

3G/HD/SD-SDI

FIBER OPTIC MEDIA CONVERTERS



Amphenol introduces its first rugged multi-channel 3G/HD/SD-SDI fiber optic media converters.

These new converters can be used in harsh environment avionics, ground systems, or naval applications that need to transmit and receive SD/HD/3G-SDI signals over fiber optic cables.



Stand Alone Converter Part Number: CF-020011-331

- Converts SDI fiber signals to 75ohm 3G/HD/SD-SDI rugged BNC connectors
- Fiber inputs are made for 9/125 micron single mode fiber with 1310nm wavelengths
- Input power is brought in over separate MIL-DTL-38999 connector and is compatible with 28VDC
- -40C to +85C operating temperatures and meant for military/commercial aerospace environments
- Variants for multi-mode 850nm 50/125 and 62.5/125 support are also available



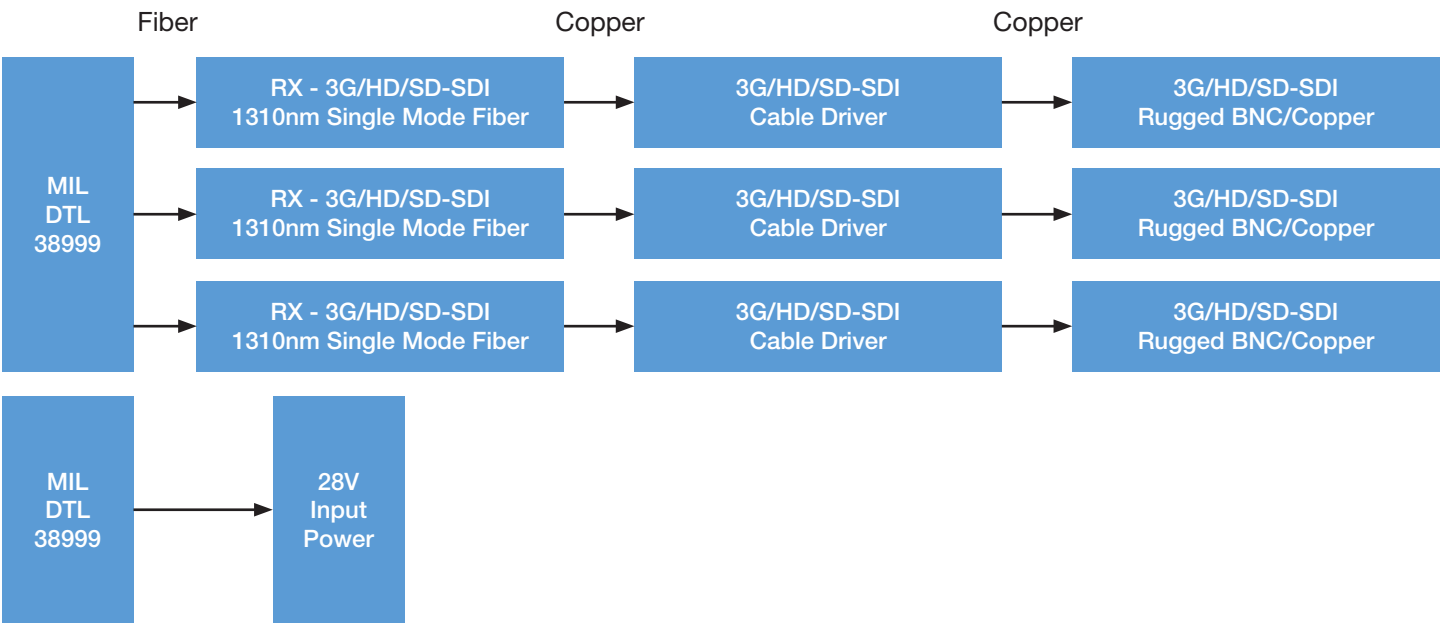
Sub-System Converter Part Number: CF-020011-333

