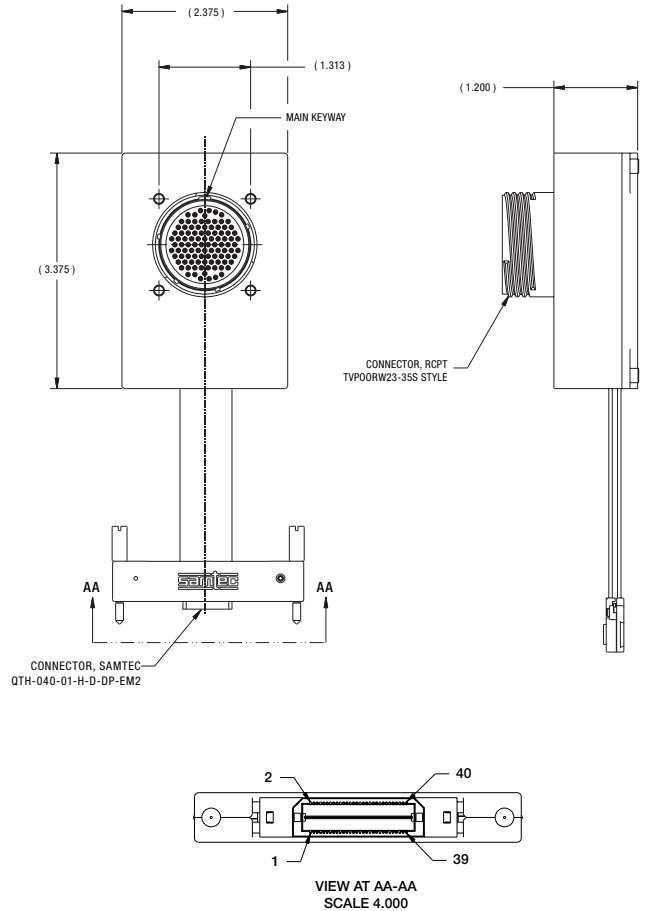
- Natural convection cooled (no fan or cold plate required)
- Operational temperature -40°C to +85°C
- Storage temperature -50°C to +125°C
- EMI/EMC compatible
- Refer to page 5 for additional details

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### PINOUT

MIL-DTL-38999 Shell Size 23-25 size 22D pins							
Pin	Description	Pin	Description	Pin	Description	Pin	Description
1	CH 1 A+	26	Ground	51	CH 5 A+	76	Ground
2	CH 2 A+	27	CH 4 A+	52	CH 5 A-	77	CH 7 A+
3	CH 2 A-	28	Ground	53	Ground	78	CH 7 A-
4	Ground	29	Ground	54	CH 5 B+	79	CH 7 B+
5	CH 2 B+	30	Ground	55	CH 5 B-	80	CH 7 B-
6	CH 2 B-	31	Ground	56	CH 6 A+	81	CH 7 C+
7	Ground	32	Ground	57	Ground	82	CH 8 A+
8	CH 1 A-	33	CH 3 D+	58	CH 6 B+	83	CH 8 A-
9	CH 1 B+	34	CH 3 D-	59	CH 6 B-	84	CH 8 B+
10	Ground	35	CH 1 C-	60	Ground	85	Ground
11	CH 2 C+	36	CH 1 D+	61	CH 5 C+	86	Ground
12	CH 2 C-	37	CH 4 A-	62	CH 5 C-	87	CH 7 D+
13	Ground	38	Ground	63	Ground	88	CH 7 D-
14	CH 2 D+	39	CH 4 B+	64	CH 5 D+	89	CH 7 C-
15	CH 2 D-	40	CH 4 B-	65	CH 5 D-	90	Ground
16	CH 1 B-	41	Ground	66	Ground	91	CH 8 C+
17	Ground	42	CH 4 C+	67	CH 6 A-	92	Ground
18	CH 3 A+	43	CH 4 C-	68	Ground	93	CH 8 B-
19	CH 3 A-	44	Ground	69	CH 6 C+	94	Ground
20	CH 3 B+	45	Ground	70	CH 6 C-	95	Ground
21	CH 3 B-	46	CH 1 D-	71	Ground	96	Ground
22	CH 3 C+	47	Ground	72	CH 6 D+	97	CH 8 C-
23	CH 3 C-	48	CH 4 D+	73	CH 6 D-	98	Spare
24	Ground	49	CH 4 D-	74	Spare	99	CH 8 D+
25	CH 1 C+	50	Spare	75	Spare	100	CH 8 D-



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### HOW TO ORDER:

1.	2.	3.	4.	5.	6.	7.	8.
Connector Type	Material	SGMII Interface	Finish	Shell Style	Option (Hermetic or Non-Hermetic)	D38999 Connector Rotation	Main Keyway Rotation
CTC							

#### STEP 1 :

Connector Type	
<b>CTC</b>	Copper to Copper Media Conversion Family

#### STEP 4:

Finish	
<b>T</b>	Aluminum Durmalon
<b>Z</b>	Aluminum Black Zinc Nickel
<b>F</b>	Aluminum Electroless Nickel
<b>M</b>	Composite Electroless Nickel
<b>W</b>	Aluminum OD Cad
<b>J</b>	Composite OD Cad
<b>L</b>	Stainless Steel Electrodeposited Nickel
<b>Y</b>	Stainless Steel Passivated

#### STEP 2 :

Material	
<b>-5</b>	Aluminum Shell
<b>-6</b>	Composite Shell
<b>-8</b>	Stainless Steel Shell

#### STEP 5 :

Shell Style	
<b>0</b>	Wall Mount

#### STEP 7 :

D38999 Connector Rotation	
<b>N</b>	N
<b>A</b>	A
<b>B</b>	B
<b>C</b>	C
<b>D</b>	D

#### STEP 3 :

SGMII Interface	
<b>-5</b>	Samtec Q Series® Connector

#### STEP 6 :

Option	
<b>05</b>	Non-Hermetic
<b>06</b>	Hermetic

#### STEP 8 :

Main Keyway Rotation	
<b>W</b>	0°
<b>X</b>	90°
<b>Y</b>	180°
<b>Z</b>	270°

### AVAILABLE TEST EQUIPMENT

	Part Number	Description
Test Cable	CA-628485-A30	RJ45 Test Cable for D38999 Connector, 5'
	CA-628485-A31	RJ45 Test Cable for D38999 Connector, 10'
	CA-628485-A32	RJ45 Test Cable for D38999 Connector, 15'
	CA-628485-A33	RJ45 Test Cable for D38999 Connector, 20'
Test Board	CF-020005-013	SMA Test Board for Samtec Connector