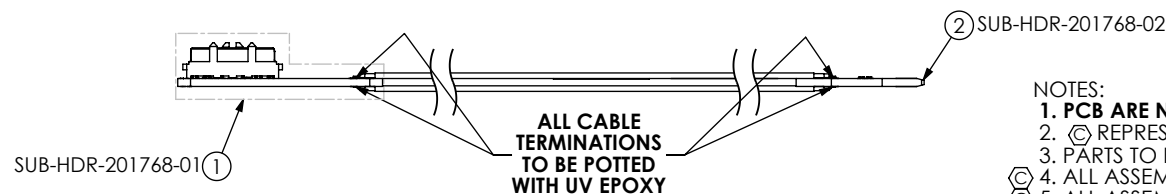
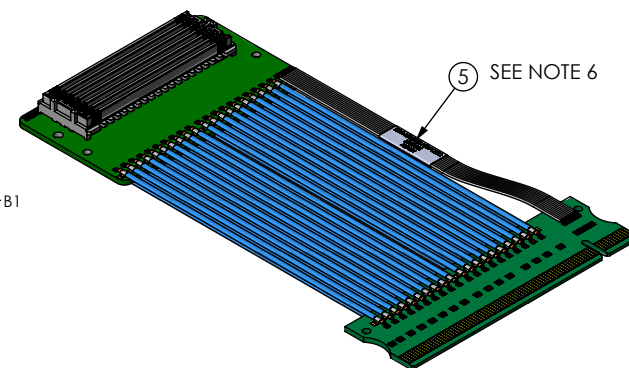
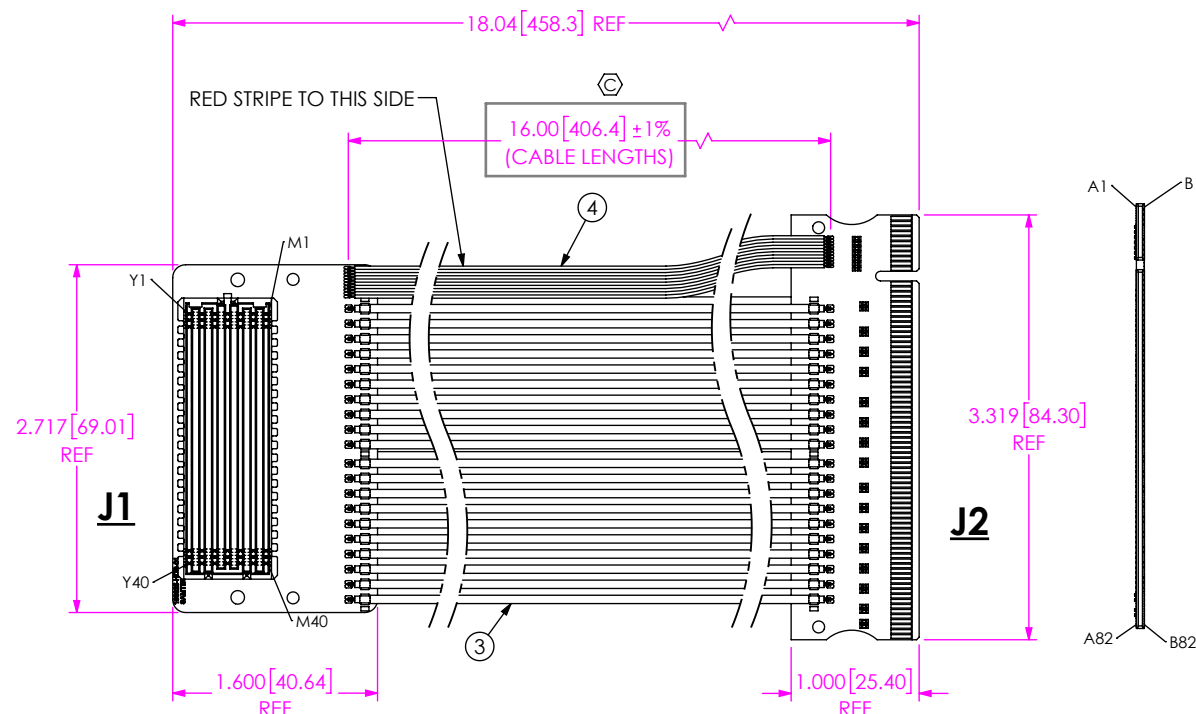


