

10G-BASE-SR & 10G AGNOSTIC EMBEDDED FIBER/COPPER MEDIA CONVERTERS

PDS-293-1



Amphenol introduces a proven line of multi-channel 10G media converters meant for Ethernet and other encoded interfaces.

These converters can be used in harsh environment avionics, ground systems, or naval applications that need to transmit and receive encoded interfaces over fiber optic cables.



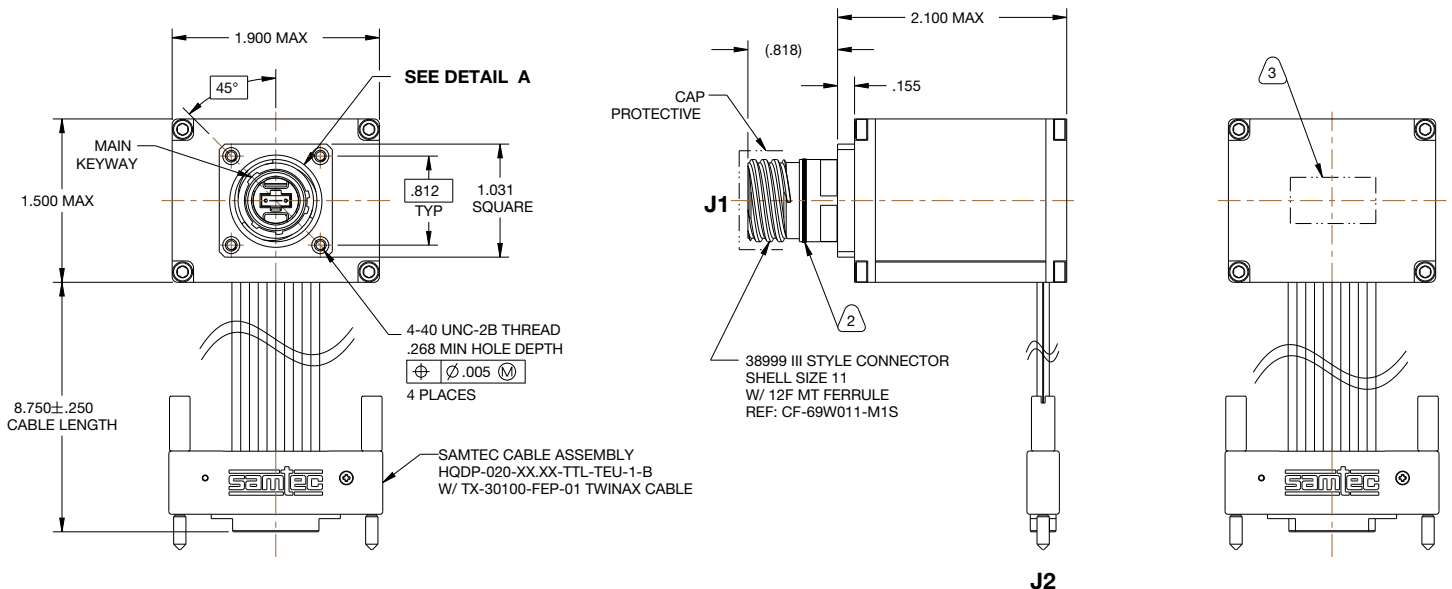
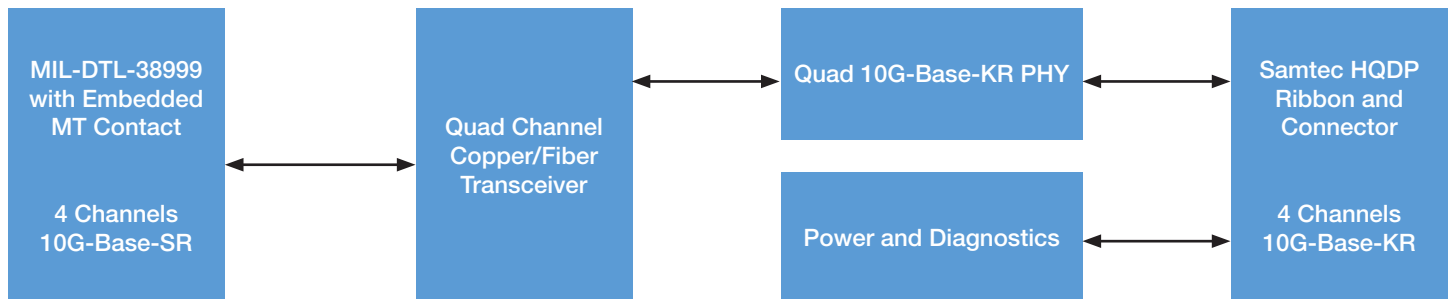
MEDIA CONVERTER FAMILY

