

| | |
|--------------------------|----------|
| HDR SETUP OPTION: | NA |
| PCB SETUP OPTION: | OPTION 4 |

REVISION

| | | |
|-----------|------------|---------|
| 0 | AC | G LEWIS |
| 5/29/2012 | ECN-178722 | |

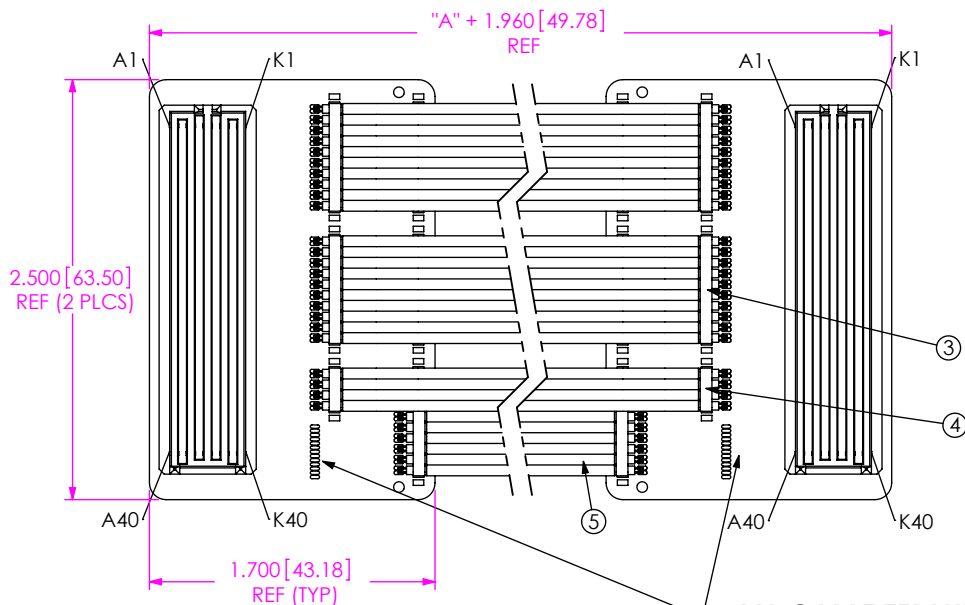
ISSUE FOR REVIEW.

RELEASED FOR LIMITED PRODUCTION

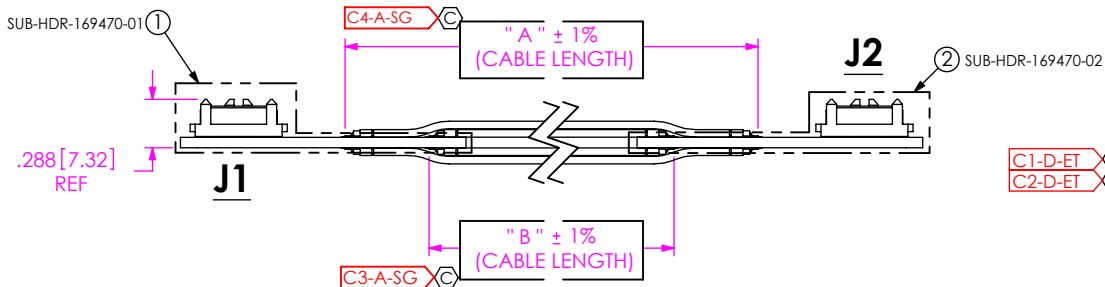
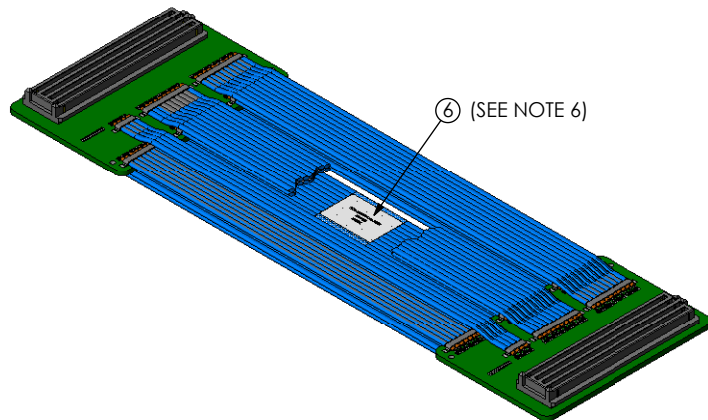
USE FOR QUOTING, PRELIMINARY DESIGN, INITIAL BUILDS AND INFORMATIONAL PURPOSES ONLY