**ESD SENSITIVE****THIS PRODUCT MANUFACTURED  
WITH LEAD-FREE PROCESSING**DO NOT  
SCALE FROM  
THIS PRINT**NOTES:**

1. PCB ARE NOT NOT STANDARD
2. (C) REPRESENTS A CRITICAL DIMENSION.
3. PARTS TO BE PROCESSED PER SAMTEC WORKMANSHIP GUIDELINES
4. ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED
5. ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V
6. ITEM 5 TO BE CENTERED ON ITEM 4 AS SHOWN, ITEM 5 TO CONTAIN:  
LINE 1 - PART NUMBER "HDR-XXXXXX-XX-XXXX"  
LINE 2 - SHOP ORDER NUMBER "XXXXXX"  
LINE 3 - DATE CODE "XXXXXX"
7. FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE SAMTEC PACKAGING MANUAL
8. PANEL PCB-108666-HDR-XX YIELDS (06) PCB-108666-HDR-01 BOARDS;  
PANEL PCB-108317-HDR-XX YIELDS (04) PCB-108317-HDR-01 BOARDS.
9. REFER TO PREP-SPEC.PDF FOR CABLE PREP DIMENSIONS.  
ITEM 3 USES STANDARD PCB PREP. ITEM 4 USES NON-SHIELDED1.

**TABLE 1**

PART #	DESCRIPTION
HDR-201768-01-PCIEC	(AS SHOWN)

HDR-201768-XX-PCIEC BOM				
ITEM NO.	PART NUMBER	DESCRIPTION	QTY	MATERIAL
1	SUB-HDR-201768-01	SUB ASSEMBLY	1	SUB ASSEMBLY
2	SUB-HDR-201768-02	SUB ASSEMBLY	1	SUB ASSEMBLY
3	SUB-TTF-3285-10-01-TB-1181-16.00	TWINAX 85Ω	4	SUB ASSEMBLY
4	SUB-IDC-1-30-10-0250-16.00	POWER CABLE	1	SUB ASSEMBLY
5	HDRL-06	LABEL	1	POLYESTER

TOLERANCES DO NOT APPLY TO REFERENCE DIMENSIONS, UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:

DECIMALS ANGLES  
XX: ±.01 [3]  
.XXX: ±.005 [13]  
.XXXX: ±.0020 [51]

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PHONE: 812-944-6733 FAX: 812-948-5047  
e-Mail: info@SAMTEC.com code 55322

DO NOT SCALE DRAWING

SHEET SCALE: 1:1.5

DESCRIPTION:

CUSTOM HDR CABLE ASSEMBLY

DWG. NO.

