REVISION Q

DO NOT SCALE FROM THIS PRINT

	TABLE 2				
I	END	"C"	"D"		
I	OPTION				
	XL,XR	0.650 [16.51]	0.218 [5.54]		
	XD	0.788 [20.02]	0.264 [6.71]		
	XH	0.788 [20.02]	0.264 [6.71]		

"B" + .150[3.81] REF

(FOR XR, XL ENDS)

"B" REF

(FOR XR, XL)

Ν

(SEE TABLE 3)

Ξ3		
N	N ₋ 1	
'`		╽┝
10	9	╟
20	19	╟
40	39	╟
60	59	
80	79	
	20 40 60	N N-1 10 9 20 19 40 39 60 59

100 99

-050

FIG 1

VERTICAL TO DH

HLCD-20-XX.XX-TR-TD-1 SHOWN

OVERALL LENGTH: XX.XX + "A

REF (SEE TABLE 4)

"C" REF

(SEE TABLE 2)

	TABLE 4		
-	END TO END	"A"	
1	DV TO DV	0.860 [21.84]	
-	DV TO DH	0.998 [25.35]	
\dashv	DV TO RH	0.998 [25.35]	
4	DH TO DH	1.136 [28.85]	
_	DH TO RH	1.136 [28.85]	
2	RH TO RH	1.136 [28.85]	
)			

HLCD-XX-XX,XX-XXX-XXX-X-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

□ /02

"B" + .125 3.18 REF

(FOR XH, XD ENDS)

(SEE TABLE 3)

"D" REF

(SEE TABLE 2)

OR XH, XD)

SECOND END

-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)

(BLANK): TCF-3850-XX-01 -T:(SEE NOTE 12)

WIRING OPTION

-1: 1-1

CABLE OPTION

-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

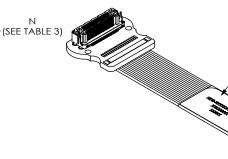
-BD: DH CONN BOTTOM
-BH: RH CONN BOTTOM

(SEE SHEET 3)

HDRL-XX (SEE TABLE 1)

SHOWN FOR CLARITY)

(TOP CABLE NOT



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

	TABLE 1							
No. OF	"B"	"B"	BLANK OPTION	-T OPTION	QTY OF	SUB-HLCD-XX-XX-XX-X-L2.5	BLANK OPTION	-T OPTION
POSITIONS	(XR,XL)	(*XH,XD)	(CABLE)	(CABLE)	SUB-TCF	30B41ECD-XXXXXXXXXXEZ:3	(LABEL)	(LABEL)
-005	.380 [9.65]	.430 [10.92]	SUB-TCF-3850-05-01-XX XX	SUB-TCF-3650F-05-T01-XX.XX	2	SUB-HLCD-05-XX-XX-X-L2.5	HDRL-11	HDRL-47
-010	.478 [12.14]	.528 [13.41]	SUB-TCF-3850-10-01-XX.XX	SUB-TCF-3650F-10-T01-XX.XX	2	SUB-HLCD-10-XX-XX-X-L2.5	HDRL-11	HDRL-47
-020	.675 [17.15]	.725 [18.42]	SUB-TCF-3850-20-01-XX.XX	SUB-TCF-3650F-20-T01-XX.XX	2	SUB-HLCD-20-XX-XX-X-L2.5	HDRL-11	HDRL-47
-030	.975 [24.77]	1.025 [26.04]	SUB-TCF-3850-30-01-XX XX	SUB-TCF-3650F-30-T01-XX.XX	2	SUB-HLCD-30-XX-XX-X-L2.5	HDRL-11	HDRL-47
-040	1.275 [32.39]	1.325 [33.66]	SUB-TCF-3850-20-01-XX XX	SUB-TCF-3650F-20-T01-XX.XX	4	SUB-HLCD-40-XX-XX-X-L2.5	HDRL-11	HDRL-47
-050	1.575 [40.01]	1.625 [41.28]	SUB-TCF-3850-25-01-XXXX	SUB-TCF-3650F-25-T01-XXXX	4	SUB-HLCD-50-XX-XX-X-L2.5	HDRL-11	HDRL-47

ALL CABLE

TERMINATIONS TO BE POTTED WITH UV EPOXY (SEE NOTE 13)

NOTES:

- 1. © REPRESENTS A CRITICAL DIMENSION.
- 2. PARTS TO BE PROCESSED PER SAMTEC BOUNDARY DOCUMENT GUIDELINES.

N-1

(SEE TABLE 3)

- 3. ALL ASSEMBLIES TO BE 100% ELECTRICALLY TESTED.
- 4. ALL ASSEMBLIES TO BE 100% HI-POT TESTED AT 300V.
- 5. HDRL-11 TO BE CENTERED ON CABLE AS SHOWN. LABEL TO CONTAIN:

LINE 1 - PART NUMBER "HLCD-XX-XX.XX-XXX-XXX-X"

FIRST END

LINE 2 - SHOP ORDER NUMBER "XXXXXX"

LINE 3 - DATE CODE "XXXXX".

