

END OPTION	"C"	"D"
XL, XR	0.650 [16.51]	0.237 [6.02]
XD	0.788 [20.02]	0.264 [6.71]
XH	0.788 [20.02]	0.264 [6.71]

No. OF POSITIONS	N	N-1
-005	10	9
-010	20	19
-020	40	39
-030	60	59

END TO END	"A"
DV TO DV	0.860 [21.84]
DV TO DH	0.998 [25.35]
DV TO RH	0.998 [25.35]
DH TO DH	1.136 [28.85]
DH TO RH	1.136 [28.85]
RH TO RH	1.136 [28.85]

HLCD-XX-XX.XX-XXX-XXX-X

No OF POSITIONS:  
-05, -10, -20, -30, -40, -50  
(PER ROW)

LENGTH:  
-XX.XX (INCHES)  
(01.72 [43.7] MIN)

FIRST END

-TR: DV CONN TOP RIGHT  
-TL: DV CONN TOP LEFT  
-BR: DV CONN BOTTOM RIGHT  
-BL: DV CONN BOTTOM LEFT  
-TD: DH CONN TOP  
-TH: RH CONN TOP  
-BD: DH CONN BOTTOM  
-BH: RH CONN BOTTOM  
(SEE SHEET 2)

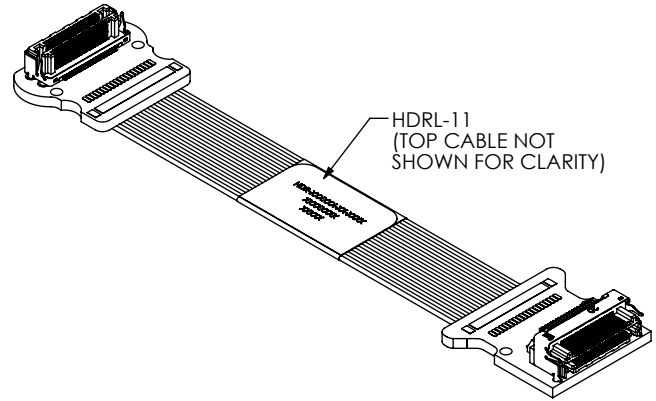
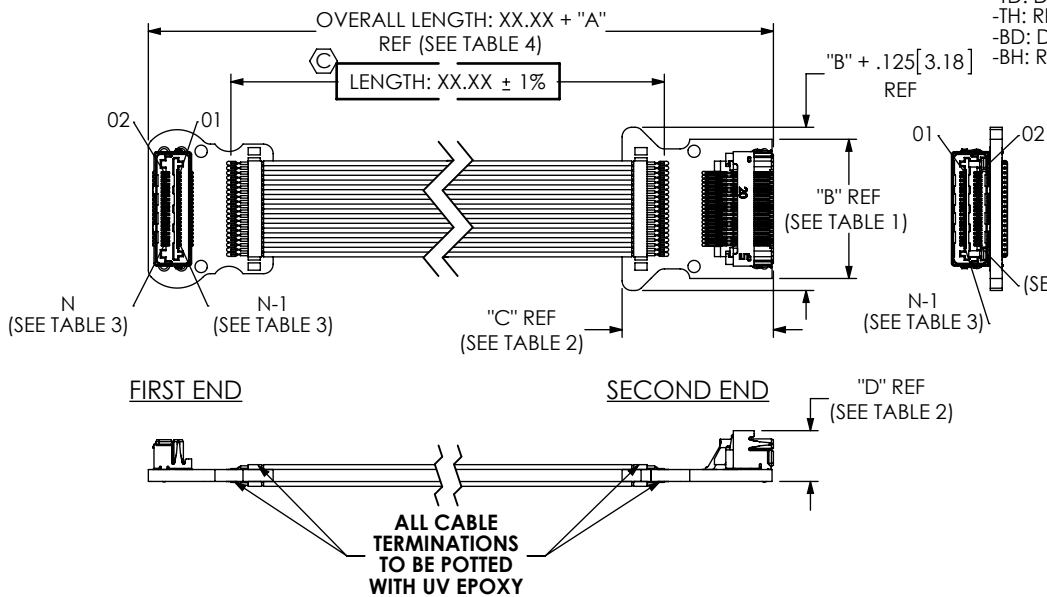
FIRST END OPTION  
-S: SCREW DOWN OPTION IN PCB  
(LEAVE BLANK FOR NON-SCREW DOWN)  
(SCREW DOWN ONLY AVAILABLE FOR -TR, -TL, -BR, -BL OPTIONS, SEE FIG. 2)