- Converts SDI copper signals to fiber optics on a MIL-DTL-38999 connector
- Fiber outputs are made for 9/125 micron single mode fiber with 1310nm wavelengths
- Input power is brought via Samtec QSE and is 3.3VDC
- Copper, SDI and control signals come to the sub-system via Samtec QSE connector
- -40C to +85C operating temperatures and meant for military/commercial aerospace environments
- Variants for multi-mode 850nm 50/125 and 62.5/125 support are also available

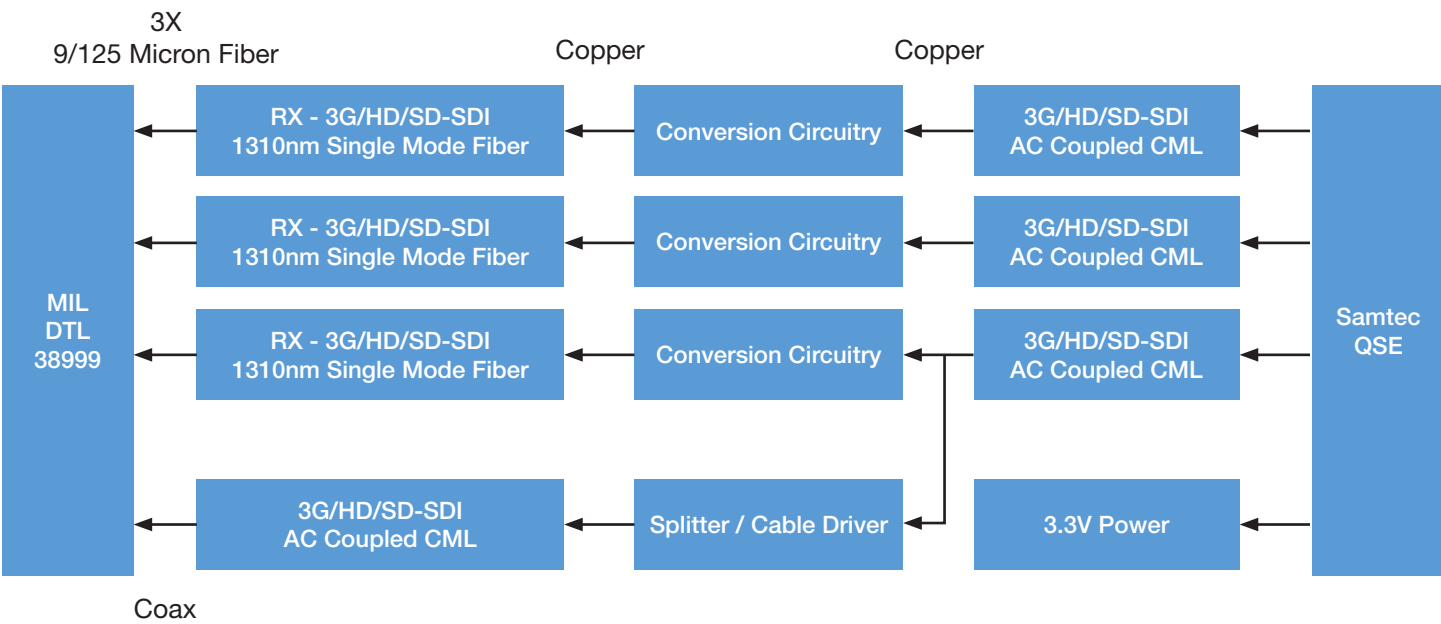
BLOCK DIAGRAMS

Stand Alone Converter CF-020011-331

9/125 micron

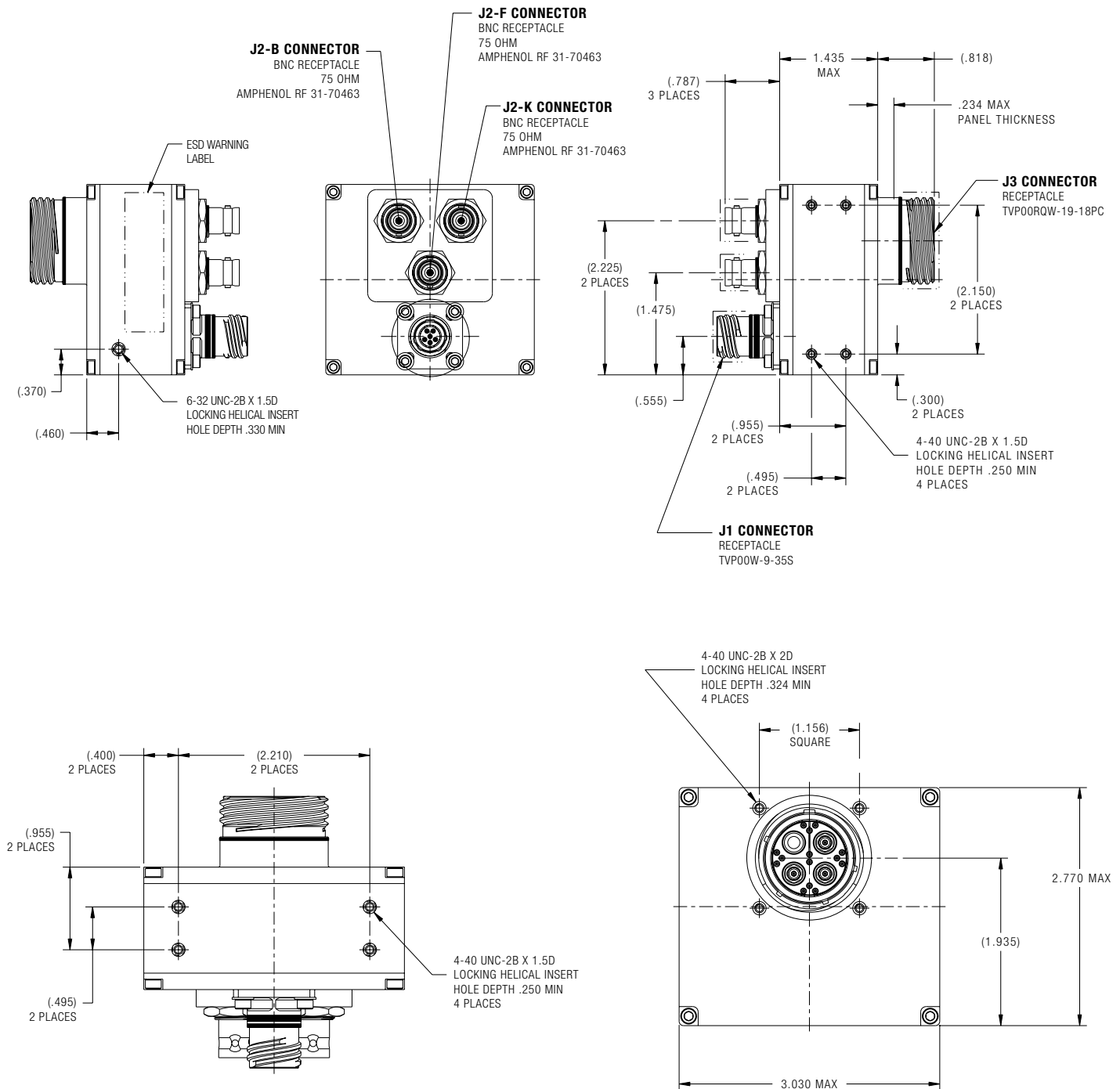