ACCEPTANCE OF DRAWING ACCEPTED WITH DEVIATIONS LISTED

DATE: _____
 COMPANY: _____
 CUSTOMER SIGNATURE: _____
 PRINTED NAME: _____
 PHONE NO.: _____
 FAX NO.: _____



ALL CABLE TERMINATIONS AND OPEN PADS POSITIONS TO BE POTTED WITH UV EPOXY (SEE SHT 2)



| PART # | "A" | "B" |
|---------------|---------------|---------------|
| HDR-169470-01 | 9.84 [250.0] | 8.84 [224.6] |
| HDR-169470-02 | 19.69 [500.0] | 18.69 [474.6] |

- NOTES:
- CABLE CONFIGURATION IS NOT STANDARD.
 - Ⓢ REPRESENTS A CRITICAL DIMENSION.
 - PARTS TO BE PROCESSED PER SAMTEC ACCEPTABILITY REQUIREMENTS: HDR-PI-01 "CABLE ASSEMBLY WORKMANSHIP STANDARDS".
 - ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED.
 - ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V.
 - ITEM 6 TO BE CENTERED ON ITEM 5 AS SHOWN. ITEM 6 TO CONTAIN: LINE 1 - PART NUMBER "HDR-XXXXXX-XX", LINE 2 - SHOP ORDER NUMBER "XXXXXX", AND LINE 3 - DATE CODE "XXXXX". NUMERIC REVISION PRODUCT WILL HAVE ADDITIONAL LABEL INDICATING "RELEASE FOR LIMITED PRODUCTION".
 - FOR PROCESSING INFORMATION ON SUB ASSEMBLY, REFERENCE SUB-HDR-169470-XX TRAVELER.XLS.
 - FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE PACKAGING STANDARD CO-HD-WI-3033-M.
 - PANEL PCB-103814-HDR-XX YIELDS (02) PCB-103814-HDR-01 AND (02) PCB-103814-HDR-02 BOARDS.

| ITEM NO. | PART NUMBER | DESCRIPTION | QTY | MATERIAL |
|----------|--------------------------------|--------------|-----|-----------------------|
| 1 | SUB-HDR-169470-01 | SUB ASSEMBLY | 1 | SUB ASSEMBLY |
| 2 | SUB-HDR-169470-02 | SUB ASSEMBLY | 1 | SUB ASSEMBLY |
| 3 | SUB-TTF-32100-10-01-XX.XX("A") | TWINAX CABLE | 5 | SUB ASSEMBLY |
| 4 | SUB-TTF-32100-04-01-XX.XX("A") | TWINAX CABLE | 1 | SUB ASSEMBLY |
| 5 | SUB-TTF-32100-10-01-XX.XX("B") | TWINAX CABLE | 6 | SUB ASSEMBLY |
| 6 | HDRL-11 | LABEL | 1 | SELF LAMINATING VINYL |

TOLERANCES DO NOT APPLY TO REFERENCE DIMENSIONS, UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
 TOLERANCES ARE:
 DECIMALS ANGLES
 .XX: ± 0.1 [3]
 .XXX: ± 0.05 [1.3]
 .XXXX: ± 0.020 [0.51]

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520 PARK EAST BLVD, NEW ALBANY, IN 47150
 PHONE: 812-944-6733 FAX: 812-948-5047
 e-Mail: info@SAMTEC.com code 53322

