

DO NOT
SCALE FROM
THIS PRINT

CABLE AWG/OHM/PAIRS

-03: 3492- 16 PAIRS (TWINAX)

-05: 3492- 16 PAIRS (THINAX)

END 2

- 1: QTY 1 ARC6-16 LENGTH 6" MIN
- 2: QTY 1 NVAC 2x2 LENGTH 6" MIN
- 3: QTY 1 CPC (Si-Fly) LENGTH 7" MIN
- 4: QTY 1 ABC-6-16 LENGTH 6" MIN

CABLE LENGTH (IN)

SEE MIN FOR END 2 OPTION

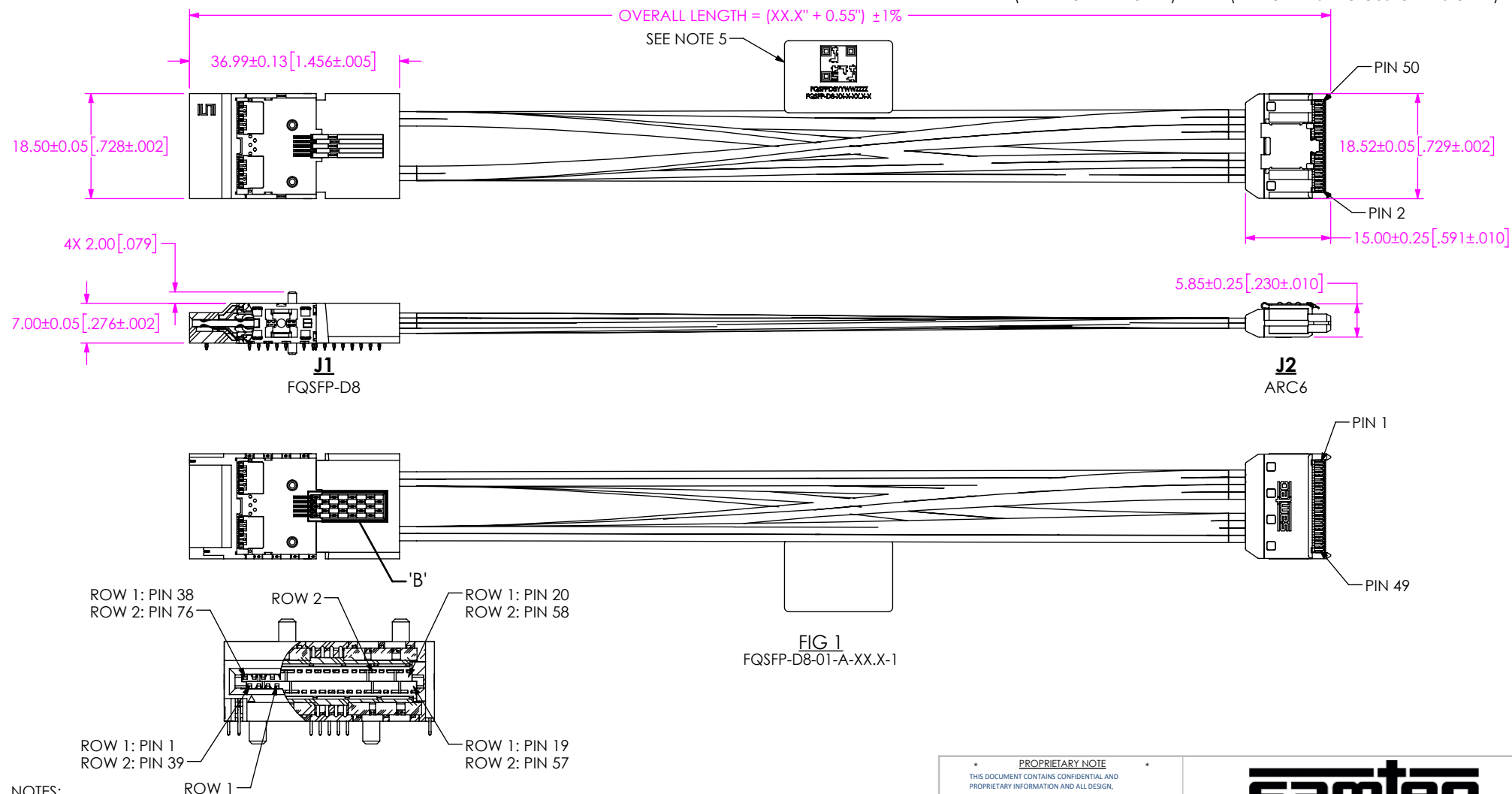
FOOTPRINT

-A: PRIMARY

-B: SECONDARY
(BELLY TO BELLY ONLY)

(Δ = NOT RELEASED)

(□ = FOR EXISTING CUSTOMERS ONLY)



NOTES:

1. REFER TO MSA QSFP-DD STANDARD FOR MATING QSFP TRANCEIVER EDGE CARD FOOTPRINT/
2. REFER TO QSFP-D8-XX-X-XX.X-X-FOOTPRINT FOR END 1 FOOTPRINT.
3. REFER TO QSFP-D8-X-X-X-XX-F FOR QSFP-D8 CAGE.
4. REFER TO HS-QSFP-D8-XX-X FOR QSFP-D8 HEAT SINK.
5. HDRL-13 TO BE CENTERED ON CABLE AS SHOWN. LABEL TO CONTAIN:
QR CODE: AS SHOWN & INCLUDING IN ONE LINE: FQSFPD8YYWWZZZ
WHERE YY = YEAR; WW = WEEK; ZZZZ = UNIQUE IDENTIFIER
LINE 1 - SERIAL NUMBER: "FQSFPD8YYWWZZZ"
LINE 2 - PART NUMBER: "FQSFP-D8-XX-X-XX.X-X"
6. QSFP-D8 END PACKAGED IN PROTECTIVE CAP SEE FIGURE 14 SHT 10.