Sub-System Converter CF-020011-333



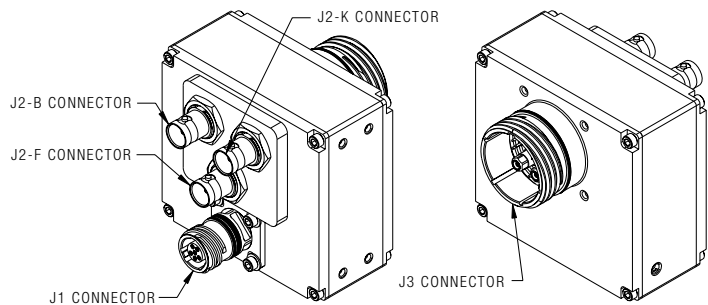
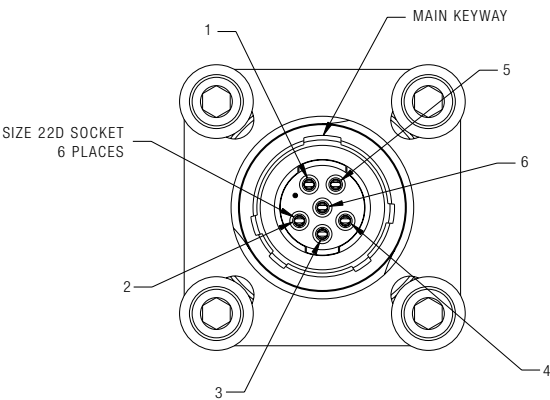
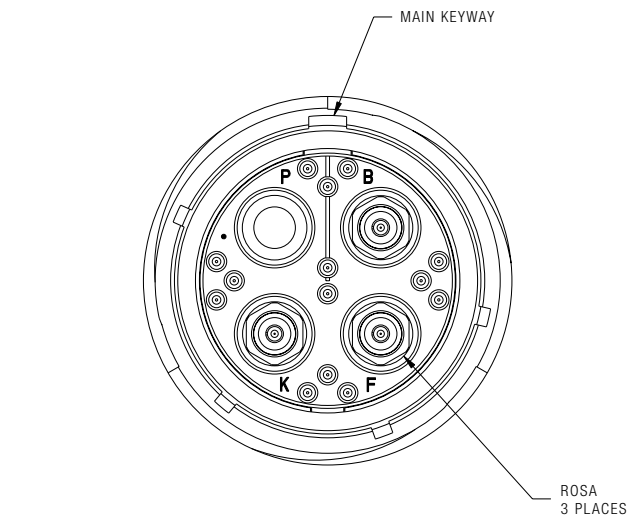
STAND ALONE CONVERTER

CF-020011-331



STAND ALONE CONVERTER

CF-020011-331

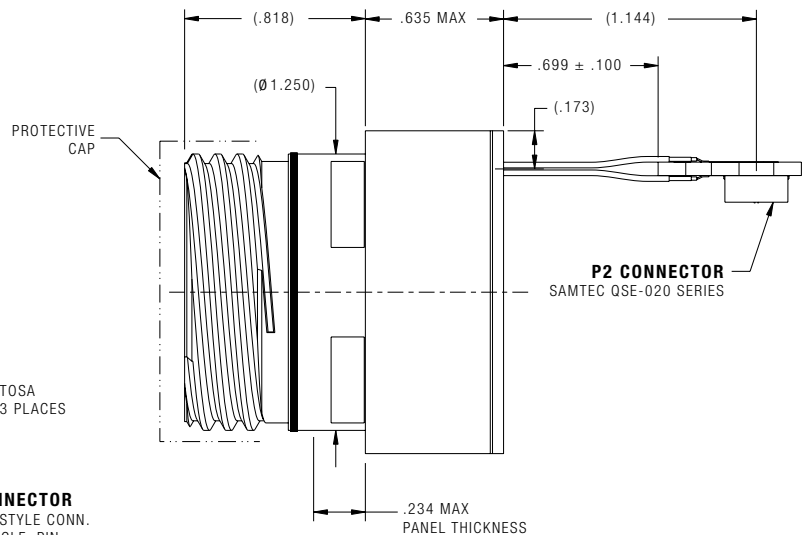
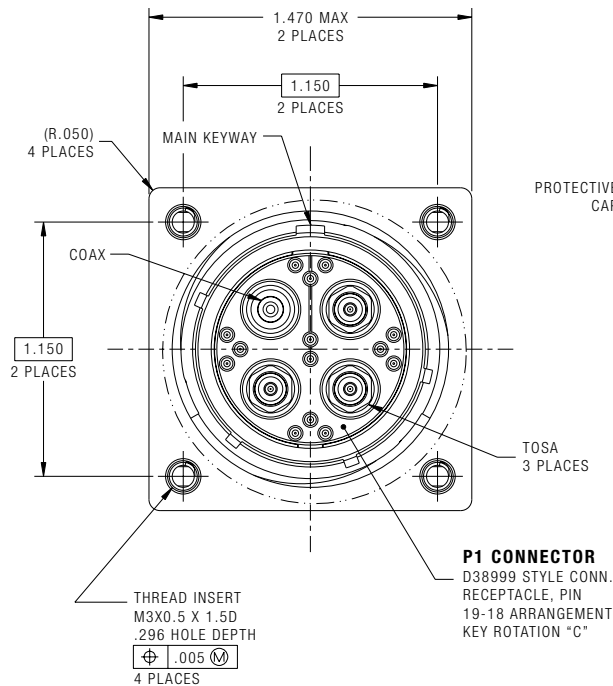