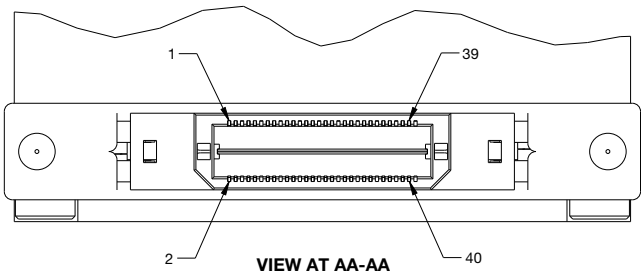
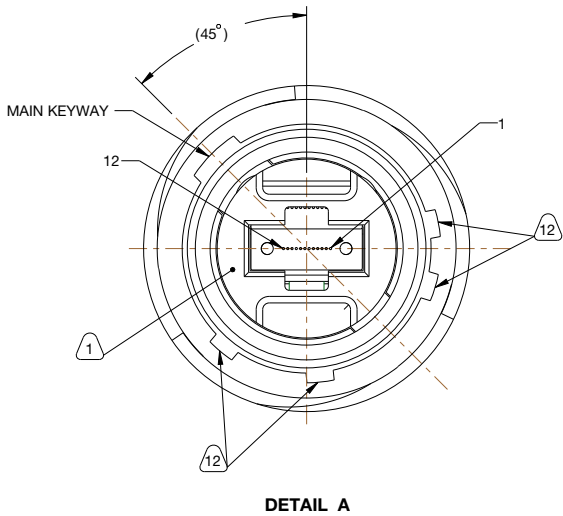
- **CF-020011-1XX:** Embedded 4-Channel 10G-Base-SR / 10G-Base-KR Embedded Media Converter
- **CF-020011-2XX:** Embedded 2-Channel 10G-Base-SR / XAUI Embedded Media Converter
- **CF-020010-8XX:** Embedded 4-Channel 10G Encoded Protocol Agnostic Embedded Media Converter
- **CF-020400-32X :** Embedded 2-channel 10G-Base-SR / 10G-Base-T Media converter

CF-020011-1XX

Embedded 4-Channel 10G-Base-SR / 10G-Base-KR Embedded Media Converter

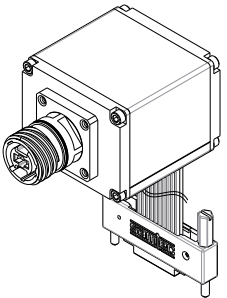
- Converts four channels of 10G-Base-KR Ethernet to 10G-Base-SR Ethernet.
- The 10G-Base-KR links are fully compliant to the IEEE specification, support auto-negotiation, and are brought out on a Samtec HQDP ribbon for attachment into a customer subsystem.
- The 10G-Base-SR links (multi-mode 850nm optics) are fully compliant to the IEEE specification and brought out on a shell size 11 MIL-DTL-38999 with an embedded MT contact suitable for use in ruggedized environments.
- Input 5V power is brought into the unit over the Samtec HQDP ribbon along with the high speed lanes.
- An I2C interface also is on the HQDP ribbon for configurability and BIT adaptation.
- -40C - +85C operating temperature and meant for military/commercial aerospace environments.
- The parts can be configured with any plating, shell rotation, HQDP ribbon length, and HQDP connector type.



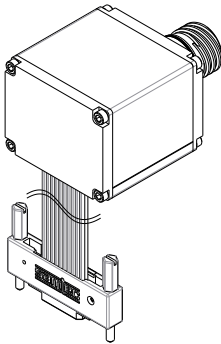


J1 I/O CHART	
ID	Signal
1	RX0
2	RX1
3	RX2
4	RX3
5	N/C
6	N/C
7	N/C
8	N/C
9	TX3
10	TX2
11	TX1
12	TX0

J2 I/O CHART			
ID	Signal	ID	Signal
1	KR_0_RX_P	2	KR_0_TX_P
3	KR_0_RX_N	4	KR_0_TX_N
5	KR_1_RX_P	6	KR_1_TX_P
7	KR_1_RX_N	8	KR_1_TX_N
9	N/C	10	N/C
11	N/C	12	N/C
13	N/C	14	N/C
15	N/C	16	N/C
17	+5V	18	+5V
19	GND	20	+5V
21	GND	22	SDA
23	GND	24	SCL
25	N/C	26	N/C
27	N/C	28	N/C
29	N/C	30	N/C
31	N/C	32	N/C
33	KR_2_RX_P	34	KR_2_TX_P
35	KR_2_RX_N	36	KR_2_TX_N
37	KR_3_RX_P	38	KR_3_TX_P
39	KR_3_RX_N	40	KR_3_TX_N