WIRING OPTION  
-1: 1-1  
-2: 1-2  
-3: 1-(N-1)  
-4: 1-N

SECOND END OPTION  
-S: SCREW DOWN OPTION IN PCB  
(LEAVE BLANK FOR NON-SCREW DOWN)  
(SCREW DOWN ONLY AVAILABLE FOR -TR, -TL, -BR, -BL OPTIONS, SEE FIG. 2)

SECOND END  
-TR: DV CONN TOP RIGHT  
-TL: DV CONN TOP LEFT  
-BR: DV CONN BOTTOM RIGHT  
-BL: DV CONN BOTTOM LEFT  
-TD: DH CONN TOP  
-TH: RH CONN TOP  
-BD: DH CONN BOTTOM  
-BH: RH CONN BOTTOM  
(SEE SHEET 3)

FIG 1  
VERTICAL TO DH  
HLCD-20-XX.XX-TR-TD-1 SHOWN



- NOTES:
- ⊗ REPRESENTS A CRITICAL DIMENSION.
  - PARTS TO BE PROCESSED PER SAMTEC BOUNDARY DOCUMENT GUIDELINES.
  - ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED.
  - ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V.
  - HDRL-11 TO BE CENTERED ON CABLE AS SHOWN. LABEL TO CONTAIN:  
LINE 1 - PART NUMBER "HLCD-XX-XX.XX-XXX-XXX-X"  
LINE 2 - SHOP ORDER NUMBER "XXXXXX"  
LINE 3 - DATE CODE "XXXXX".
  - FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE PACKAGING STANDARD CO-HD-WI-3033-M.
  - SUB-TCF LENGTH IS EQUAL TO HLCD LENGTH.
  - CABLE LENGTHS GREATER THAN 40.00 INCHES ARE NOT SUPPORTED BY SI TEST DATA.
  - ALL PINS ROUTED AS SIGNALS. LSHM SHIELD TIED TO COAX SHIELD FOR GROUND RETURN.
  - DO NOT PULL ON COAX RIBBON TO UNMATE CABLE ASSEMBLY.
  - ON DV END OPTIONS PIN 01 LOCATION DENOTES LEFT OR RIGHT ORIENTATION.

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

No. OF POSITIONS	"B" (XR, XL)	"B" (*XH, XD)	SUB-TCF-3850-XX-01-XX.XX	QTY OF SUB-TCF	SUB-HLCD-XX-XX-XX-XL2.5
-005	.380 [9.65]	.430 [10.92]	SUB-TCF-3850-05-01-XX.XX	2	SUB-HLCD-05-XX-XX-XL2.5
-010	.478 [12.14]	.528 [13.41]	SUB-TCF-3850-10-01-XX.XX	2	SUB-HLCD-10-XX-XX-XL2.5
-020	.875 [22.23]	.725 [18.42]	SUB-TCF-3850-20-01-XX.XX	2	SUB-HLCD-20-XX-XX-XL2.5
-030	.975 [24.77]	1.025 [26.04]	SUB-TCF-3850-30-01-XX.XX	2	SUB-HLCD-30-XX-XX-XL2.5
-040	1.275 [32.39]	1.325 [33.66]	SUB-TCF-3850-20-01-XX.XX	4	SUB-HLCD-40-XX-XX-XL2.5
-050	1.575 [40.01]	1.625 [41.28]	SUB-TCF-3850-25-01-XX.XX	4	SUB-HLCD-50-XX-XX-XL2.5

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.  
TOLERANCES ARE:  
DECIMALS ANGLES  
.XX: ±.01 [0.3] 2°  
.XXX: ±.005 [0.13]  
.XXXX: ±.0020 [0.051]

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.

