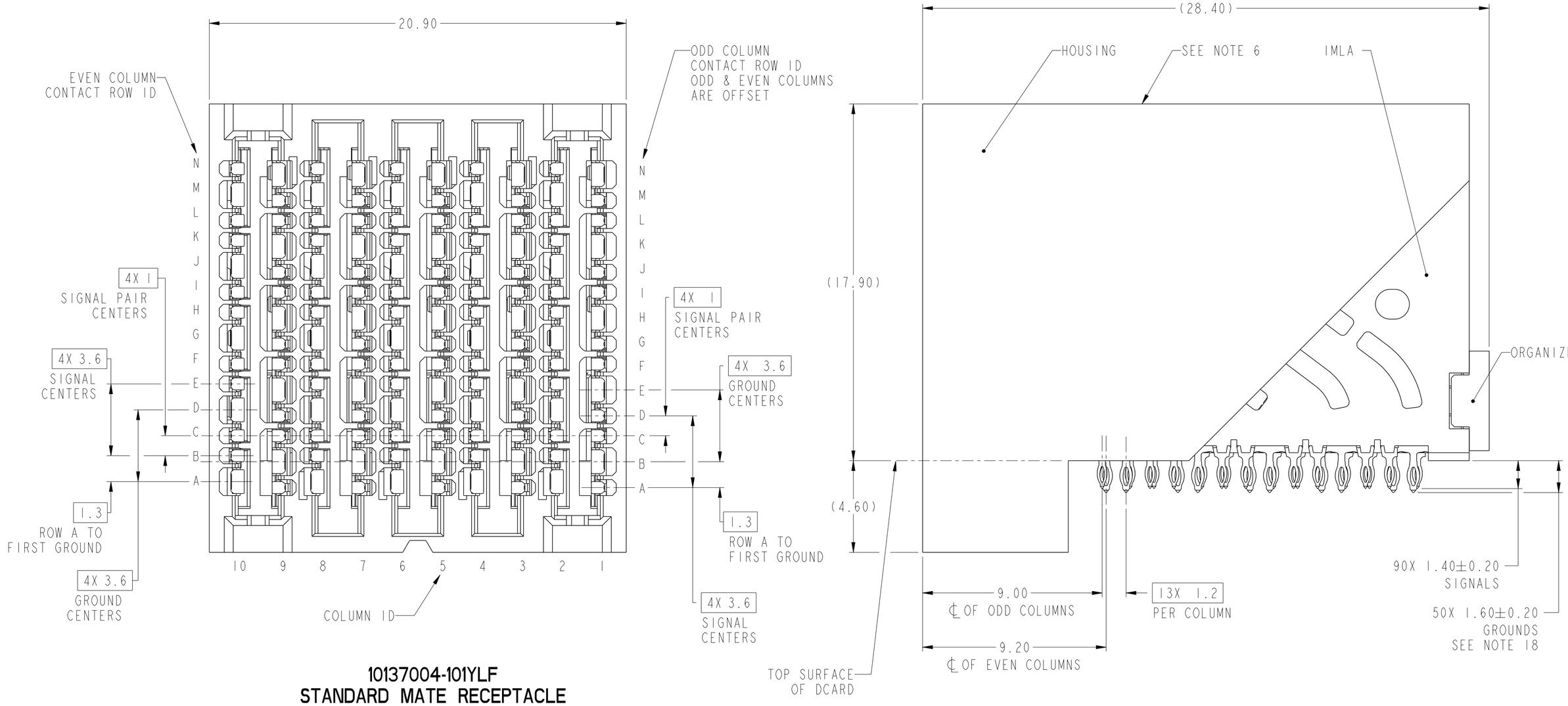
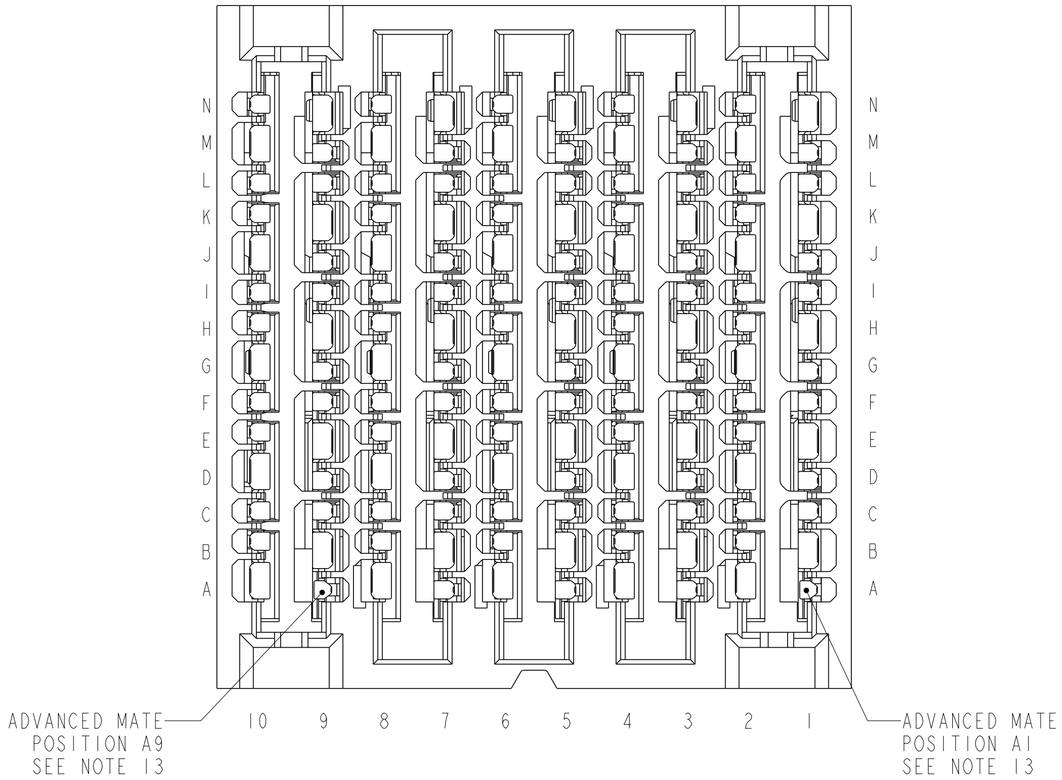
PRODUCT NUMBER
SEE TABLE