FRONT ISO VIEW

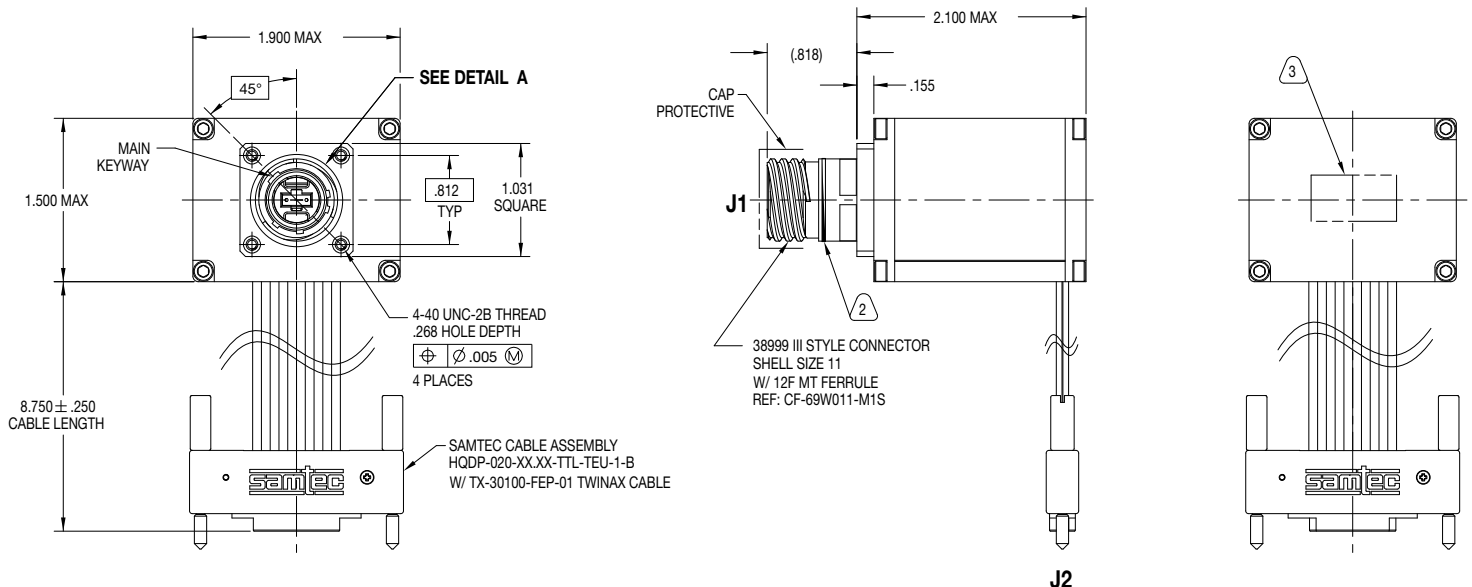
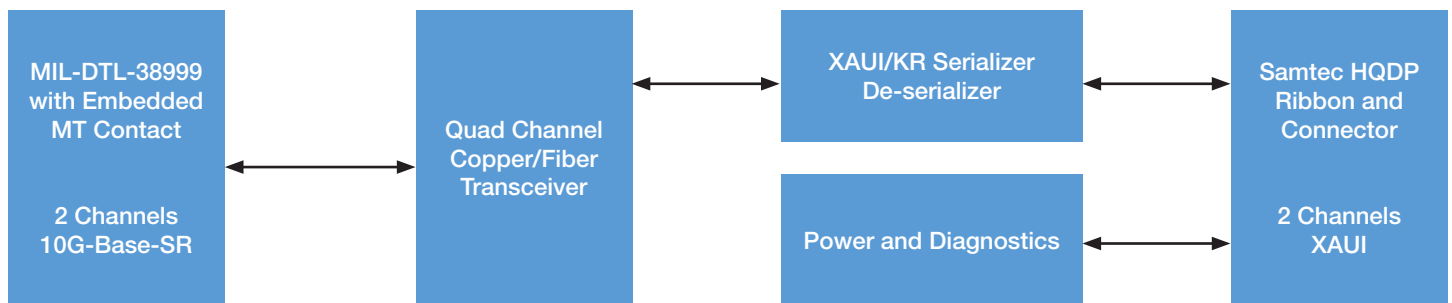