F:\DWG\SW\Exisprod\Assembly\Point8mm\FQSFP-D8-XX-X-XX.X-X.SLDDRW

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MATERIAL: DO NOT SCALE DRAWING
INSULATOR: LCP SHEET SCALE: 1:2
WELD TAB: COPPER ALLOY
STAMPING: COPPER ALLOY
PLATING: 30μ" SELECTIVE GOLD
IN CONTACT AREA

samtec

520 PARK EAST BLVD, NEW ALBANY, IN 47150
PHONE: 812-944-6733 FAX: 812-948-5047
e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:

FQSFP-D8 ASSEMBLY

DWG. NO.

FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY

04/15/2021

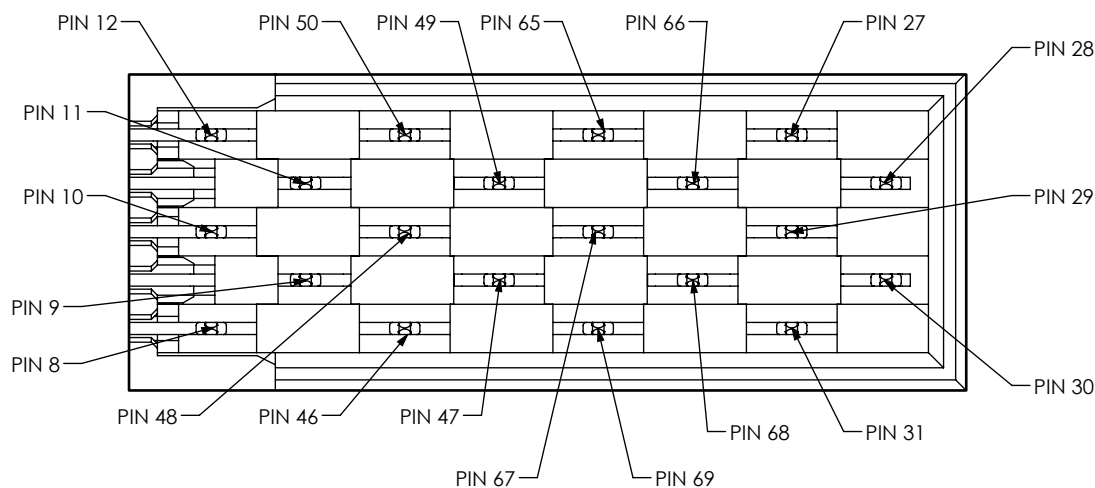
SHEET 1 OF 10

TABLE 1

SIGNAL MAPPING TO ARC6 (END OPTION -1)

J1	NAME	J2	J1	NAME	J2	J1	NAME	J2	J1	NAME	J2
1	GND 1	49	20	GND 2	50	39	GND 1	37	58	GND 2	38
2	TX2N	47	21	RX2N	46	40	TX6N	35	59	RX6N	34
3	TX2P	45	22	RX2P	48	41	TX6P	33	60	RX6P	36
4	GND 1	43	23	GND 2	44	42	GND 1	31	61	GND 2	32
5	TX4N	41	24	RX4N	40	43	TX8N	29	62	RX8N	28
6	TX4P	39	25	RX4P	42	44	TX8P	27	63	RX8P	30
7	GND 1		26	GND 2		45	GND 1		64	GND 2	
8	MODSELL	NC	27	MODPRSL	NC	46	RESERVED	NC	65	NC	NC
9	RESETL	NC	28	INTL	NC	47	VS1	NC	66	RESERVED	NC
10	VCCR _X	NC	29	VCC _{TX}	NC	48	VCCR _{X1}	NC	67	VCC _{TX1}	NC
11	SCL	NC	30	VCC1	NC	49	VS2	NC	68	VCC2	NC
12	SDA	NC	31	INITMODE	NC	50	VS3	NC	69	RESERVED	NC
13	GND 2	14	32	GND 1	13	51	GND 2	26	70	GND 1	19
14	RX3P	12	33	TX3P	9	52	RX7P	24	71	TX7P	21
15	RX3N	10	34	TX3N	11	53	RX7N	22	72	TX7N	23
16	GND 2	8	35	GND 1	1	54	GND 2	20	73	GND 1	25
17	RX1P	6	36	TX1P	3	55	RX5P	18	74	TX5P	15
18	RX1N	4	37	TX1N	5	56	RX5N	16	75	TX5N	17
19	GND 2	2	38	GND 1	7	57	GND 2		76	GND 1	

ALL LIKE NAMED GROUNDS ARE COMMON AND TIED TO CABLE SHIELD

ALL NC NETS DO NOT TRANSMIT THROUGH CABLE,
THEY WILL ROUTE THROUGH CUSTOMER PCBON THE MATING BOARD ASSEMBLY, SAMTEC RECOMMENDS IMPLEMENTING A
GND REFERENCE TYING ALL GND'S TOGETHERDETAIL 'B'
SCALE 8 : 1

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DESCRIPTION:	FQSFP-D8 ASSEMBLY	
DWG. NO.	FQSFP-D8-XX-X-XX.X-X	
BY: G. DETHY	04/15/2021	SHEET 2 OF 10