DO NOT SCALE DRAWING SHEET SCALE: 2:1

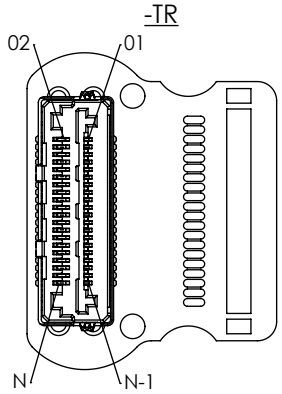
DESCRIPTION: LSHM CABLE ASSEMBLY

DWG. NO. HLCD-XX-XX.XX-XXX-XXX-X

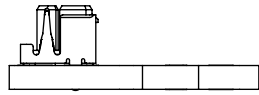
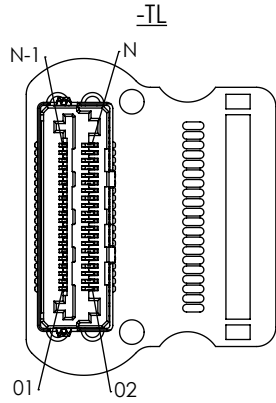
BY: ANDREW C 05/29/2013 SHEET 1 OF 4

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

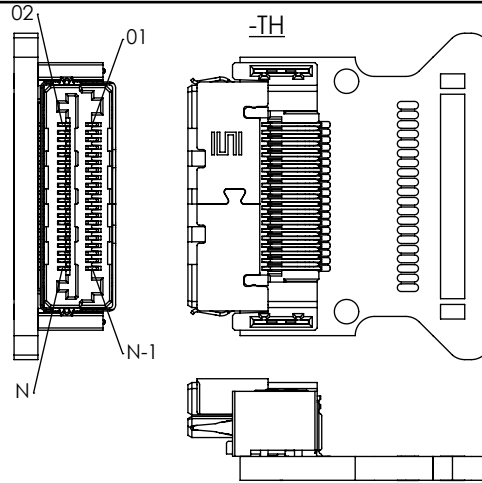
F:\DWG\MISC\MKTG\HLCD-XX-XX.XX-XXX-XXX-X-MKT.SLDDRW



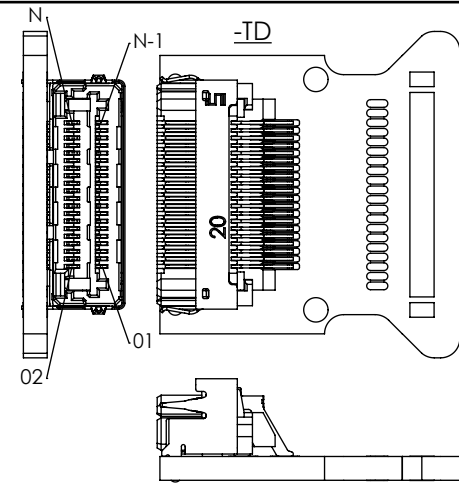
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



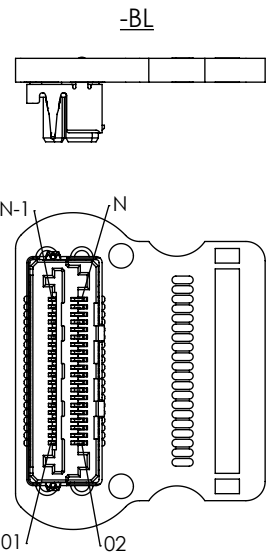
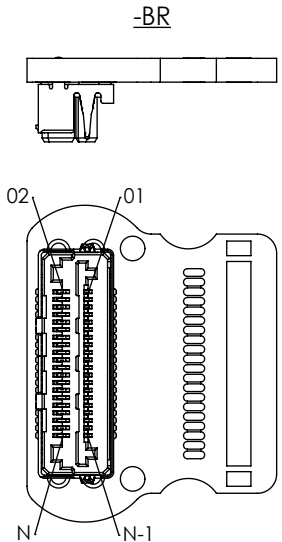
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N

