

DO NOT  
SCALE FROM  
THIS PRINT

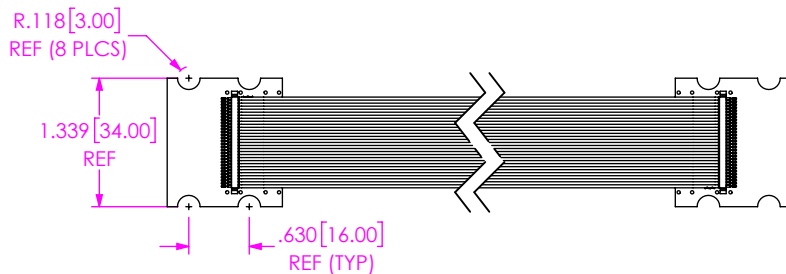
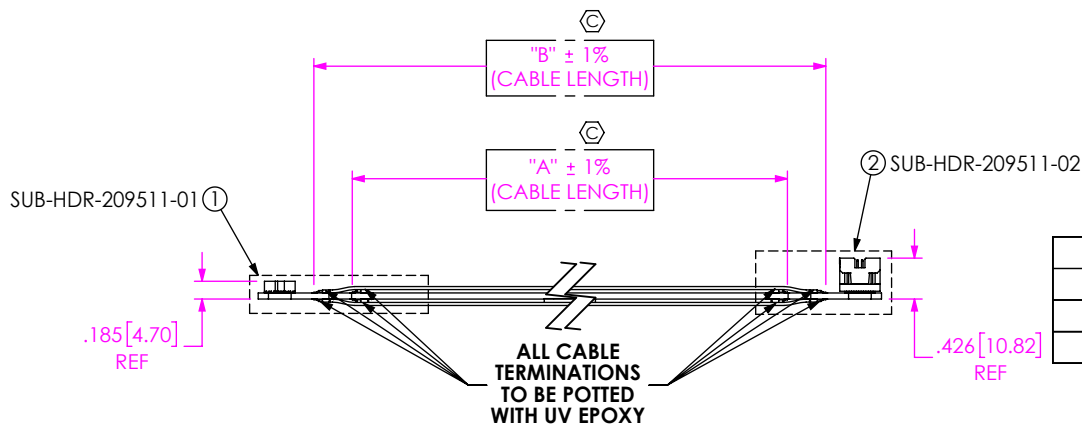
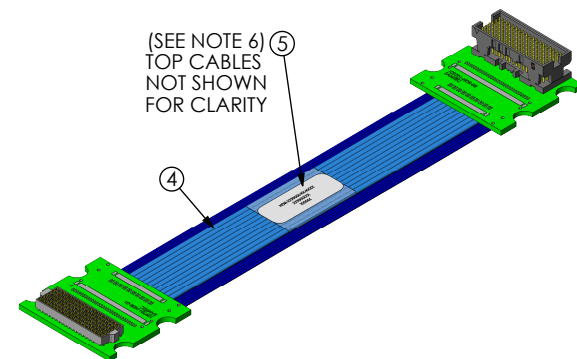
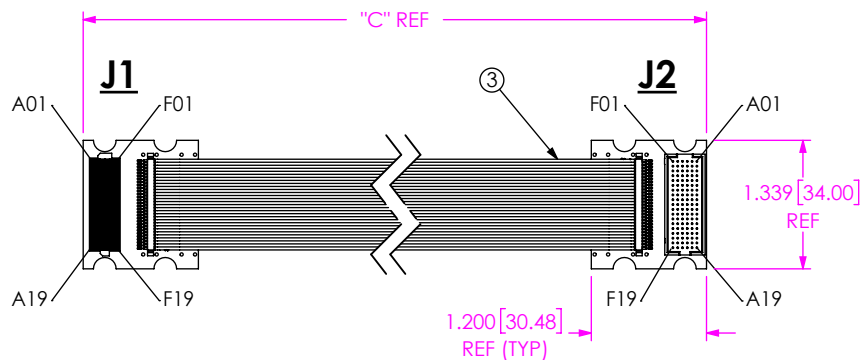


TABLE 1			
PART #	"A"	"B"	"C"
HDR-209511-01	12.00 [304.8]	12.80 [325.1]	13.96 [354.6]
HDR-209511-02	24.00 [609.6]	24.80 [629.9]	25.96 [659.4]

NOTES:

- CABLE ASSEMBLY CONFORMS TO VITA 42.0 STANDARD.
- ⊕ REPRESENTS A CRITICAL DIMENSION.
- PARTS TO BE PROCESSED PER SAMTEC WORKMANSHIP GUIDELINES.
- ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED.
- ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V.
- ITEM 5 TO BE CENTERED ON ITEM 3 AS SHOWN. ITEM 5 TO CONTAIN:  
LINE 1 - PART NUMBER "HDR-XXXXXX-XX"  
LINE 2 - SHOP ORDER NUMBER "XXXXXX"  
LINE 3 - DATE CODE "XXXXXX"
- FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE SAMTEC PACKAGING MANUAL.
- REFER TO PREP-SPEC.PDF FOR CABLE PREP DIMENSIONS. ASSEMBLY USES STANDARD PCB PREP.