- 6. FOR SUB-ASSEMBLY AND FINISHED GOOD PACKAGING REQUIREMENTS, REFERENCE PACKAGING STANDARD CO-HD-WI-3033-M.
- 7. SUB-TCF LENGTH IS EQUAL TO HLCD LENGTH.
- 8. CABLE LENGTHS GREATER THAN 40.00 INCHES ARE NOT SUPPORTED BY SI TEST DATA.
- 9. ALL PINS ROUTED AS SIGNALS. LSHM SHIELD TIED TO COAX SHIELD FOR GROUND RETURN.
- 10. DO NOT PULL ON COAX RIBBON TO UNMATE CABLE ASSEMBLY.
- 11. ON DV END OPTIONS PIN 01 LOCATION DENOTES LEFT OR RIGHT ORIENTATION.
- 12. -T OPTION: HIGH TEMP THV JACKET & WHITE PVF LABEL
- 13. EPOXY: IF CABLE OPTION IS -T, USE EPOXY-06 ONLY ON ALL CABLE TERMINATIONS. IF BLANK, USE EPOXY-42 ON ALL CABLE TERMINATIONS.

THIS PRODUCT MANUFACTURED WITH LEAD-FREE PROCESSING

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 SAMFLAND FOR CHILD THE DISCLOSED, IN WHOLE OR PART, TO ANY UNAUTHORIZED PERSON OR ENTITY NOR REPRODUCED, TRANSFERRED OR INCORPORATE IN ANY OTHER PROJECT IN ANY MANNER WITHOUT THE EXPRESS

DO NOT SCALE DRAWING

SHEET SCALE: 2



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

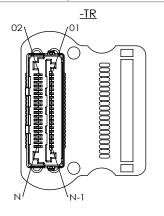
DWG. NO.

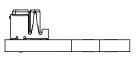
HLCD-XX-XX.XX-XXX-XXX-XXX-X-X
BY:ANDREW C 05/29/2013 SHEET 1 OF 4

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

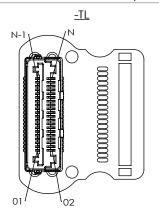


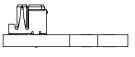
FIRST END (SEE TABLE 6, SHEET 4) (FIRST END BOARDS WILL HAVE BLACK SOLDER MASK)



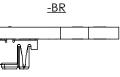


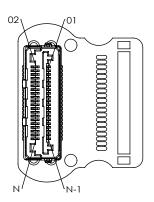
WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N



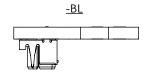


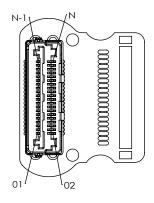
WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N





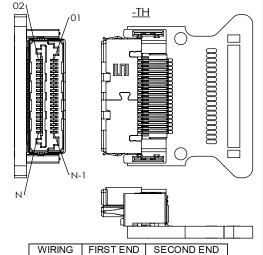
WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N





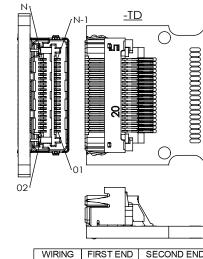
WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N

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



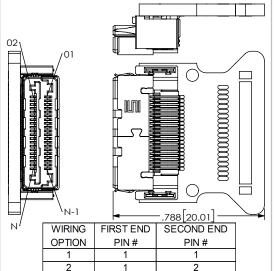
				丄
ĺ	WIRING	FIRST END	SECOND END	l
	OPTION	PIN#	PIN#	
	1	1	1	
	2	1	2	
	3	1	N-1	
	4	1	N	

<u>-BH</u>



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

<u>-BD</u>



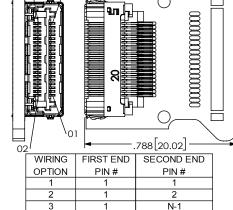
		., 00[20.01]
WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N

PROPRIETARY NOTE THIS DOCUMENT CONTAINS CONFIDENTIAL AND

MANUFACTURING, REPRODUCTION, USE, PATENT RIGHTS INC. THIS DOCUMENT SHALL NOT BE DISCLOSED, IN WHOLE 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:

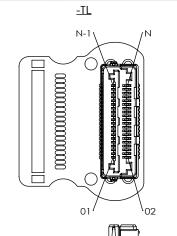
LSHM CABLE ASSEMBLY

DWG. NO.