**HDR-201768-XX-PCIEC**

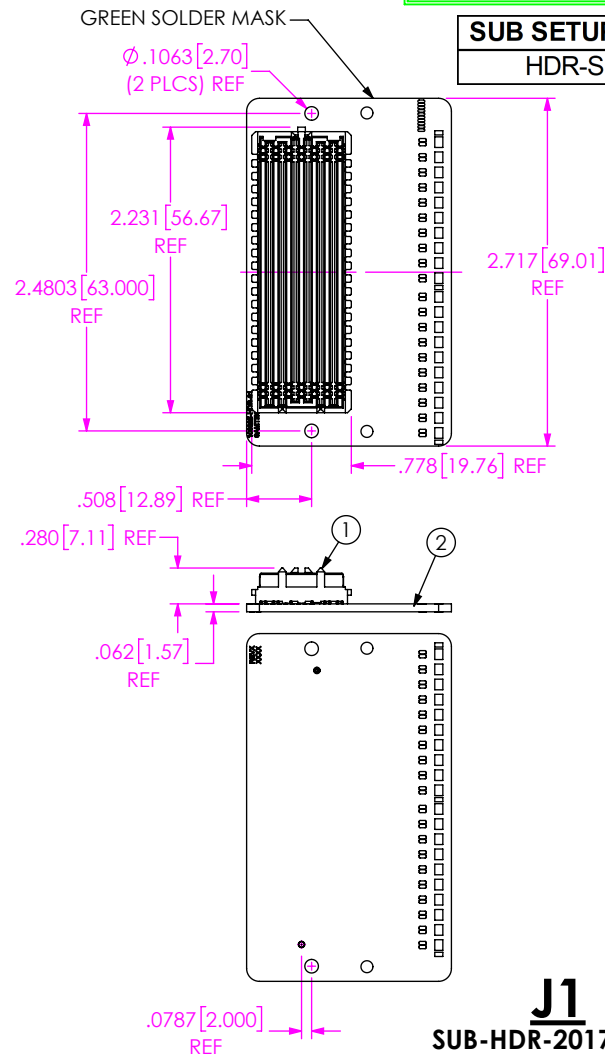
BY: JERRY SU

09/20/2017

SHEET 1 OF 3

**SUB SETUP OPTION:**

HDR-SUB-02



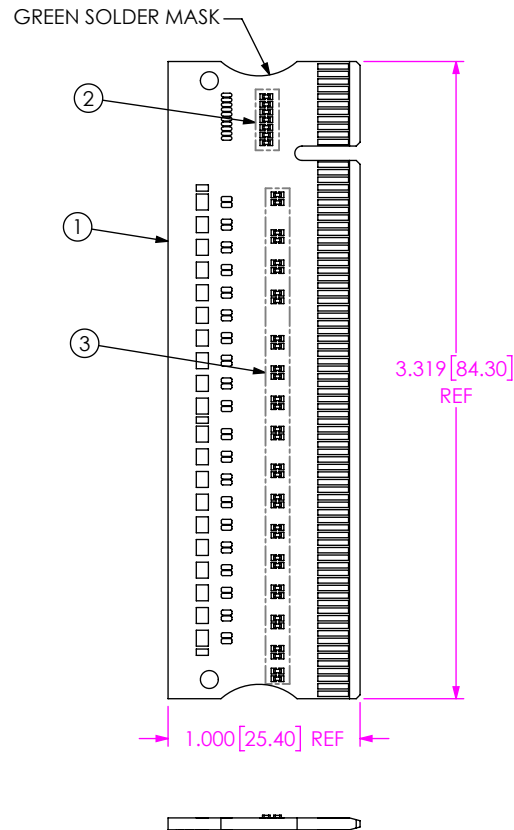
**J1**  
**SUB-HDR-201768-01**

\*\*PACKAGING TO BE SPECIFIED BY PRODUCTION OR SFC BOM IF DEFINED\*\*

SUB-HDR-201768-01 BOM			
ITEM NO.	PART NUMBER	QUANTITY	MATERIAL
1	ASP-184330-01	1	TERMINAL
2	PCB-111878-HDR-01	1	PCB

**SUB SETUP OPTION:**

HDR-SUB-02



**J2**  
**SUB-HDR-201768-02**

\*\*PACKAGING TO BE SPECIFIED BY PRODUCTION OR SFC BOM IF DEFINED\*\*

SUB-HDR-201768-02 BOM			
ITEM NO.	PART NUMBER	QTY	MATERIAL
1	PCB-108317-HDR-01	1	PCB
2	RES-0402-0000-J-JB-SM	7	RESISTOR
3	CAP-0402-224-K-06.3-SM	32	CAPACITOR

**CRITICAL DIMENSION INSPECTION  
INSTRUCTION TABLE**

ASSEMBLY OPERATION	IN-PROCESS INSPECTION
PREP CABLE	C3
E-TEST	C1, C2

TABLE 3

## NET COUNT

TYPE	NETS	POINTS
POINT TO POINT	81	162
GND	1	306
PRSNT2#	1	4

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**samtec**

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e-Mail: info@SAMTEC.com code 55322

DESCRIPTION:

CUSTOM HDR CABLE ASSEMBLY

DWG. NO.