HDR-209511-XX BOM				
ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY	MATERIAL
1	SUB-HDR-209511-01	SUB ASSEMBLY	1	SUB ASSEMBLY
2	SUB-HDR-209511-02	SUB ASSEMBLY	1	SUB ASSEMBLY
3	SUB-TCF-3450F-30-01-XX.XX	COAX CABLE	2	SUB ASSEMBLY
4	SUB-TTF-32100-10-01-XX.XX	TWINAX CABLE	2	SUB ASSEMBLY
5	HDRL-11	LABEL	1	SELF LAMINATING VINYL

TOLERANCES DO NOT APPLY TO REFERENCE DIMENSIONS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.  
TOLERANCES ARE:  
DECIMALS .XX: ±.01 [.3]  
.XXX: ±.005 [.13]  
.XXXX: ±.0020 [.051]

**PROPRIETARY NOTE**  
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

**samtec**

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

DO NOT SCALE DRAWING

SHEET SCALE: 1:2

DESCRIPTION:

CUSTOM HDR CABLE ASSEMBLY

DWG. NO.

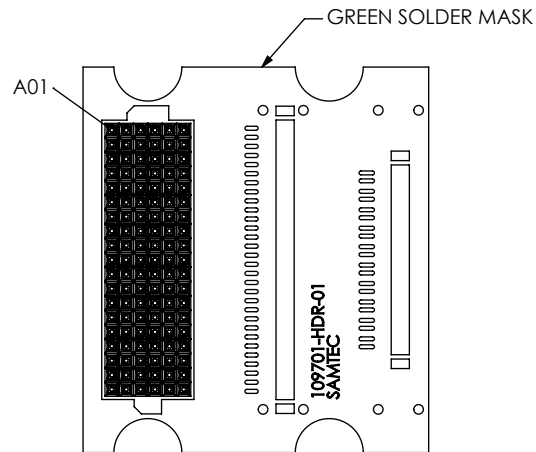
HDR-209511-XX

BY: ADAM H. 12/10/2018 SHEET 1 OF 3

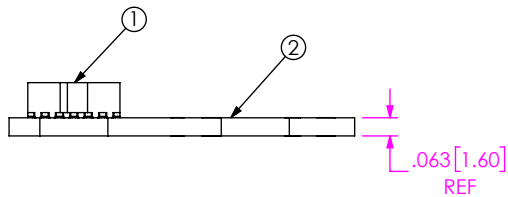
**THIS PRODUCT MANUFACTURED  
WITH LEAD-FREE PROCESSING**

**SUB SETUP OPTION:**

HDR-SUB-02



**J1**  
SUB-HDR-209511-01



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

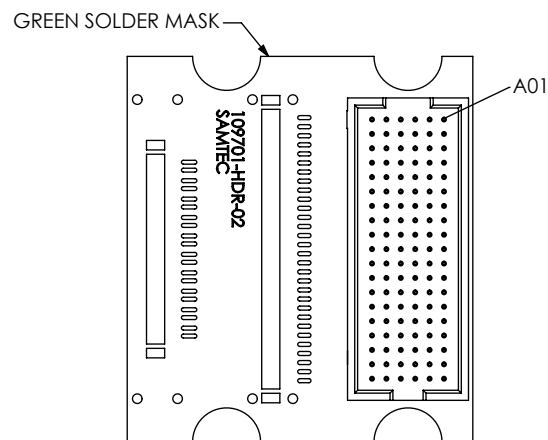
**SUB-HDR-209511-01 BOM**

ITEM NO.	PART NUMBER	QUANTITY	MATERIAL
1	ASP-103612-01	1	SOCKET
2	PCB-109701-HDR-01	1	PCB

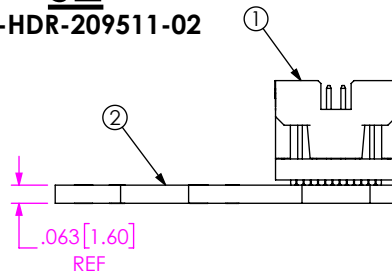
**THIS PRODUCT MANUFACTURED  
WITH LEAD-FREE PROCESSING**