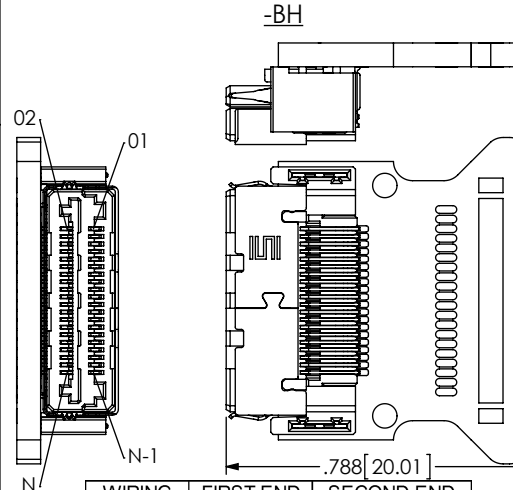


WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N

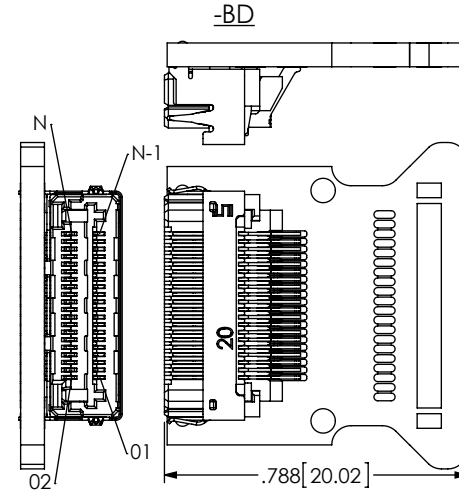


WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N

WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N

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: 1:25:1



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

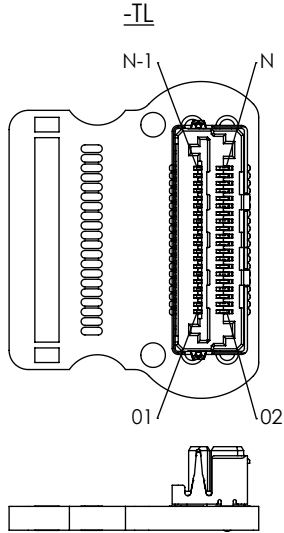
DESCRIPTION:

LSHM CABLE ASSEMBLY

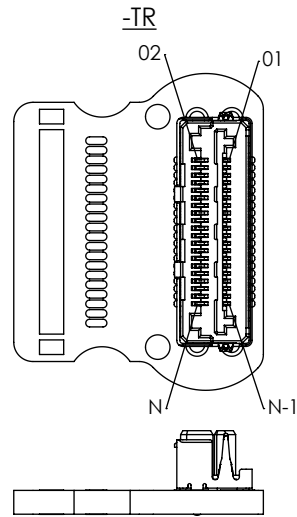
DWG. NO.

HLCD-XX-XX.XX-XXX-XXX-X

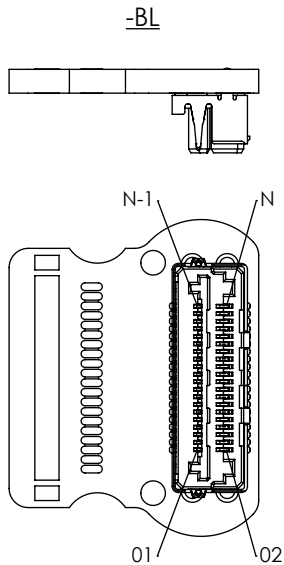
BY: ANDREW C 05/29/2013 SHEET 2 OF 4



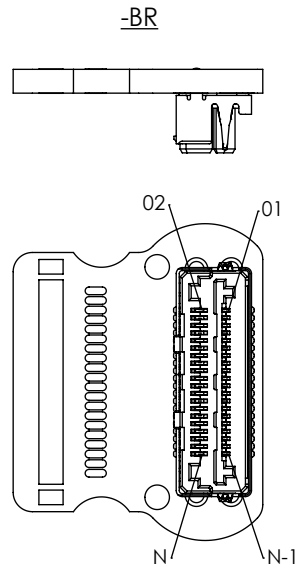
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