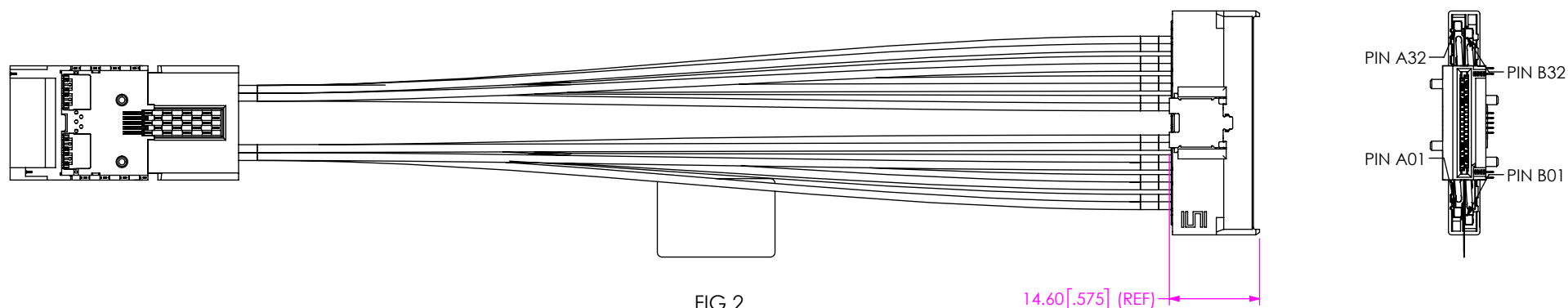
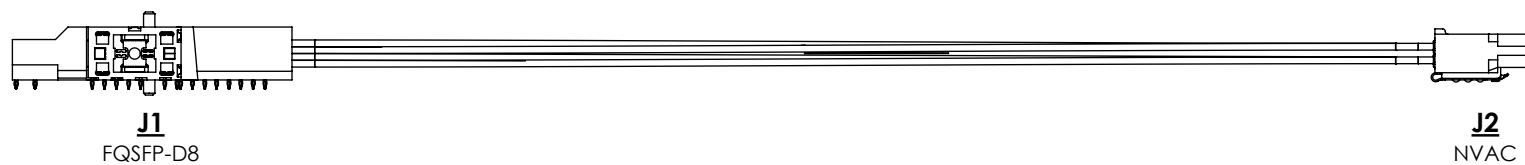
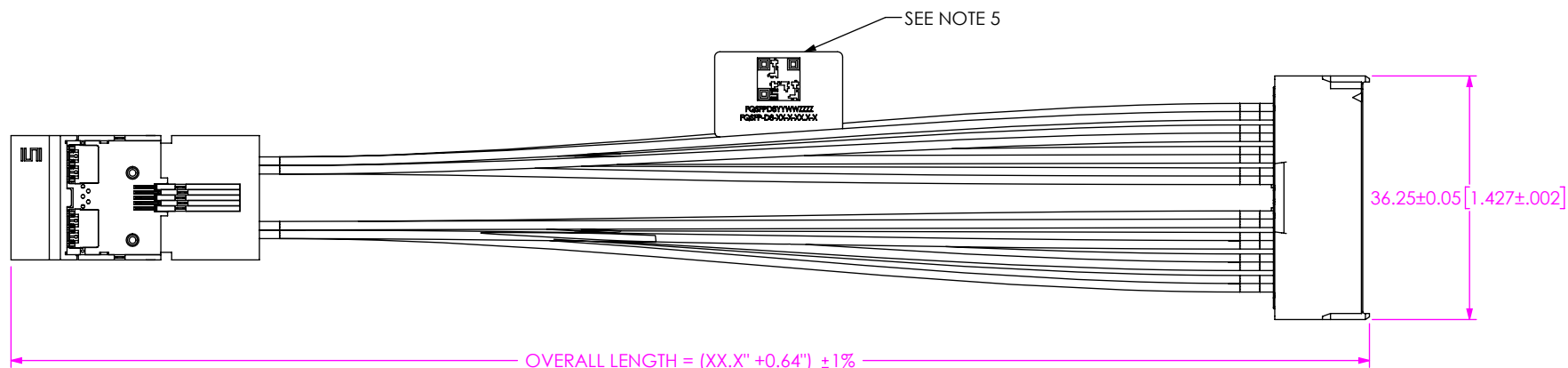


FIG 2
FQSFP-D8-01-A-XX.X-2 SHOWN
(SAME AS FIG 1, EXCEPT AS SHOWN)

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e-Mail info@SAMTEC.com code 55322

DESCRIPTION:
FQSFP-D8 ASSEMBLY

DWG. NO.
FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY 04/15/2021 SHEET 3 OF 10

TABLE 2											
SIGNAL MAPPING TO NVAC (END OPTION -2)											
J1	NAME	J2	J1	NAME	J2	J1	NAME	J2	J1	NAME	J2
1	GND 1	GND	20	GND 2	GND	39	GND 1	GND	58	GND 2	GND
2	TX2N	B10	21	RX2N	A23	40	TX6N	B2	59	RX6N	A31
3	TX2P	B11	22	RX2P	A22	41	TX6P	B3	60	RX6P	A30
4	GND 1	GND	23	GND 2	GND	42	GND 1	GND	61	GND 2	GND
5	TX4N	B14	24	RX4N	A19	43	TX8N	B6	62	RX8N	A27
6	TX4P	B15	25	RX4P	A18	44	TX8P	B7	63	RX8P	A26
7	GND 1	GND	26	GND 2	GND	45	GND 1	GND	64	GND 2	GND
8	MODSELL	NC	27	MODPRSL	NC	46	RESERVED	NC	65	NC	NC
9	RESETL	NC	28	INTL	NC	47	VS1	NC	66	RESERVED	NC
10	VCCR1	NC	29	VCCTX	NC	48	VCCR1	NC	67	VCCTX1	NC
11	SCL	NC	30	VCC1	NC	49	VS2	NC	68	VCC2	NC
12	SDA	NC	31	INITMODE	NC	50	VS3	NC	69	RESERVED	NC
13	GND 2	GND	32	GND 1	GND	51	GND 2	GND	70	GND 1	GND
14	RX3P	B26	33	TX3P	A7	52	RX7P	B18	71	TX7P	A15
15	RX3N	B27	34	TX3N	A6	53	RX7N	B19	72	TX7N	A14
16	GND 2	GND	35	GND 1	GND	54	GND 2	GND	73	GND 1	GND
17	RX1P	B30	36	TX1P	A3	55	RX5P	B22	74	TX5P	A11
18	RX1N	B31	37	TX1N	A2	56	RX5N	B23	75	TX5N	A10
19	GND 2	GND	38	GND 1	GND	57	GND 2	GND	76	GND 1	GND
ALL LIKE NAMED GROUNDS ARE COMMON AND TIED TO CABLE SHIELD											
ALL NC NETS DO NOT TRANSMIT THROUGH CABLE, THEY WILL ROUTE THROUGH CUSTOMER PCB											
ON THE MATING BOARD ASSEMBLY, SAMTEC RECOMMENDS IMPLEMENTING A GND REFERENCE TYING ALL GND'S TOGETHER											