JI I/O CHART · POWER CONNECTOR				
Signal	Size	Copper/Fiber	I/O	Description
1	220	Copper	Power	Chassis Ground
2	220	Copper	Power	Chassis Ground
3	220	Copper	Power	Chassis Ground
4	220	Copper	Power	Chassis Ground
5	220	Copper	Power	28 DC IN
6	220	Copper	Power	Ground

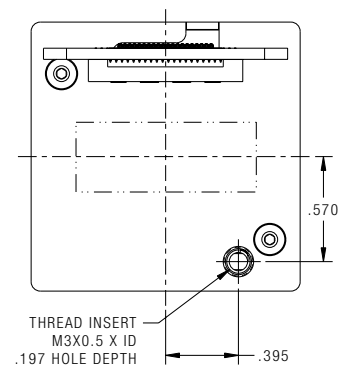
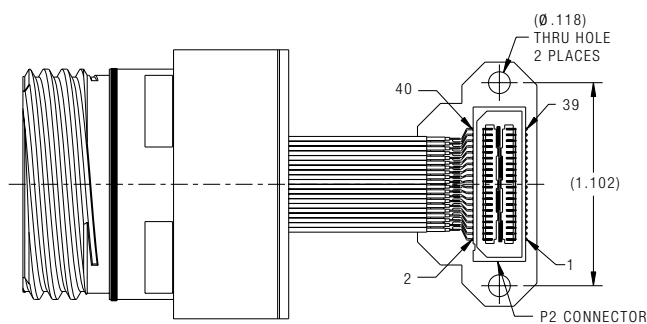
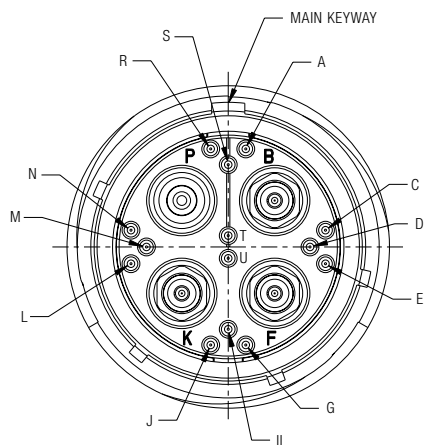
JI I/O CHART · POWER CONNECTOR					Signal Flow	BNC I/O CHART · OUTPUT CONNECTOR				
Signal	Size	Copper/Fiber	I/O	Description		Signal	Size	Copper/Fiber	I/O	Description
B	8	Fiber	Input	FO_VID_3 SDI	Converted to Copper	J2-B	8	Copper	Output	FO_VID_3 SDI Copper Converted
K	8	Fiber	Input	FO_VID_3 SDI	Converted to Copper	J2-K	8	Copper	Output	FO_VID_3 SDI Copper Converted
F	8	Fiber	Input	FO_VID_3 SDI	Converted to Copper	J2-F	8	Copper	Output	FO_VID_3 SDI Copper Converted