DO NOT SCALE DRAWING SHEET SCALE: 7:8

DESCRIPTION: CUSTOM HDR CABLE ASSEMBLY

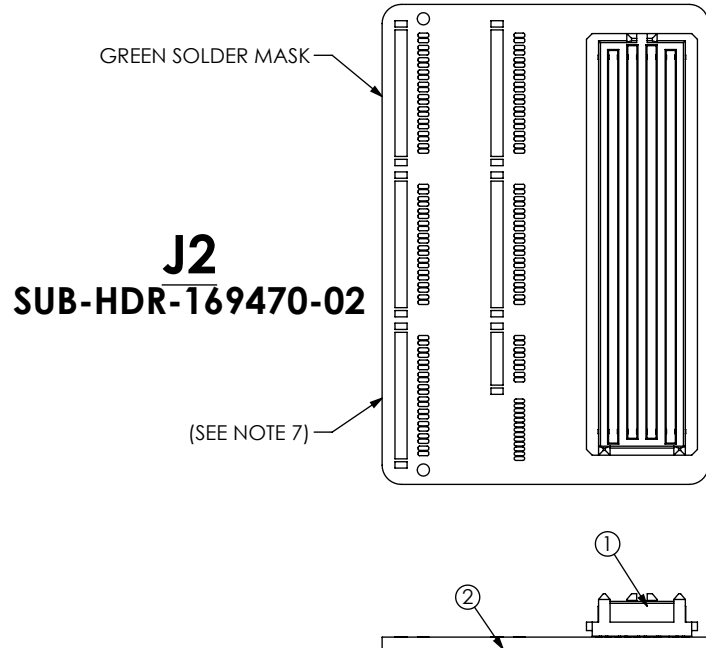
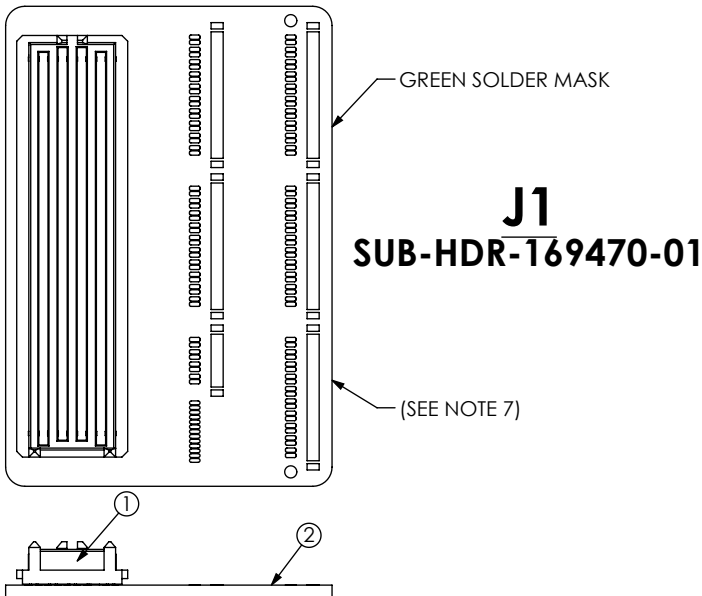
DWG. NO. HDR-169470-XX

BY: ANDREW C 05/25/2012 SHEET 1 OF 3

Pb THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

Pb THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

REVISION 0



PACKAGING TUBE TO BE SPECIFIED AT FIRST PRODUCTION RUN.

PACKAGING TUBE TO BE SPECIFIED AT FIRST PRODUCTION RUN.

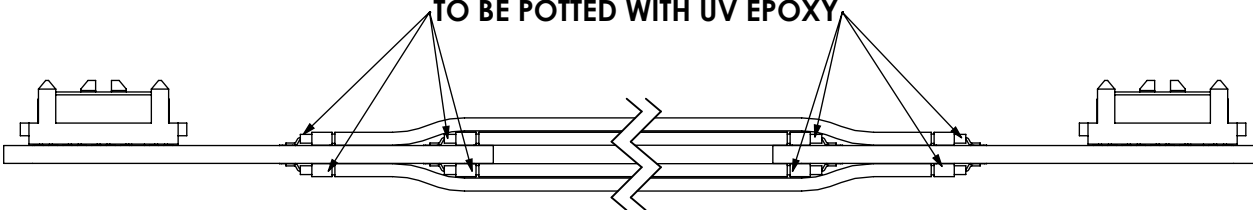
| SUB-HDR-169470-01 BOM | | | |
|-----------------------|-------------------|----------|----------|
| ITEM NO. | PART NUMBER | QUANTITY | MATERIAL |
| 1 | ASP-134488-01 | 1 | TERMINAL |
| 2 | PCB-103814-HDR-01 | 1 | PCB |