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DESCRIPTION:
FQSFP-D8 ASSEMBLY

DWG. NO.
FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY 04/15/2021 SHEET 4 OF 10

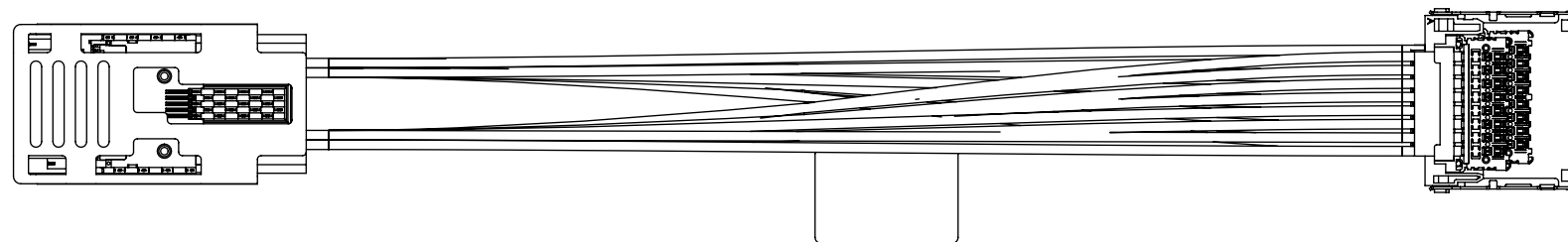
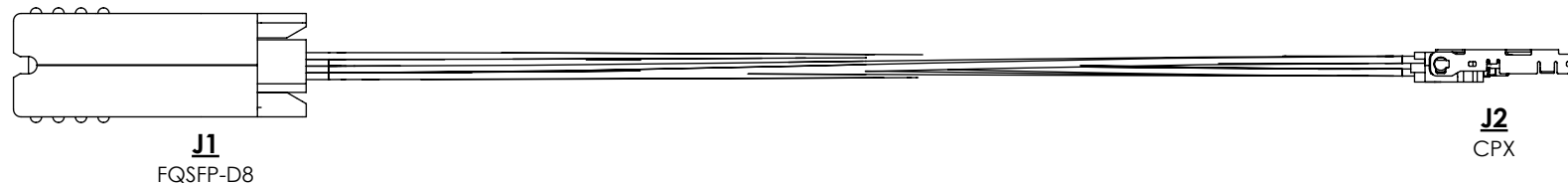
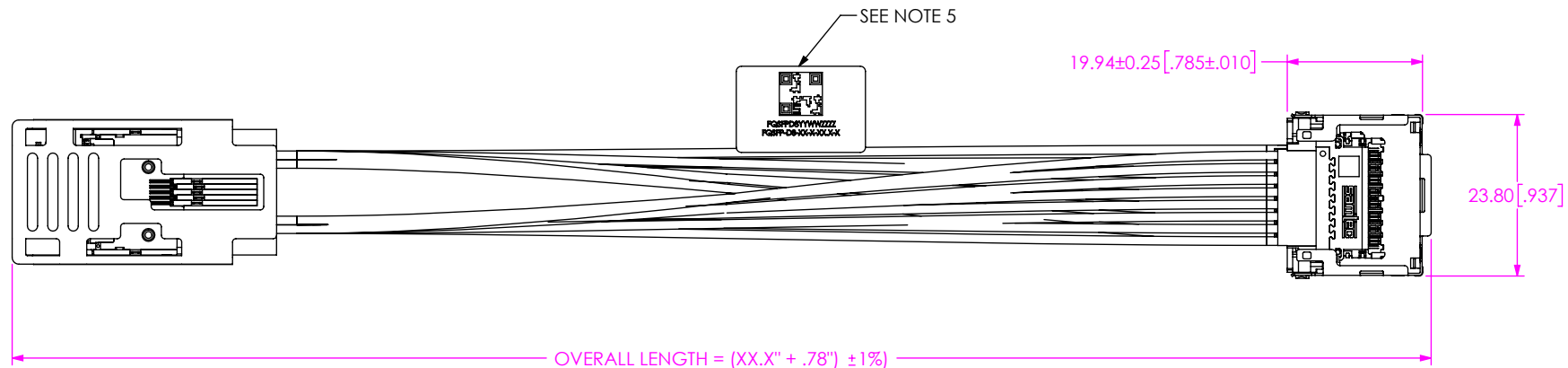