SUB-SYSTEM CONVERTER

CF-020011-333

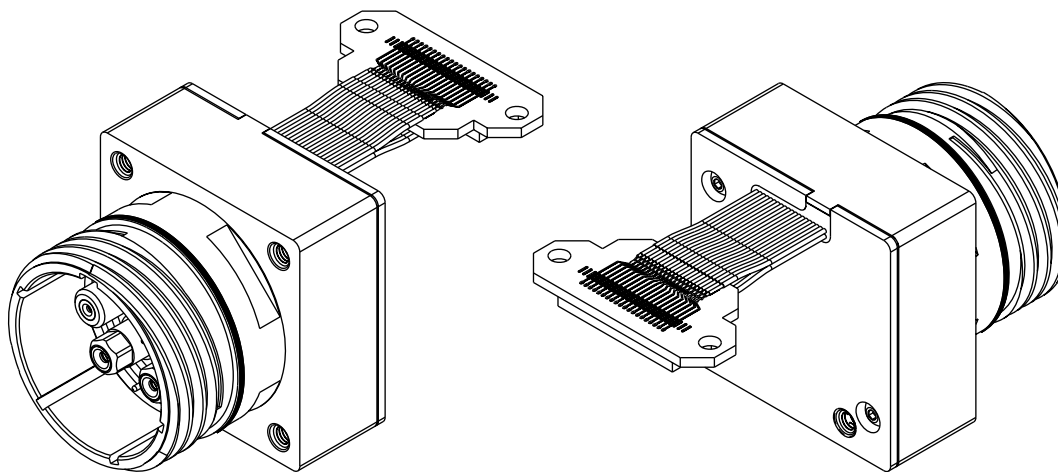


P1 CONNECTOR
D38999 STYLE CONN.
RECEPTACLE, PIN
19-18 ARRANGEMENT
KEY ROTATION "C"



SUB-SYSTEM CONVERTER

CF-020011-333



P1 I/O CHART			
PIN ID	Size	Signal	Description
P-CORE	8	D_VID_1	COAX
P-SHIELD		D_VID_1_RTN	
B	8	FO_VID_3	FIBER OPTIC
K	8	FO_VID_1	FIBER OPTIC
F	8	FO_VID_2	FIBER OPTIC
A	22D	SPARE	—
C	22D	A_VID_1Y	—
D	22D	A_VID_1Y_RTN	—
E	22D	SPARE	—
G	22D	A_VID_1C	—
H	22D	A_VID_1C_RTN	—
J	22D	A_VID_IN1	—
L	22D	A_VID_IN1_RTN	—
M	22D	A_VID_2Y	—
N	22D	A_VID_2Y_RTN	—
R	22D	A_VID_2C	—
S	22D	A_VID_2C_RTN	—
T	22D	EXT_SYNC_IN	—
U	22D	EXT_SYNC_IN_RTN	—

P2 I/O CHART		
PIN ID	Signal	Description
1	GND	—
3	D_VID_1+	100 OHM DP
5	D_VID_1-	100 OHM DP
7	GND	—
9	D_VID_3+	100 OHM DP
11	D_VID_3-	100 OHM DP
13	GND	—
15	GND	—
17	+3V3	POWER
19	+3V3	POWER
21	GND	—
23	A_VID_1C	75 OHM SE
25	A_VID_1C_RTN	75 OHM SE
27	GND	—
29	A_VID_2C	75 OHM SE
31	A_VID_2C_RTN	75 OHM SE
33	GND	—
35	A_VID_IN1	75 OHM SE
37	A_VID_IN1_RTN	75 OHM SE
39	GND	—

P2 I/O CHART (CONTINUED)		
PIN ID	Signal	Description
2	GND	—
4	D_VID_2+	100 OHM DP
6	D_VID_2-	100 OHM DP
8	GND	—
10	EXT_SYNC_IN	75 OHM SE
12	EXT_SYNC_IN_RTN	75 OHM SE
14	GND	—
16	GND	—
18	DV_SELECT	LOW-HD/ HIGH-SD
20	N/C	—
22	GND	—
24	A_VID_1Y	75 OHM SE
26	A_VID_1Y_RTN	75 OHM SE
28	GND	—
30	A_VID_2Y	75 OHM SE
32	A_VID_2Y_RTN	75 OHM SE
34	GND	—
36	N/C	100 OHM DP
38	N/C	100 OHM DP
40	GND	—

Amphenol Aerospace

40-60 Delaware Avenue
Sidney, NY 13838

amphenol-aerospace.com | amphenolmao.com