| SUB-HDR-169470-02 BOM | | | |
|-----------------------|-------------------|----------|----------|
| ITEM NO. | PART NUMBER | QUANTITY | MATERIAL |
| 1 | ASP-134488-01 | 1 | TERMINAL |
| 2 | PCB-103814-HDR-02 | 1 | PCB |

| TABLE 3 NET LIST | | |
|---------------------|------|--------|
| TYPE | NETS | POINTS |
| POINT TO POINT | 226 | 452 |
| GND | 159 | 318 |

| CRITICAL DIMENSION INSPECTION INSTRUCTION TABLE | |
|---|-----------------------|
| ASSEMBLY OPERATION | IN-PROCESS INSPECTION |
| PREP CABLE | C3 |
| E-TEST | C1, C2 |

ALL CABLE TERMINATIONS AND OPEN PADS POSITIONS TO BE POTTED WITH UV EPOXY



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SHEET SCALE: 1:1

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e-Mail info@SAMTEC.com code 53322

DESCRIPTION:
CUSTOM HDR CABLE ASSEMBLY

DWG. NO.
HDR-169470-XX

BY: ANDREW C 05/25/2012 SHEET 2 OF 3

TABLE 1
SIGNAL MAPPING

| | A | B | C | D | E | F | G | H | J | K |
|----|-----------|---------------|-----------|---------------|-----------|-----------|------------|-------------|------------|------------|
| 1 | GND | RES1 | GND | PG C2M | GND | PG M2C | GND | VREF A M2C | GND | VREF B M2C |
| 2 | DP1_M2C_P | GND | DP0_C2M_P | GND | HA01_P_CC | GND | CLK1_M2C_N | PRSNT_M2C_L | CLK3_M2C_N | GND |
| 3 | DP1_M2C_N | GND | DP0_C2M_N | GND | HA01_N_CC | GND | CLK1_M2C_P | GND | CLK3_M2C_P | GND |
| 4 | GND | DP9_M2C_P | GND | GBTCLK0_M2C_P | GND | HA00_P_CC | GND | CLK0_M2C_N | GND | CLK2_M2C_N |
| 5 | GND | DP9_M2C_N | GND | GBTCLK0_M2C_N | GND | HA00_N_CC | GND | CLK0_M2C_P | GND | CLK2_M2C_P |
| 6 | DP2_M2C_P | GND | DP0_M2C_P | GND | HA05_P | GND | LA00_P_CC | GND | HA03_P | GND |
| 7 | DP2_M2C_N | GND | DP0_M2C_N | GND | HA05_N | HA04_P | LA00_N_CC | LA02_P | HA03_N | HA02_P |
| 8 | GND | DP8_M2C_P | GND | LA01_P_CC | GND | HA04_N | GND | LA02_N | GND | HA02_N |
| 9 | GND | DP8_M2C_N | GND | LA01_N_CC | HA09_P | GND | LA03_P | GND | HA07_P | GND |
| 10 | DP3_M2C_P | GND | LA06_P | GND | HA09_N | HA08_P | LA03_N | LA04_P | HA07_N | HA06_P |
| 11 | DP3_M2C_N | GND | LA06_N | LA05_P | GND | HA08_N | GND | LA04_N | GND | HA06_N |
| 12 | GND | DP7_M2C_P | GND | LA05_N | HA13_P | GND | LA08_P | GND | HA11_P | GND |
| 13 | GND | DP7_M2C_N | GND | GND | HA13_N | HA12_P | LA08_N | LA07_P | HA11_N | HA10_P |
| 14 | DP4_M2C_P | GND | LA10_P | LA09_P | GND | HA12_N | GND | LA07_N | GND | HA10_N |
| 15 | DP4_M2C_N | GND | LA10_N | LA09_N | HA16_P | GND | LA12_P | GND | HA14_P | GND |