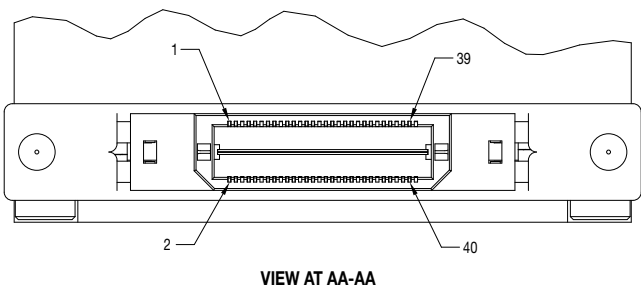
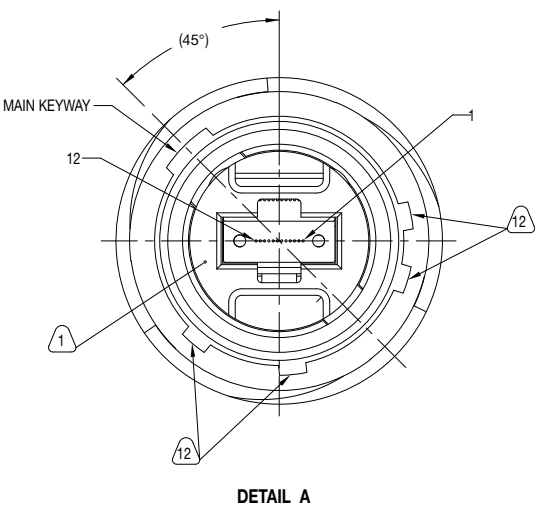
REAR ISO VIEW

CF-020011-2XX

Embedded 2-Channel 10G-Base-SR / XAUI Embedded Media Converter

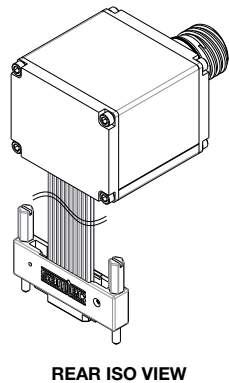
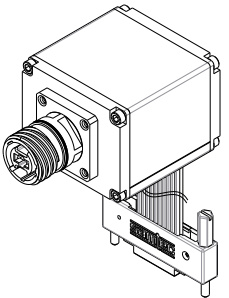
- Converts two channels of XAUI Ethernet to 10G-Base-SR Ethernet.
- The XAUI links are fully compliant to the IEEE specification and are brought out on a Samtec HQDP ribbon for attachment into a customer subsystem.
- The 10G-Base-SR links (multi-mode 850nm optics) are fully compliant to the IEEE specification and brought out on a shell size 11 MIL-DTL-38999 with an embedded MT contact suitable for use in ruggedized environments.
- Input 5V power is brought into the unit over the Samtec HQDP ribbon along with the high speed lanes.
- An MDIO interface also is on the HQDP ribbon for configurability and BIT adaptation.
- -40C - +85C operating temperature and meant for military/commercial aerospace environments.
- The parts can be configured with any plating, shell rotation, HQDP ribbon length, and HQDP connector type.