FIG 3
FQSFP-D8-01-A-XX.X-3 SHOWN
(SAME AS FIG 2, EXCEPT AS SHOWN)

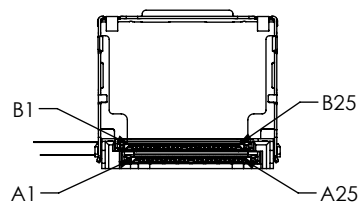


FIG 15
CPC END VIEW SHOWN
FOR PINOUT CLARITY

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DESCRIPTION: FQSFP-D8 ASSEMBLY

DWG. NO. FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY 04/15/2021 SHEET 5 OF 10

TABLE 3											
SIGNAL MAPPING TO CPX (END OPTION -3)											
J1	NAME	J2	J1	NAME	J2	J1	NAME	J2	J1	NAME	J2
1	GND 1		20	GND 2		39	GND 1		58	GND 2	
2	TX2N	A24	21	RX2N	B20	40	TX6N	A18	59	RX6N	B14
3	TX2P	A23	22	RX2P	B21	41	TX6P	A17	60	RX6P	B15
4	GND 1		23	GND 2		42	GND 1		61	GND 2	
5	TX4N	A21	24	RX4N	B23	43	TX8N	A15	62	RX8N	B17
6	TX4P	A20	25	RX4P	B24	44	TX8P	A14	63	RX8P	B18
7	GND 1		26	GND 2		45	GND 1		64	GND 2	
8	MODSELL	NC	27	MODPRSL	NC	46	RESERVED	NC	65	NC	NC
9	RESETL	NC	28	INTL	NC	47	VS1	NC	66	RESERVED	NC
10	VCCR1	NC	29	VCCTX	NC	48	VCCR1	NC	67	VCCTX1	NC
11	SCL	NC	30	VCC1	NC	49	VS2	NC	68	VCC2	NC
12	SDA	NC	31	INITMODE	NC	50	VS3	NC	69	RESERVED	NC
13	GND 2		32	GND 1		51	GND 2		70	GND 1	
14	RX3P	B06	33	TX3P	A02	52	RX7P	B12	71	TX7P	A08
15	RX3N	B05	34	TX3N	A03	53	RX7N	B11	72	TX7N	A09
16	GND 2		35	GND 1		54	GND 2		73	GND 1	
17	RX1P	B03	36	TX1P	A05	55	RX5P	B09	74	TX5P	A11
18	RX1N	B02	37	TX1N	A06	56	RX5N	B08	75	TX5N	A12
19	GND 2		38	GND 1		57	GND 2		76	GND 1	
ALL LIKE NAMED GROUNDS ARE COMMON AND TIED TO CABLE SHIELD											
ALL NC NETS DO NOT TRANSMIT THROUGH CABLE, THEY WILL ROUTE THROUGH CUSTOMER PCB											
ON THE MATING BOARD ASSEMBLY, SAMTEC RECOMMENDS IMPLEMENTING A GND REFERENCE TYING ALL GND'S TOGETHER											

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DESCRIPTION:
 FQSFP-D8 ASSEMBLY

DWG. NO.
 FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY 04/15/2021 SHEET 6 OF 10