HDR-201768-XX-PCIEC

BY: JERRY SU

09/20/2017

SHEET 2 OF 3

TABLE 2

## SIGNAL MAPPING

SIDE B			SIDE A			SIDE B			SIDE A		
J1	NAME	J2	J1	NAME	J2	J1	NAME	J2	J1	NAME	J2
C35	NC	B1	H37	PRSENT1#	A1	B17	PETn6	B42	GND	GND	A42
	NC	B2	C37	NC	A2	GND	GND	B43	B36	PERp6	A43
	NC	B3		NC	A3	GND	GND	B44	B37	PERn6	A44
GND	GND	B4	GND	GND	A4	B12	PETp7	B45	GND	GND	A45
C30	SMCLK	B5	D29	JTAG2	A5	B13	PETn7	B46	GND	GND	A46
C31	SMDATA	B6	D30	JTAG3	A6	GND	GND	B47	B32	PERp7	A47
GND	GND	B7	D31	JTAG4	A7	-	PRSENT2#	B48	B33	PERn7	A48
C39	NC	B8	D33	JTAG5	A8	GND	GND	B49	GND	GND	A49
D34	JTAG1	B9	D36	NC	A9	B8	PETp8	B50	NC	RSVD	A50
D32	NC	B10	D38, D40	NC	A10	B9	PETn8	B51	GND	GND	A51
G37	WAKE#	B11		PERST#	A11	GND	GND	B52	B28	PERp8	A52
MECHANICAL KEY			GND			GND	GND	B53	B29	PERn8	A53
						B4	PETp9	B54	GND	GND	A54
G31	RSVD 0	B12	GND	GND	A12	B5	PETn9	B55	GND	GND	A55
GND	GND	B13	D4	REFCLK+	A13	GND	GND	B56	B24	PERp9	A56
C6	PETp0	B14	D5	REFCLK-	A14	GND	GND	B57	B25	PERn9	A57
C7	PETn0	B15	GND	GND	A15	GND	GND	B58	GND	GND	A58
GND	GND	B16	C2	PERp0	A16	Y10	PETp10	B58	GND	GND	A59
NC	NC	B17	C3	PERn0	A17	Y11	PETn10	B59	Z24	PERp10	A60
GND	GND	B18	GND	GND	A18	GND	GND	B60	Z25	PERn10	A61
A2	PETp1	B19	H34	RSVD 1	A19	GND	GND	B61	GND	GND	A62
A3	PETn1	B20	GND	GND	A20	Z12	PETp11	B62	GND	GND	A63
GND	GND	B21	A22	PERp1	A21	Z13	PETn11	B63	GND	GND	A64
GND	GND	B22	A23	PERn1	A22	GND	GND	B64	Y26	PERp11	A65
A6	PETp2	B23	GND	GND	A23	GND	GND	B65	Y27	PERn11	A66
A7	PETn2	B24	GND	GND	A24	Y14	PETp12	B66	GND	GND	A67
GND	GND	B25	A26	PERp2	A25	Y15	PETn12	B67	Z28	PERp12	A68
GND	GND	B26	A27	PERn2	A26	GND	GND	B68	Z29	PERn12	A69
A10	PETp3	B27	GND	GND	A27	GND	GND	B69	GND	GND	A70
A11	PETn3	B28	GND	GND	A28	Z16	PETp13	B70	GND	GND	A71
GND	GND	B29	A30	PERp3	A29	Z17	PETn13	B71	GND	GND	A72
H35	RSVD 2	B30	A31	PERn3	A30	GND	GND	B72	Y30	PERp13	A73
H38	PRSENT2#	B31	GND	GND	A31	GND	GND	B73	Y31	PERn13	A74
GND	GND	B32	G33	REVD 3	A32	Y18	PETp14	B74	GND	GND	A75
A14	PETp4	B33	G34	REVD 4	A33	Y19	PETn14	B75	GND	GND	A76
A15	PETn4	B34	GND	GND	A34	GND	GND	B76	M18	PERp14	A77
GND	GND	B35	A34	PERp4	A35	GND	GND	B77	M19	PERn14	A78
GND	GND	B36	A35	PERn4	A36	Y22	PETp15	B78	GND	GND	A79
A18	PETp5	B37	GND	GND	A37	Y23	PETn15	B79	GND	GND	A80
A19	PETn5	B38	GND	GND	A38	GND	GND	B80	M22	PERp15	A81
GND	GND	B39	A38	PERp5	A39	-	PRSENT2#	B81	M23	PERn15	A82
GND	GND	B40	A39	PERn5	A40	NC	RSVD	B82	GND	GND	A82
B16	PETp6	B41	GND	GND	A41						