**SUB SETUP OPTION:**

HDR-SUB-02



**J2**  
SUB-HDR-209511-02



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

**SUB-HDR-209511-02 BOM**

ITEM NO.	PART NUMBER	QUANTITY	MATERIAL
1	ASP-103614-01	1	TERMINAL
2	PCB-109701-HDR-02	1	PCB

**PROPRIETARY NOTE**

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 3:2

**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:  
CUSTOM HDR CABLE ASSEMBLY

DWG. NO.  
HDR-209511-XX

BY: ADAM H. 12/10/2018 SHEET 2 OF 3

**TABLE 2**  
**SIGNAL MAPPING**

A	TYPE	NAME	B	TYPE	NAME	C	TYPE	NAME	D	TYPE	NAME	E	TYPE	NAME	F	TYPE	NAME
1	DP	DP00+	1	DP	DP00-	1	PWR1	3.3V	1	DP	DP01+	1	DP	DP01-	1	PWR2	VPWR
2	GND	GND	2	GND	GND	2	SIG	TRST#	2	GND	GND	2	GND	GND	2	SIG	MRST#
3	DP	DP02+	3	DP	DP02-	3	PWR1	3.3V	3	DP	DP03+	3	DP	DP03-	3	PWR2	VPWR
4	GND	GND	4	GND	GND	4	SIG	TCK	4	GND	GND	4	GND	GND	4	SIG	MRSTO#
5	DP	DP04+	5	DP	DP04-	5	PWR1	3.3V	5	DP	DP05+	5	DP	DP05-	5	PWR2	VPWR
6	GND	GND	6	GND	GND	6	SIG	TMS	6	GND	GND	6	GND	GND	6	SIG	+12V
7	DP	DP06+	7	DP	DP06-	7	PWR1	3.3V	7	DP	DP07+	7	DP	DP07-	7	PWR2	VPWR
8	GND	GND	8	GND	GND	8	SIG	TDI	8	GND	GND	8	GND	GND	8	SIG	-12V
9	DP	DP08+	9	DP	DP08-	9	SIG	RPS	9	DP	DP09+	9	DP	DP09-	9	PWR2	VPWR
10	GND	GND	10	GND	GND	10	SIG	TDO	10	GND	GND	10	GND	GND	10	SIG	GA0
11	DP	DP10+	11	DP	DP10-	11	SIG	MBIST#	11	DP	DP11+	11	DP	DP11-	11	PWR2	VPWR
12	GND	GND	12	GND	GND	12	SIG	GA1	12	GND	GND	12	GND	GND	12	SIG	MPRESENT#
13	DP	DP12+	13	DP	DP12-	13	SIG	3.3V AUX	13	DP	DP13+	13	DP	DP13-	13	PWR2	VPWR
14	GND	GND	14	GND	GND	14	SIG	GA2	14	GND	GND	14	GND	GND	14	SIG	MSDA
15	DP	DP14+	15	DP	DP14-	15	SIG	RPS	15	DP	DP15+	15	DP	DP15-	15	PWR2	VPWR
16	GND	GND	16	GND	GND	16	SIG	MVMRO	16	GND	GND	16	GND	GND	16	SIG	MSCL
17	DP	DP16+	17	DP	DP16-	17	SIG	RFU	17	DP	DP17+	17	DP	DP17-	17	SIG	RFU
18	GND	GND	18	GND	GND	18	SIG	RPS	18	GND	GND	18	GND	GND	18	SIG	RPS
19	DP	DP18+	19	DP	DP18-	19	SIG	RPS	19	DP	DP19+	19	DP	DP19-	19	SIG	RPS

ALL GROUNDS COMMON AND TIED TO CABLE SHIELD

CABLE ASSEMBLY IS MAPPED 1-TO-1, ALL POSITIONS ROUTED POINT TO POINT

3.3V, 3.3V AUX, VPWR, +12V, -12V POSITIONS ARE ROUTED OVER TWO COAX LINES EACH, SUPPORT 1A CCC EACH

**TABLE 3**

**NET COUNT**

TYPE	NETS	POINTS
POINT TO POINT	78	156
GND	1	72

**CRITICAL DIMENSION INSPECTION  
INSTRUCTION TABLE**

ASSEMBLY OPERATION	IN-PROCESS INSPECTION
PREP CABLE	C3, C4
E-TEST	C1, C2

**PROPRIETARY NOTE**  
THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND ALL DESIGN, MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMTEC, INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATED IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF SAMTEC, INC.

DO NOT SCALE DRAWING

SHEET SCALE: 1:1

**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:  
CUSTOM HDR CABLE ASSEMBLY

DWG. NO.  
**HDR-209511-XX**

BY: ADAM H. 12/10/2018 SHEET 3 OF 3