10137004-101YLF
STANDARD MATE RECEPTACLE

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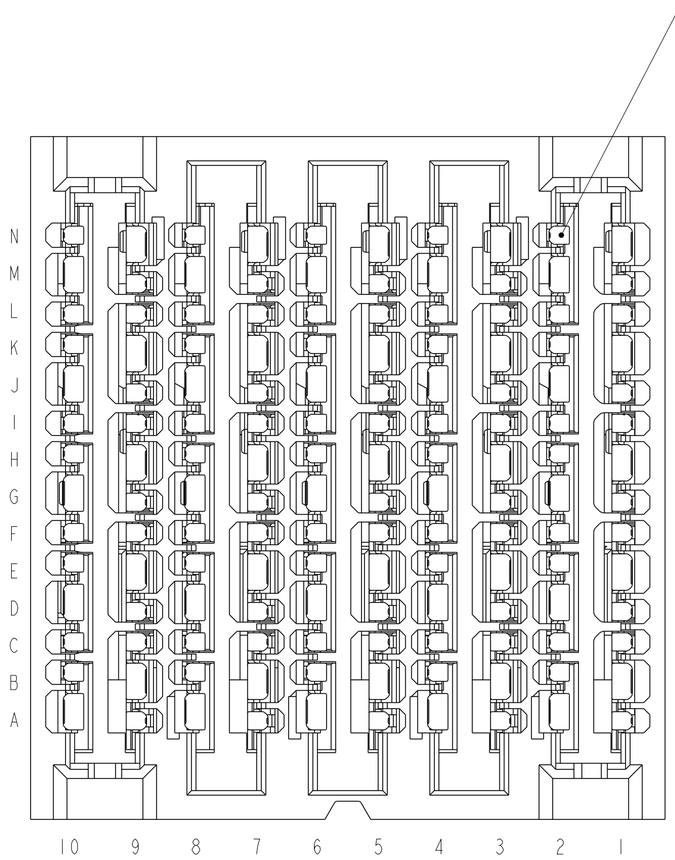
spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/11			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family ExaMax		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no 10137004		rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°			cat. no.	Product - Customer Drw		sheet 1 of 11



10137004-201YLF
ADVANCED MATE RECEPTACLE
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
FOR ALL DIMENSIONS SEE 10137004-101YLF ON SHEET 1

spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family ExaMax		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no 10137004		rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°		cat. no.		Product - Customer Drw		sheet 2 of 11