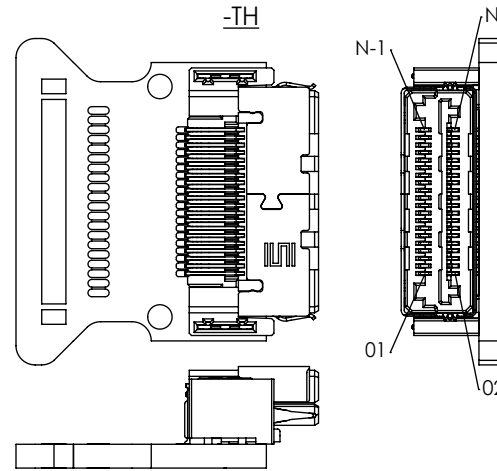
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



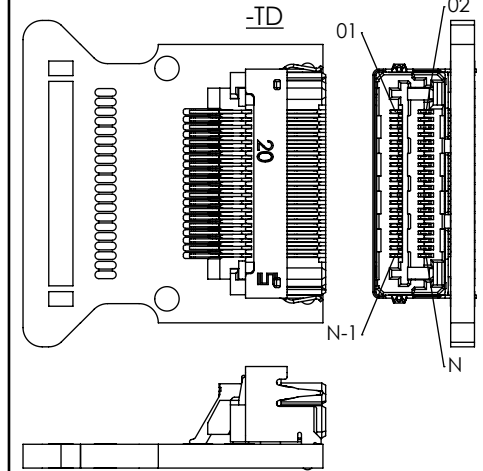
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



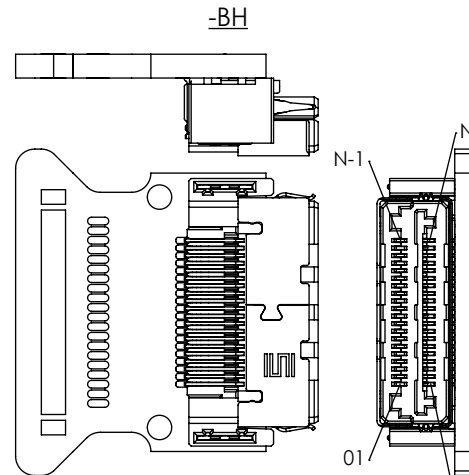
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



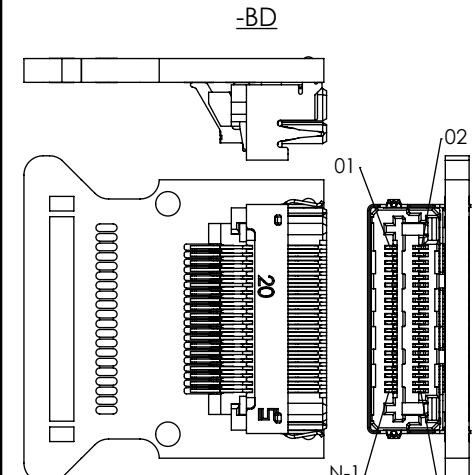
WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N