| 16 | GND | DP6_M2C_P | GND | GND | HA16_N | HA15_P | LA12_N | LA11_P | HA14_N | HA17_P_CC |
| 17 | GND | DP6_M2C_N | GND | LA13_P | GND | HA15_N | GND | LA11_N | GND | HA17_N_CC |
| 18 | DP5_M2C_P | GND | LA14_P | LA13_N | HA20_P | GND | LA16_P | GND | HA18_P | GND |
| 19 | DP5_M2C_N | GND | LA14_N | GND | HA20_N | HA19_P | LA16_N | LA15_P | HA18_N | HA21_P |
| 20 | GND | GBTCLK1_M2C_P | GND | LA17_P_CC | GND | HA19_N | GND | LA15_N | GND | HA21_N |
| 21 | GND | GBTCLK1_M2C_N | GND | LA17_N_CC | HB03_P | GND | LA20_P | GND | HA22_P | GND |
| 22 | DP1_C2M_P | GND | LA18_P_CC | GND | HB03_N | HB02_P | LA20_N | LA19P | HA22_N | HA23_P |
| 23 | DP1_C2M_N | GND | LA18_N_CC | LA23_P | GND | HB02_N | GND | LA19_N | GND | HA23_N |
| 24 | GND | DP9_C2M_P | GND | LA23_N | HB05_P | GND | LA22_P | GND | HB01_P | GND |
| 25 | GND | DP9_C2M_N | GND | GND | HB05_N | HB04_P | LA22_N | LA21_P | HB01_N | HB00_P_CC |
| 26 | DP2_C2M_P | GND | LA27_P | LA26_P | GND | HB04_N | GND | LA21_N | GND | HB00_N_CC |
| 27 | DP2_C2M_N | GND | LA27_N | LA26_N | HB09_P | GND | LA25_P | GND | HB07_P | GND |
| 28 | GND | DP8_C2M_P | GND | GND | HB09_N | HB08_P | LA25_N | LA24_P | HB07_N | HB06_P_CC |
| 29 | GND | DP8_C2M_N | GND | TCK | GND | HB08_N | GND | LA24_N | GND | HB06_N_CC |
| 30 | DP3_C2M_P | GND | SCL | TDI | HB13_P | GND | LA29_P | GND | HB11_P | GND |
| 31 | DP3_C2M_N | GND | SDA | TDO | HB13_N | HB12_P | LA29_N | LA28_P | HB11_N | HB10_P |
| 32 | GND | DP7_C2M_P | GND | 3P3VAUX | GND | HB12_N | GND | LA28_N | GND | HB10_N |
| 33 | GND | DP7_C2M_N | GND | TMS | HB19_P | GND | LA31_P | GND | HB15_P | GND |
| 34 | DP4_C2M_P | GND | GA0 | TRST_L | HB19_N | HB16_P | LA31_N | LA30_P | HB15_N | HB14_P |
| 35 | DP4_C2M_N | GND | 12POV | GA1 | GND | HB16_N | GND | LA30_N | GND | HB14_N |
| 36 | GND | DP6_C2M_P | GND | 3P3V | HB21_P | GND | LA33_P | GND | HB18_P | GND |
| 37 | GND | DP6_C2M_N | 12POV | GND | HB21_N | HB20_P | LA33_N | LA32_P | HB18_N | HB17_P_CC |
| 38 | DP5_C2M_P | GND | GND | 3P3V | GND | HB20_N | GND | LA32_N | GND | HB17_N_CC |
| 39 | DP5_C2M_N | GND | 3P3V | GND | VADJ | GND | VADJ | GND | VIO_B_M2C | GND |
| 40 | GND | RES0 | GND | 3P3V | GND | VADJ | GND | VADJ | GND | VIO_B_M2C |

POWER POSITIONS VADJ, VIO_B_M2C, VREF_A_M2C, VREF_B_M2C, 3P3VAUX, 3P3V, AND 12POV (ALL POSITIONS IN RED) ARE NO CONNECTS.

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CUSTOM HDR CABLE ASSEMBLY

DWG. NO.
HDR-169470-XX

SHEET SCALE: 1:1

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