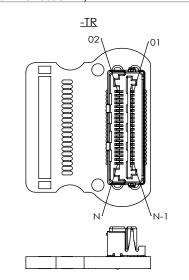
HLCD-XX-XX.XX-XXX-XXX-X-X BY: ANDREW C 05/29/2013 SHEET 2 OF 4



SECOND END (SEE TABLE 6, SHEET 4)
(SECOND END BOARDS WILL HAVE BLACK SOLDERMASK IF STRAIGHT,
RED SOLDER MASK IF CROSSOVER)

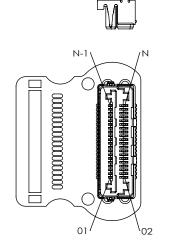


WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N

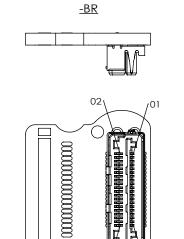


WIRING	FIRST END	SECOND END
OPTION	PIN#	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N

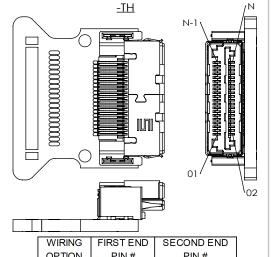




WIRING	FIRST END	SECOND END
OPTION	PIN # PIN #	
1	1	1
2	1	2
3	1	N-1
4	1	N

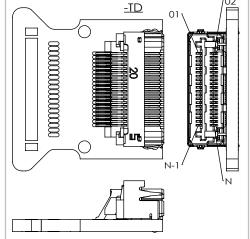


WIRING	FIRST END	SECOND END			
OPTION	PIN#	PIN#			
1	1	1			
2	1	2			
3	1	N-1			
4	1	N			

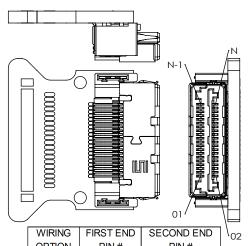


L		
WIRING	FIRST END	SECOND END
OPTION	FIRST END SECOND PIN # PIN # 1 1 1 1 1 1 1 1 1	PIN#
1	1	1
2	1	2
3	1	N-1
4	1	N

<u>-BH</u>



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



- 0			
	WIRING	FIRST END	SECOND END
	OPTION	PIN#	PIN#
	1	1	1
	2	1	2
	3	1	N-1
	4	1	N

<u>-BD</u>
WIDING FIRST END SECOND END 'N

WIRING	FIRST END	SECOND END		
OPTION	PIN#	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-X BY: ANDREW C 05/29/2013 SHEET 3 OF 4

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

REVISION Q

	TABLE 6											
FIRST	FIRST END	WRING	FIRST	SECOND			SECON	ID END OPTION (SU	B-HLCD-XX-XX-XX-	X-LX.X)		
END OPTION	SUB-HLCD-XX-XX-XX-XX.X	OPTION	END PIN#	END PIN#	-TRX	-TLX	-TD	-TH	-BRX	-BLX	-BD	-BH
	-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
-TRX		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
-1100		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
		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
-TLX	-XX-02-01-X-L2.5	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
- ILX	-701-02-01-71-22.0	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
		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
-TH	-XX-04-01	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
	750000	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
	-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
-TD		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
10		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
	-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-L25	N/A	-XX-03-01	N/A
-BRX		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
-DIV		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
		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
-BLX	-XX-02-01-X-L2.5	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
-DLX	-XX-02-01-X-L2.0	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
		1	1	1	N/A	-XX-01-02-X-L2.5	N/A	-XX-04-02	-XX-02-02-X-L25	N/A	-XX-03-01	N/A
-BH	-XX-04-01	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
-011	-701-01-01	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	Ν	-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
		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
-BD	-XX-03-01	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
-60	-//-03-01	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 THY THY DRY DLY ADDIEST FOR CODMISSIAN OFFICIAL FLORIDATION - CURLINGS VY 0.2 VY 0.12 EV											

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

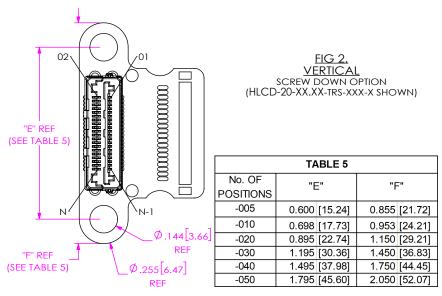


TABLE 7											
E	EXAMPLE SIGNAL MAPPING - HLCD-20-XX.XX-XXX-XXX-1										
END 1	1	3	5		35	37	39				
NAME	SIG	SIG	SIG		SIG	SIG	SIG				
END 2	1	3	5		35	37	39				
END 1	2	4	6		36	38	40				
NAME	SIG	SIG	SIG		SIG	SIG	SIG				
END 2	2	4	6		36	38	40				
LS	LSHM SHIELD TIED TO COAX SHIELD FOR GROUND RETURN										

* PROPRIETARY NOTE THIS DOCUMENT CONTAINS CONFIDENTIAL AND

PROPRIETARY INFORMATION AND ALL DESIGN,
MANUFACTURING, REPROLUCING, USE, PATENT RIGHTS
AND SALES RIGHTS ARE EXPRESSLY RESERVED BY SAMPLE,
INC. THIS DOWNERT SHALL NOT BE DISCLOSE, BY ASMPLE,
OR PAST, TO ANY UNANTHORIZED PERSON DE ENTITY NO.
PROPROLUCIT TRANSFERRO DESIGNATION OF ENTITY NO.
OTHER PROJECT IN ANY MANURE WITHOUT THE EXPRESS
WAITER PROJECT IN ANY MANURE WITHOUT THE EXPRESS
WAITER PROJECT IN ANY MANURE WITHOUT THE EXPRESS

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

DW

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

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

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