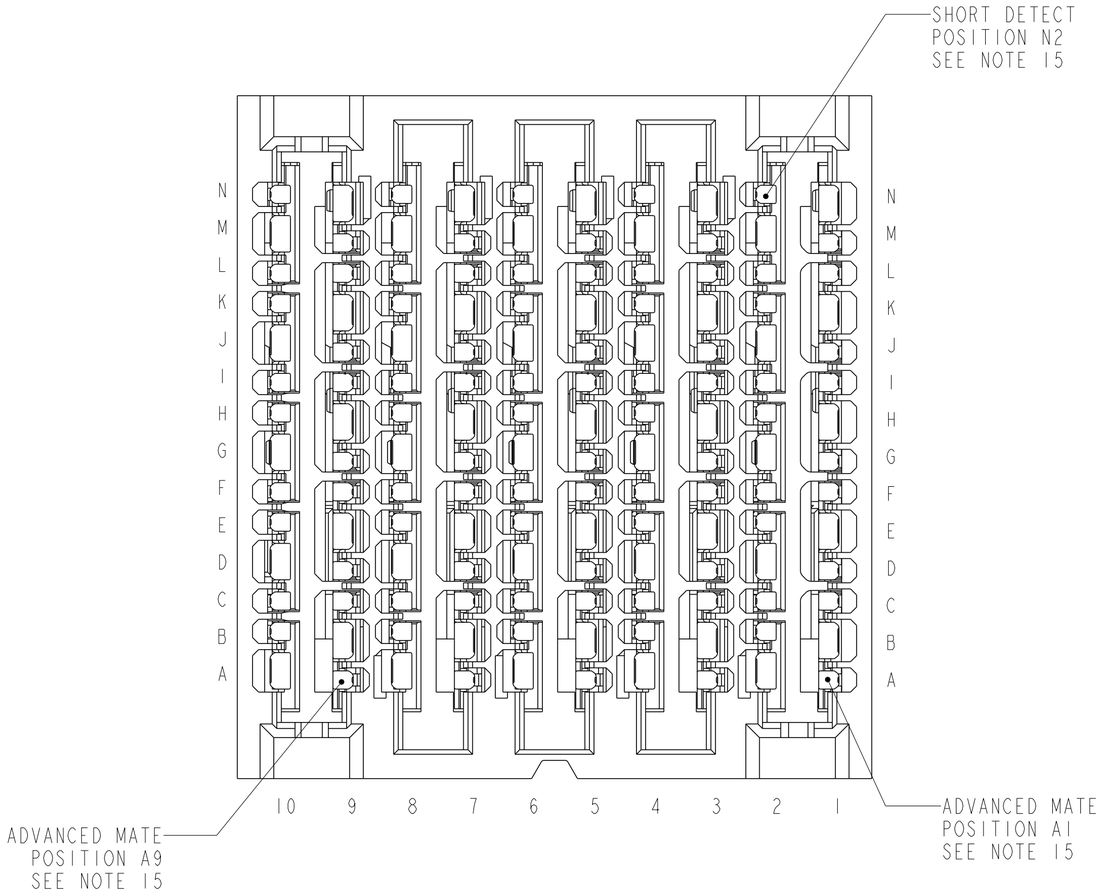
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10137004-301YLF
SHORT DETECT RECEPTACLE
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10137004-101YLF ON SHEET 1