WIRING OPTION	FIRST END PIN #	SECOND END PIN #
1	1	1
2	1	2
3	1	N-1
4	1	N

**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 IN 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: 1:25:1



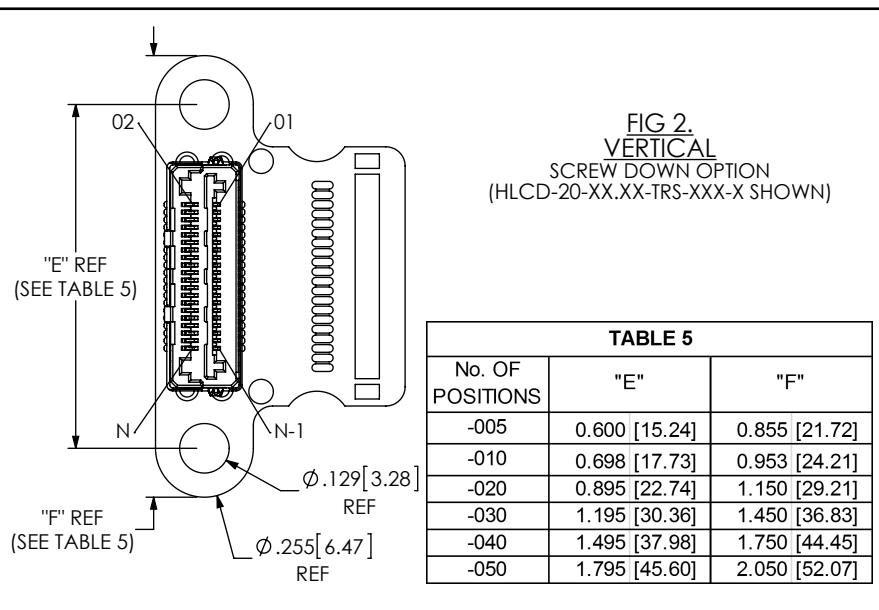
520 PARK EAST BLVD. NEW ALBANY, IN 47150  
 PHONE: 812-944-6733 FAX: 812-948-5047  
 e-Mail: info@SAMTEC.com code 55322

DESCRIPTION: LSHM CABLE ASSEMBLY  
 DWG. NO. HLCD-XX-XX.XX-XXX-XXX-X  
 BY: ANDREW C 05/29/2013 SHEET 3 OF 4

TABLE 6

FIRST END OPTION	FIRST END SUB-HLCD-XX-XX-XX-X-XX.X	WRING OPTION	FIRST END PIN #	SECOND END PIN #	SECOND END OPTION ( SUB-HLCD-XX-XX-XX-X-LX.X)							
					-TRX	-TLX	-TD	-TH	-BRX	-BLX	-BD	-BH
-TRX	-XX-01-01-X-L2.5	1	1	1	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
		2	1	2	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		3	1	N-1	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		4	1	N	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
-TLX	-XX-02-01-X-L2.5	1	1	1	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
		2	1	2	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		3	1	N-1	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		4	1	N	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
-TH	-XX-04-01	1	1	1	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
		2	1	2	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		3	1	N-1	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		4	1	N	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
-TD	-XX-03-01	1	1	1	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		2	1	2	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
		3	1	N-1	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
		4	1	N	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
-BRX	-XX-01-01-X-L2.5	1	1	1	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
		2	1	2	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		3	1	N-1	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		4	1	N	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
-BLX	-XX-02-01-X-L2.5	1	1	1	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
		2	1	2	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		3	1	N-1	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		4	1	N	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
-BH	-XX-04-01	1	1	1	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
		2	1	2	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A
		3	1	N-1	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		4	1	N	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
-BD	-XX-03-01	1	1	1	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01
		2	1	2	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02
		3	1	N-1	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L2.5	N/A	-XX-03-01	N/A
		4	1	N	N/A	-XX-01-01-X-L2.5	N/A	-XX-04-01	-XX-02-01-X-L2.5	N/A	-XX-03-02	N/A

FOR -TRX, -TLX, -BRX, -BLX ADD "S" FOR SCREW DOWN OPTION (I.E. -TLS END OPTION = SUB-HLCD-XX-02-XX-S-L2.5)



No. OF POSITIONS	"E"	"F"
-005	0.600 [15.24]	0.855 [21.72]
-010	0.698 [17.73]	0.953 [24.21]
-020	0.895 [22.74]	1.150 [29.21]
-030	1.195 [30.36]	1.450 [36.83]
-040	1.495 [37.98]	1.750 [44.45]
-050	1.795 [45.60]	2.050 [52.07]

END 1	1	3	5	...	35	37	39
NAME	SIG	SIG	SIG	...	SIG	SIG	SIG
END 2	1	3	5	...	35	37	39
END 1	2	4	6	...	36	38	40
NAME	SIG	SIG	SIG	...	SIG	SIG	SIG
END 2	2	4	6	...	36	38	40

LSHM SHIELD TIED TO COAX SHIELD FOR GROUND RETURN

**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: 1:25:1



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

DESCRIPTION: LSHM CABLE ASSEMBLY  
DWG. NO. HLCD-XX-XX.XX-XXX-XXX-X  
BY: ANDREW C 05/29/2013 SHEET 4 OF 4