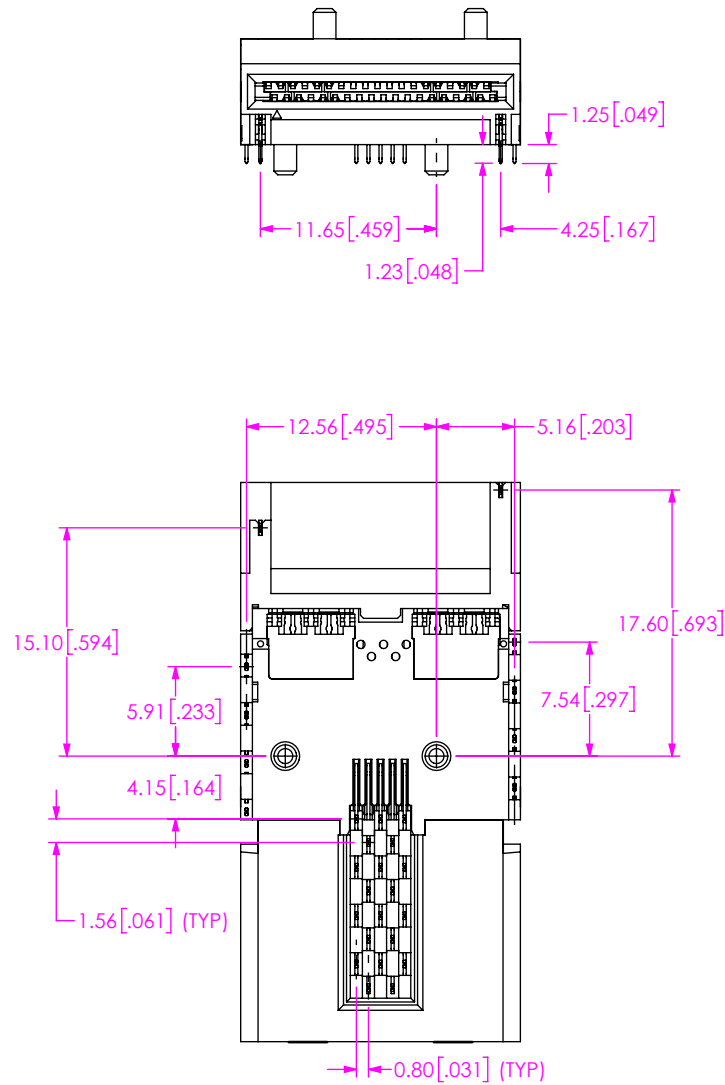


FIG 4
FQSFP-D8-01-A-XX.X-X SHOWN

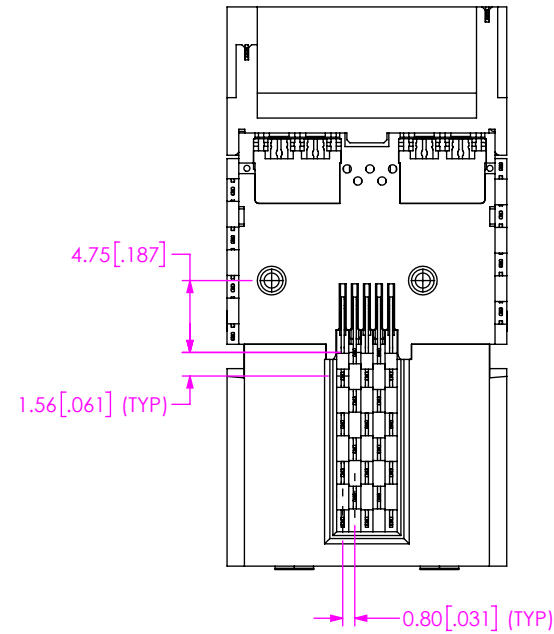


FIG 5
FQSFP-D8-01-B-XX.X-X SHOWN

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DESCRIPTION:
FQSFP-D8 ASSEMBLY

DWG. NO.
FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY 04/15/2021 SHEET 7 OF 10

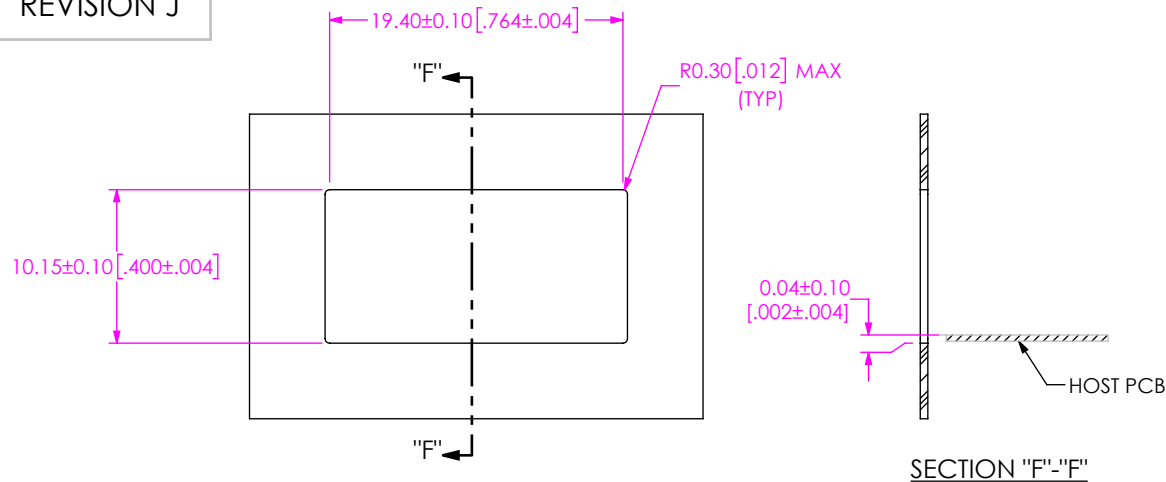


FIG 6
RECOMMENDED PANEL OPENING FOR QSFP-D8-X-X-X-XX-F

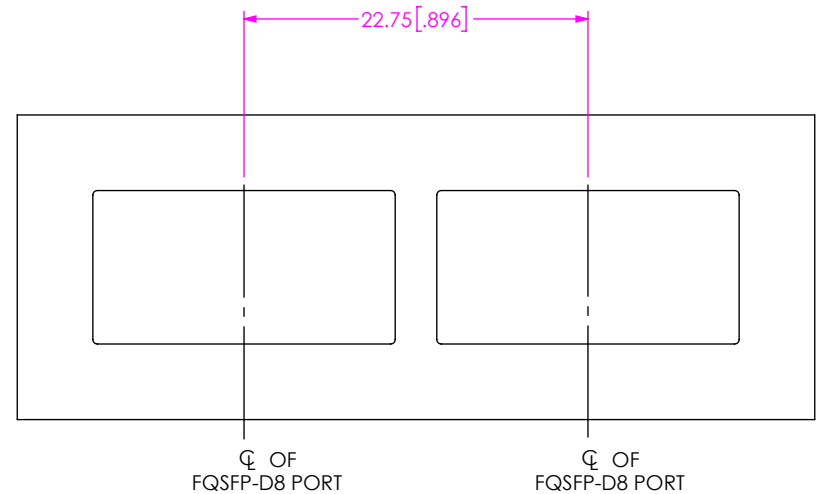


FIG 7
(DIFFERENT AS SHOWN, OTHERWISE SAME AS FIG 8)