J1 I/O CHART	
ID	Signal
1	RX0
2	RX1
3	RX2
4	RX3
5	N/C
6	N/C
7	N/C
8	N/C
9	TX3
10	TX2
11	TX1
12	TX0

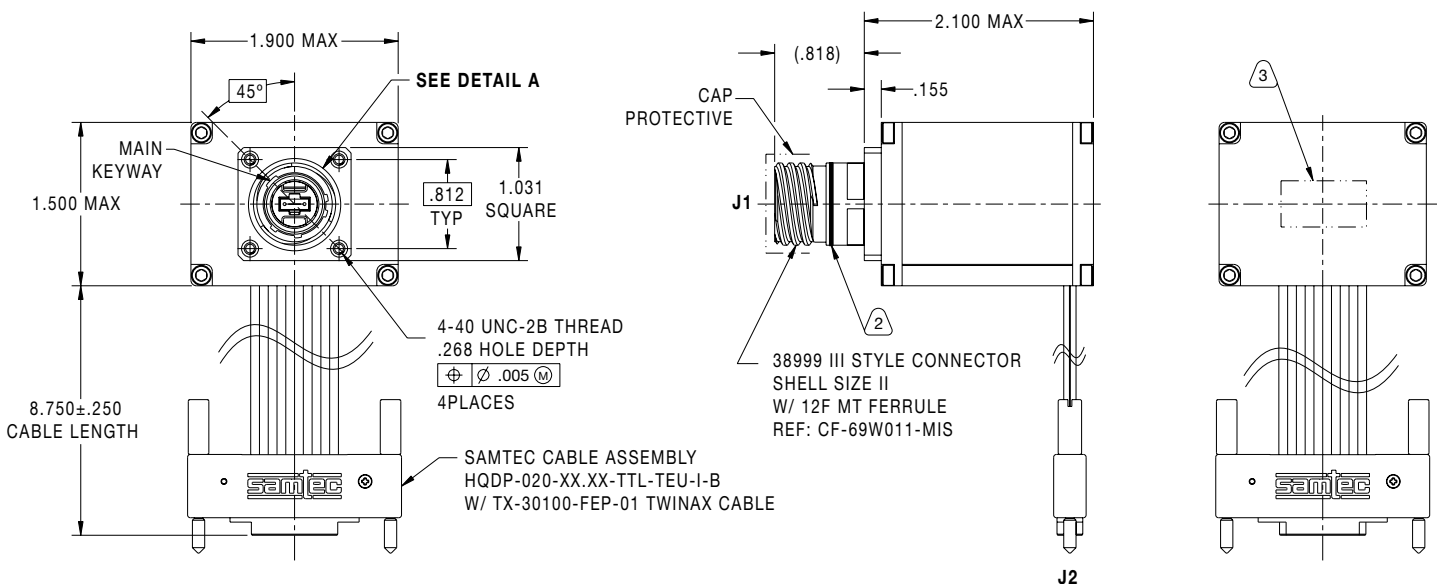
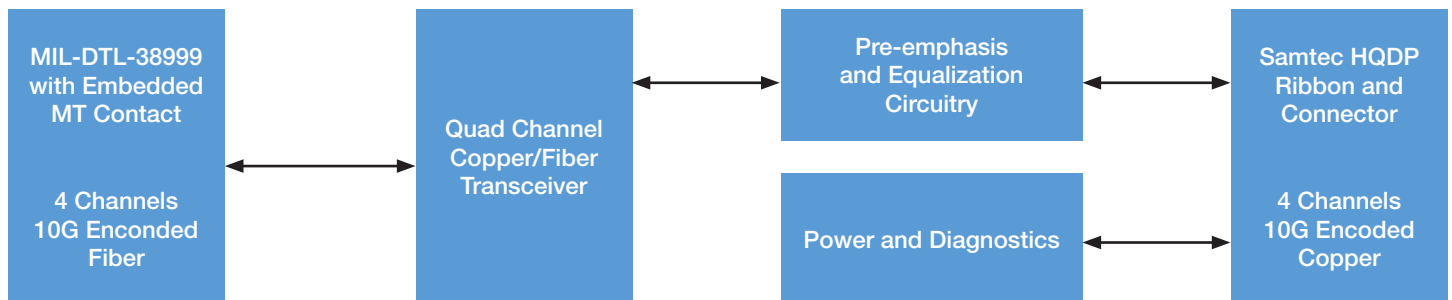
J2 I/O CHART			
ID	Signal	ID	Signal
1	XAUI_1_IN0_P	2	XAUI_1_OUT0_P
3	XAUI_1_IN0_N	4	XAUI_1_OUT0_N
5	XAUI_1_IN1_P	6	XAUI_1_OUT1_P
7	XAUI_1_IN1_N	8	XAUI_1_OUT1_N
9	XAUI_1_IN2_P	10	XAUI_1_OUT2_P
11	XAUI_1_IN2_N	12	XAUI_1_OUT2_N
13	XAUI_1_IN3_P	14	XAUI_1_OUT3_P
15	XAUI_1_IN3_N	16	XAUI_1_OUT3_N
17	+5V	18	+5V
19	GND	20	+5V
21	GND	22	MDIO
23	GND	24	MDC
25	XAUI_0_IN0_P	26	XAUI_0_OUT0_P
27	XAUI_0_IN0_N	28	XAUI_0_OUT0_N
29	XAUI_0_IN1_P	30	XAUI_0_OUT1_P
31	XAUI_0_IN1_N	32	XAUI_0_OUT1_N
33	XAUI_0_IN2_P	34	XAUI_0_OUT2_P
35	XAUI_0_IN2_N	36	XAUI_0_OUT2_N
37	XAUI_0_IN3_P	38	XAUI_0_OUT3_P
39	XAUI_0_IN3_N	40	XAUI_0_OUT3_N