ALL GROUND ARE COMMON AND TIED TO CABLE SHIELD

PRSENT2# ARE COMMON

J2 POSITIONS A50, B17, AND B82 ARE NO CONNECTS

J2 POSITIONS B5, B6, B9, A5, A6, A7, A8 HAVE 0-OHM RESISTOR IN-LINE

ALL PERpX AND PERnX SIGNALS HAVE 0.22uF CAPACITOR IN-LINE

TABLE 4

## J1 SIGNAL NAMES, GND AND NO CONNECT (nc) POSITIONS

	Y	Z	A	B	C	D	E	F	G	H	J	K	L	M
1	GND	nc	GND	nc	nc	nc	GND	nc	GND	nc	GND	nc	nc	GND
2	nc	GND	PETp1	GND	PERp0	GND	nc	GND	nc	nc	nc	GND	GND	nc
3	nc	GND	PETn1	GND	PERn0	GND	nc	GND	nc	GND	nc	GND	GND	nc
4	GND	nc	GND	PETp9	GND	REFCLK+	GND	nc	GND	nc	GND	nc	nc	GND
5	GND	nc	GND	PETn9	GND	REFCLK-	GND	nc	GND	nc	GND	nc	nc	GND
6	nc	GND	PETp2	GND	PETp0	GND	nc	GND	nc	GND	nc	GND	GND	nc
7	nc	GND	PETn2	GND	PETn0	GND	nc	nc	nc	nc	nc	nc	GND	nc
8	GND	nc	GND	PETp8	GND	nc	GND	nc	GND	nc	GND	nc	nc	GND
9	GND	nc	GND	PETn8	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND
10	PETp10	GND	PETp3	GND	nc	GND	nc	nc	nc	nc	nc	nc	GND	nc
11	PETn10	GND	PETn3	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND	nc
12	GND	PETp11	GND	PETp7	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND
13	GND	PETn11	GND	PETn7	GND	GND	nc	nc	nc	nc	nc	nc	nc	GND
14	PETp12	GND	PETp4	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND	nc
15	PETn12	GND	PETn4	GND	nc	nc	nc	GND	nc	GND	nc	GND	GND	nc
16	GND	PETp13	GND	PETp6	GND	GND	nc	nc	nc	nc	nc	nc	nc	GND
17	GND	PETn13	GND	PETn6	GND	nc	GND	nc	GND	nc	GND	nc	nc	GND
18	PETp14	GND	PETp5	GND	nc	nc	nc	GND	nc	GND	nc	GND	GND	PERp14
19	PETn14	GND	PETn5	GND	nc	GND	nc	nc	nc	nc	nc	nc	GND	PERn14
20	GND	nc	GND	nc	GND	nc	GND	nc	GND	nc	GND	nc	nc	GND
21	GND	nc	GND	nc	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND
22	PETp15	GND	PERp1	GND	nc	GND	nc	nc	nc	nc	nc	nc	GND	PERp15
23	PETn15	GND	PERn1	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND	PERn15
24	GND	PERp10	GND	PERp9	GND	nc	GND	nc	GND	nc	GND	nc	GND	nc
25	GND	PERn10	GND	PERn9	GND	GND	nc	nc	nc	nc	nc	nc	nc	GND
26	PERp11	GND	PERp2	GND	nc	nc	GND	nc	GND	nc	GND	nc	GND	nc
27	PERn11	GND	PERn2	GND	nc	nc	nc	GND	nc	GND	nc	GND	GND	nc
28	GND	PERp12	GND	PERp8	GND	GND	nc	nc	nc	nc	nc	nc	nc	GND
29	GND	PERn12	GND	PERn8	GND	JTAG2	GND	nc	GND	nc	GND	nc	nc	GND
30	PERp13	GND	PERp3	GND	SMCLK	JTAG3	nc	GND	nc	GND	nc	GND	GND	nc
31	PERn13	GND	PERn3	GND	SMDATA	JTAG4	nc	nc	RSVD 0	nc	nc	nc	GND	nc
32	GND	nc	GND	PERp7	GND	nc	GND	nc	GND	nc	GND	nc	nc	GND
33	GND	nc	GND	PERn7	GND	JTAG5	nc	GND	REVD 3	GND	nc	GND	nc	GND
34	nc	GND	PERp4	GND	nc	JTAG1	nc	nc	REVD 4	RSVD 1	nc	nc	GND	nc
35	nc	GND	PERn4	GND	nc	nc	GND	nc	GND	RSVD 2	GND	nc	GND	nc
36	GND	nc	GND	PERp6	GND	nc	nc	GND	PERST#	GND	nc	GND	nc	GND
37	GND	nc	GND	PERn6	nc	GND	nc	nc	WAKE#	PRSENT1#	nc	nc	nc	GND
38	nc	GND	PERp5	GND	GND	nc	GND	nc	GND	PRSENT2#	GND	nc	GND	nc
39	nc	GND	PERn5	GND	nc	GND	nc	GND	nc	GND	nc	GND	GND	nc
40	GND	nc	GND	nc	GND	nc	GND	nc	GND	nc	GND	nc	nc	GND

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DESCRIPTION:

CUSTOM HDR CABLE ASSEMBLY

DWG. NO.

HDR-201768-XX-PCIEC

BY: JERRY SU

09/20/2017

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