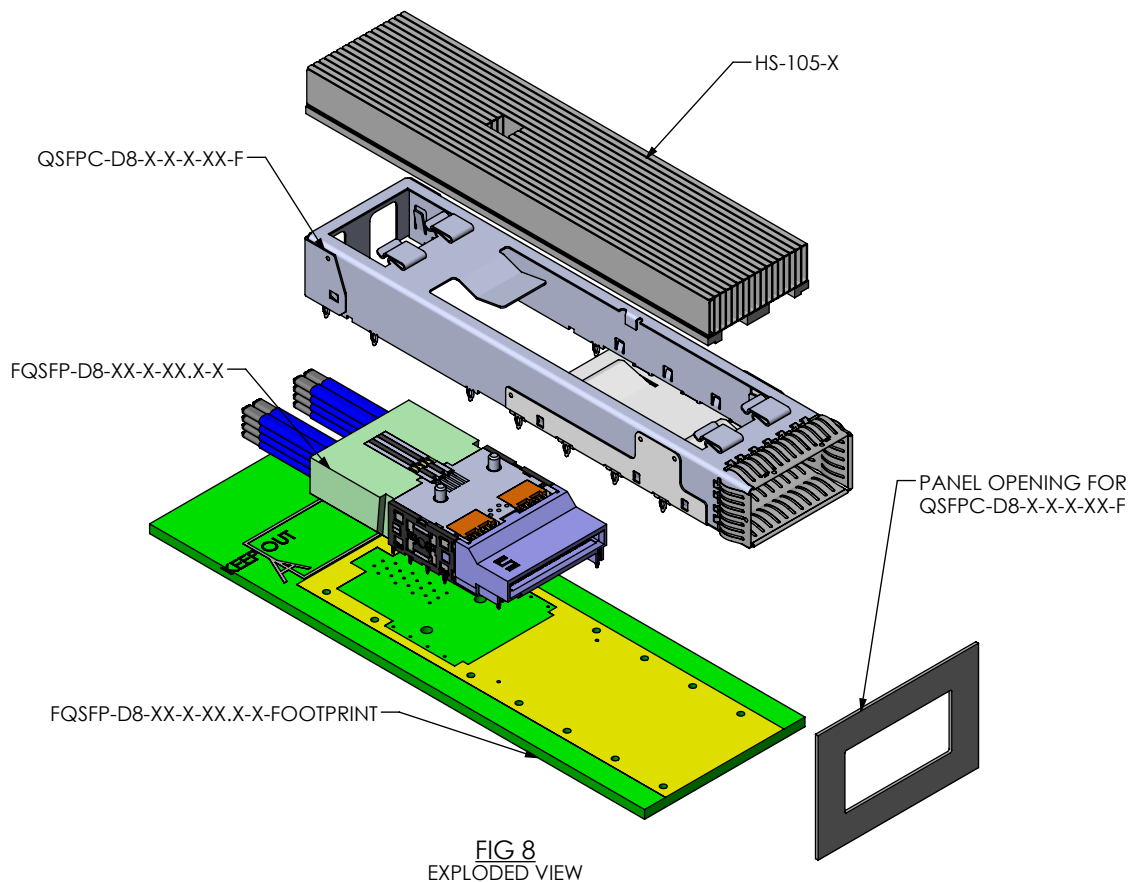


FIG 8
EXPLODED VIEW

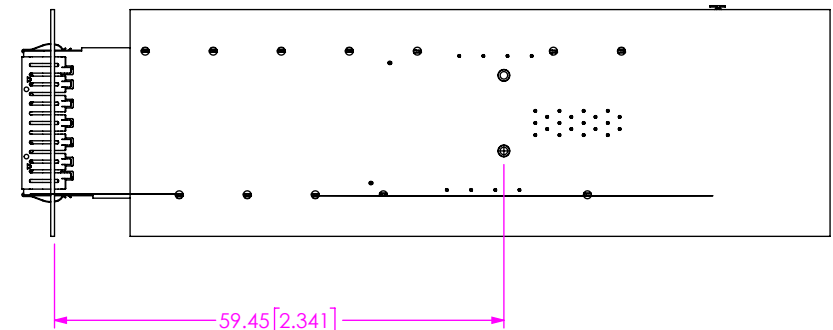


FIG 9
APPLICATION VIEW

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DESCRIPTION:
FQSFP-D8 ASSEMBLY