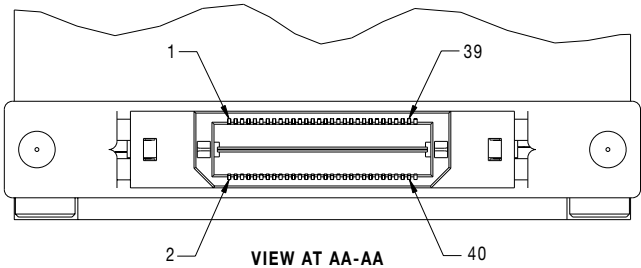
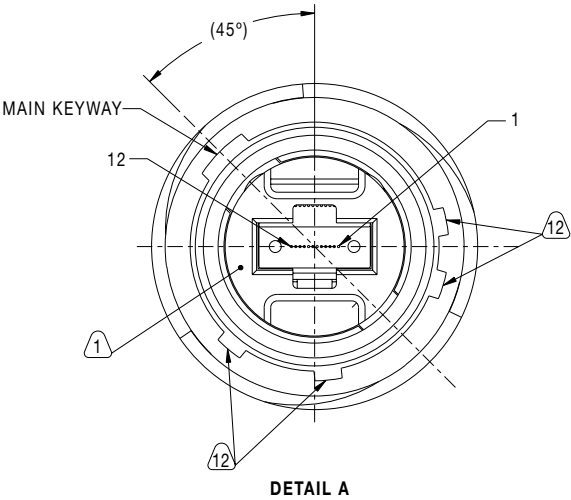


CF-020010-8XX

Embedded 4-Channel 10G Encoded Protocol Agnostic Embedded Media Converter

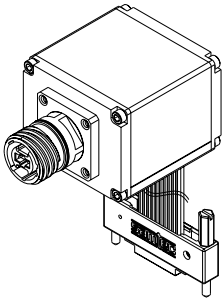
- Converts four channels of agnostic encoded data (Tx and Rx in one channel by definition) from copper to fiber. Supports speeds from 100Mbps to 10.3125Gbps.
- The 10G copper links are brought out on a Samtec HQDP ribbon for attachment into a customer subsystem.
- The 10G fiber links (multi-mode 850nm optics) are fully compliant to the IEEE specification and brought out on a shell size 11 MIL-DTL-38999 with an embedded MT contact suitable for use in ruggedized environments.
- Input 5V power is brought into the unit over the Samtec HQDP ribbon along with the high speed lanes.
- An I2C interface also is on the HQDP ribbon for configurability and BIT adaptation.
- -40C - +85C operating temperature and meant for military/commercial aerospace environments.
- The parts can be configured with any plating, shell rotation, HQDP ribbon length, and HQDP connector type.



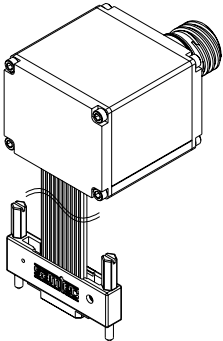


J1 I/O CHART	
ID	Signal
1	RX0
2	RX1
3	RX2
4	RX3
5	N/C
6	N/C
7	N/C
8	N/C
9	TX3
10	TX2
11	TX1
12	TX0

J2 I/O CHART			
ID	Signal	ID	Signal
1	KR_0_RX_P	2	KR_0_TX_P
3	KR_0_RX_N	4	KR_0_TX_N
5	KR_1_RX_P	6	KR_1_TX_P
7	KR_1_RX_N	8	KR_1_TX_N
9	N/C	10	N/C
11	N/C	12	N/C
13	N/C	14	N/C
15	N/C	16	N/C
17	+5V	18	+5V
19	GND	20	+5V
21	GND	22	SDA
23	GND	24	SCL
25	N/C	26	N/C
27	N/C	28	N/C
29	N/C	30	N/C
31	N/C	32	N/C
33	KR_2_RX_P	34	KR_2_TX_P
35	KR_2_RX_N	36	KR_2_TX_N
37	KR_3_RX_P	38	KR_3_TX_P
39	KR_3_RX_N	40	KR_3_TX_N



FRONT ISO VIEW

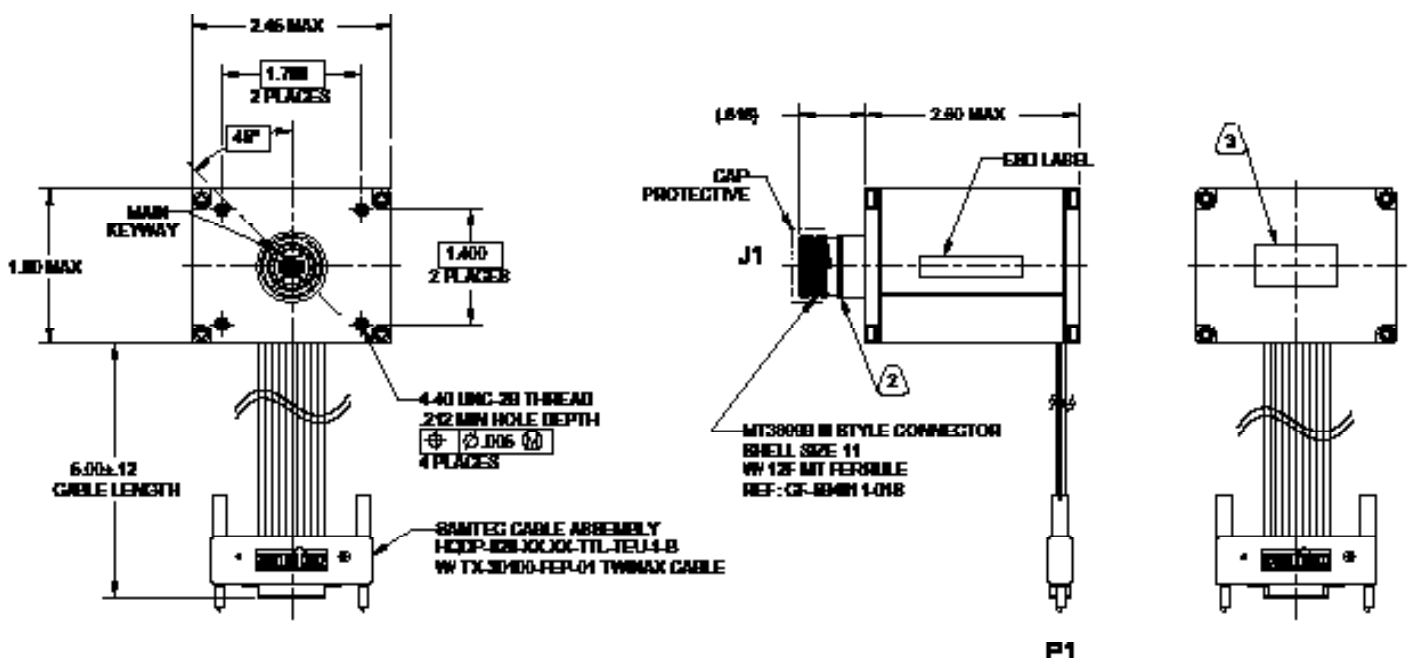
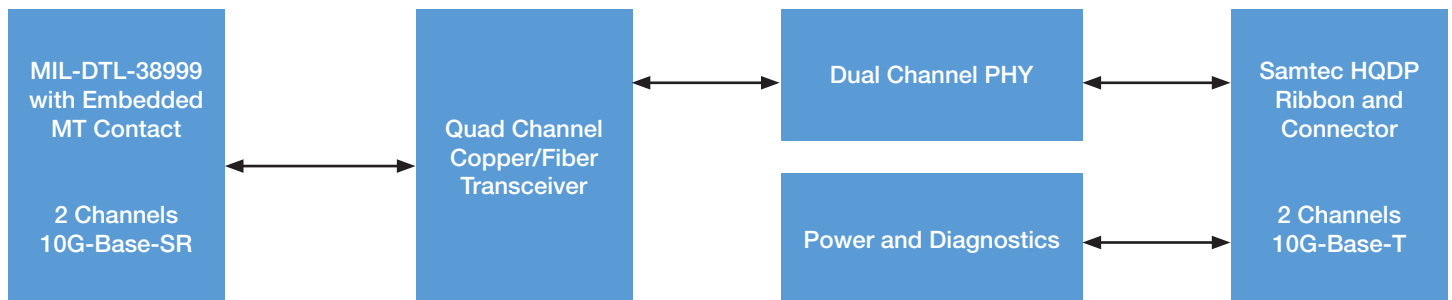


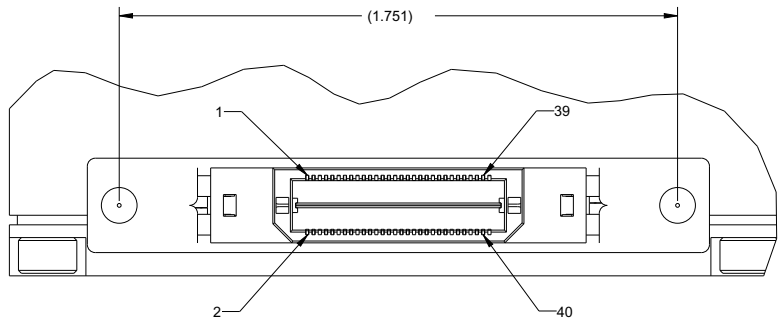
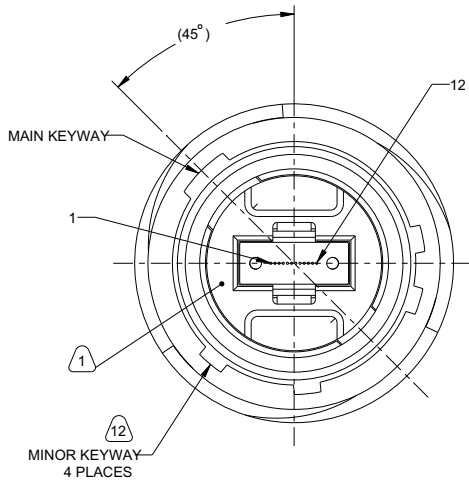
REAR ISO VIEW