DWG. NO.
FQSFP-D8-XX-X-XX.X-X

BY: G. DETHY 04/15/2021 SHEET 8 OF 10

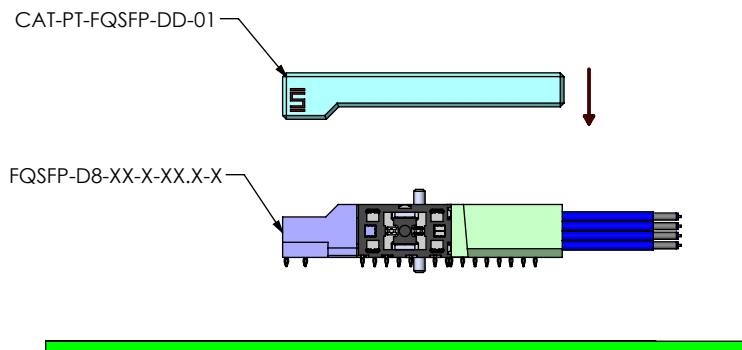


FIG 10
CONNECTOR PRESS

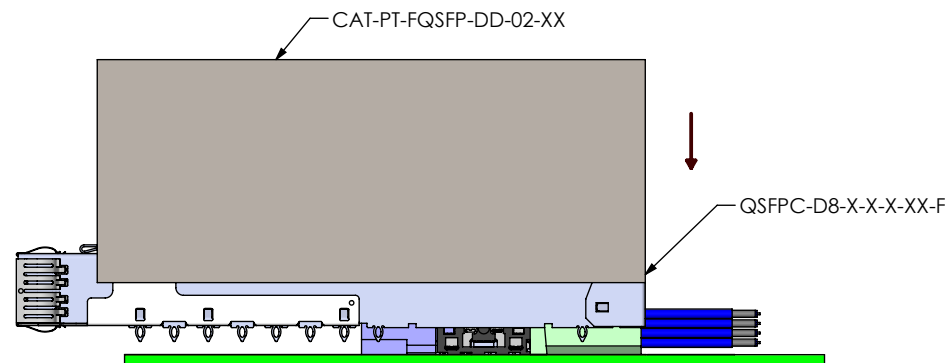


FIG 11
CAGE PRESS

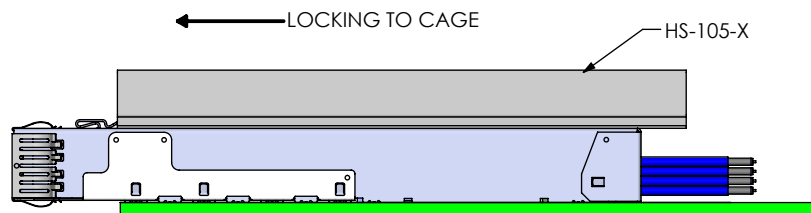


FIG 12
HEAT SINK LOCK

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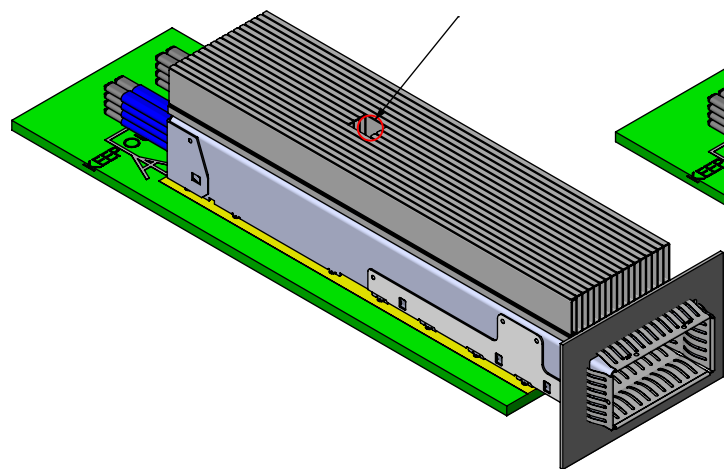
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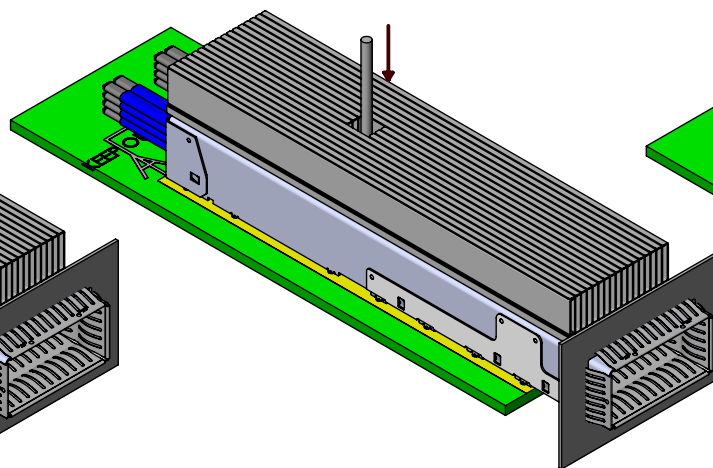
DESCRIPTION:
FQSFP-D8 ASSEMBLY

DWG. NO.
FQSFP-D8-XX-X-XX.X-X

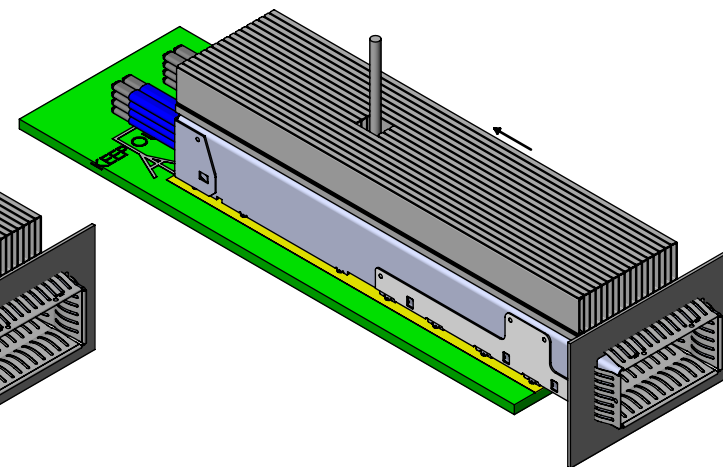
BY: G. DETHY 04/15/2021 SHEET 9 OF 10



STEP 1
LOCATE HEATSINK LATCH HOLE



STEP 2
INSERT PIN TO RELEASE LATCH



STEP 3
SLIDE REARWARD TO REMOVE

FIG 13
HEATSINK REMOVAL

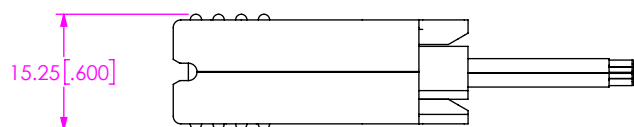
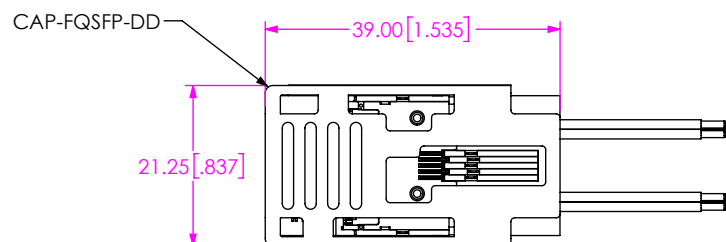


FIG 14
CAP VIEW FOR J1 END

F:\DWG\SW\Exisprod\Assembly\Point8mm\FQSFP-D8-XX-X-XX.X-SLDDRW

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SHEET 10 OF 10	