CF-020400-32X

Embedded 2-channel 10G-Base-SR / 10G-Base-T Media converter

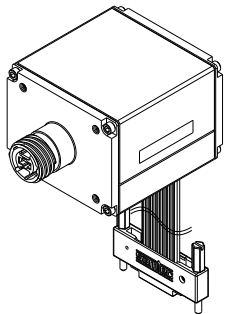
- Converts two channels of 10GBase-T to 10GBase-SR fiber. The 10G copper links are brought out on a Samtec HQDP ribbon for attachment into a customer subsystem.
- The 10G copper links are brought out on a Samtec HQDP ribbon for attachment into a customer subsystem. Input 5V power is brought into the unit over the Samtec HQDP ribbon along with the high speed lanes.
- The 10G fiber links (multi-mode 850nm optics) are fully compliant to the IEEE specification and brought out on a shell size 11 MIL-DTL-38999 with an embedded MT contact suitable for use in ruggedized environments.
- Input 5V power is brought into the unit over the Samtec HQDP ribbon along with the high speed lanes.
- An I2C interface also is on the HQDP ribbon for configurability and BIT adaptation.
- -40C - +85C operating temperature and meant for military/commercial aerospace environments.
- The parts can be configured with any plating, shell rotation, HQDP ribbon length, and HQDP connector type.



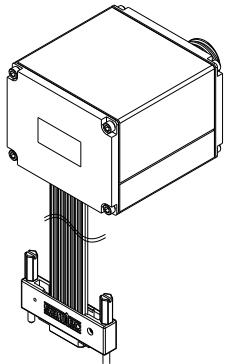


J1 I/O CHART	
ID	Signal
1	TX0
2	TX1
3	TX2
4	TX3
5	N/C
6	N/C
7	N/C
8	N/C
9	RX3
10	RX2
11	RX1
12	RX0

P1 I/O CHART			
ID	Signal	ID	Signal
1	1G/10GBASE-T CHANNEL 0 DA +	2	1G/10GBASE-T CHANNEL 0 DC +
3	1G/10GBASE-T CHANNEL 0 DA -	4	1G/10GBASE-T CHANNEL 0 DC -
5	1G/10GBASE-T CHANNEL 0 DB +	6	1G/10GBASE-T CHANNEL 0 DD +
7	1G/10GBASE-T CHANNEL 0 DB -	8	1G/10GBASE-T CHANNEL 0 DD -
9	1G/10GBASE-T CHANNEL 1 DA +	10	1G/10GBASE-T CHANNEL 1 DC +
11	1G/10GBASE-T CHANNEL 1 DA -	12	1G/10GBASE-T CHANNEL 1 DC -
13	1G/10GBASE-T CHANNEL 1 DB +	14	1G/10GBASE-T CHANNEL 1 DD +
15	1G/10GBASE-T CHANNEL 1 DB -	16	1G/10GBASE-T CHANNEL 1 DD -
17	+5V	18	GND
19	+5V	20	GND
21	SDA	22	MDIO
23	SCL	24	MDC
25	1G/10GBASE-T CHANNEL 2 DA +	26	1G/10GBASE-T CHANNEL 2 DC +
27	1G/10GBASE-T CHANNEL 2 DA -	28	1G/10GBASE-T CHANNEL 2 DC -
29	1G/10GBASE-T CHANNEL 2 DB +	30	1G/10GBASE-T CHANNEL 2 DD +
31	1G/10GBASE-T CHANNEL 2 DB -	32	1G/10GBASE-T CHANNEL 2 DD -
33	1G/10GBASE-T CHANNEL 3 DA +	34	1G/10GBASE-T CHANNEL 3 DC +
35	1G/10GBASE-T CHANNEL 3 DA -	36	1G/10GBASE-T CHANNEL 3 DC -
37	1G/10GBASE-T CHANNEL 3 DB +	38	1G/10GBASE-T CHANNEL 3 DD +
39	1G/10GBASE-T CHANNEL 3 DB -	40	1G/10GBASE-T CHANNEL 3 DD -



FRONT ISO VIEW



REAR ISO VIEW

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