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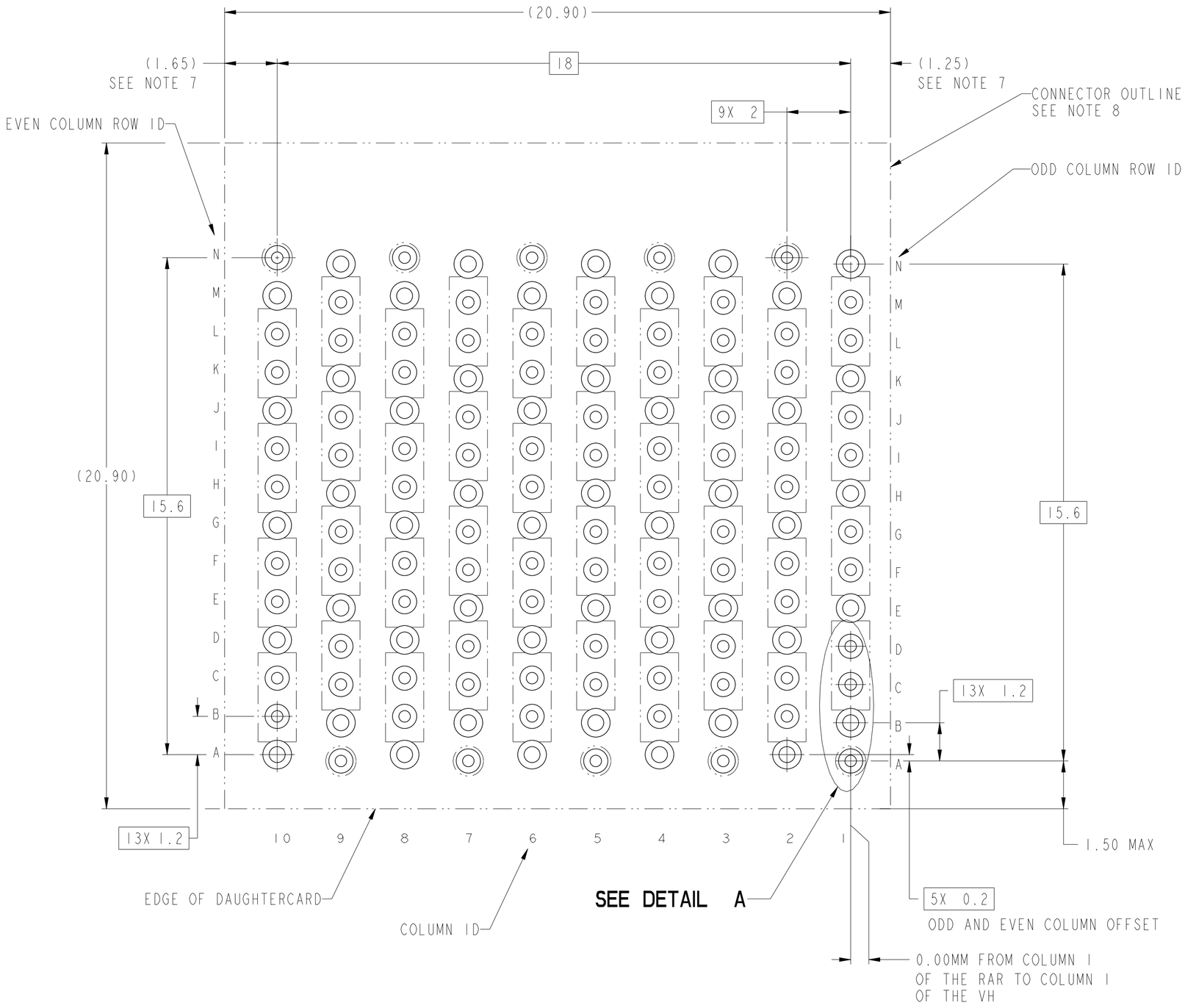
spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family ExaMax		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE	dwg no	10137004	rev C
		0.XX	±.10			ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall			
		0.XXX	±.050						
	angular	0°	±°		cat. no.	Product - Customer Drw			sheet 3 of 11

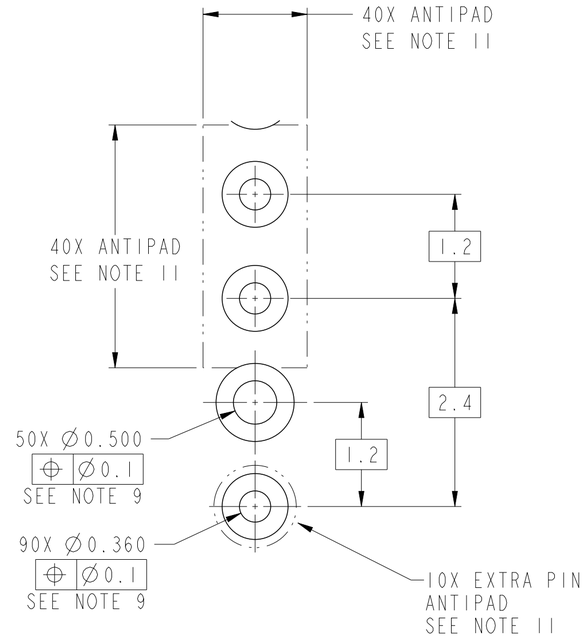


10137004-401YLF
ADVANCED MATE/SHORT DETECT RECEPTACLE
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10137004-101YLF ON SHEET 1

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spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2	scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12				
				chr	-	-			ecn no	ELX-DG-35549-1
				appr	Heaven Cen	2020/04/22	product family	ExaMax	rel level	Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no	10137004	rev	C
		0.XX	±.10							
		0.XXX	±.050							
	angular	0°	±°		cat. no.		Product - Customer Drw		sheet 4 of 11	



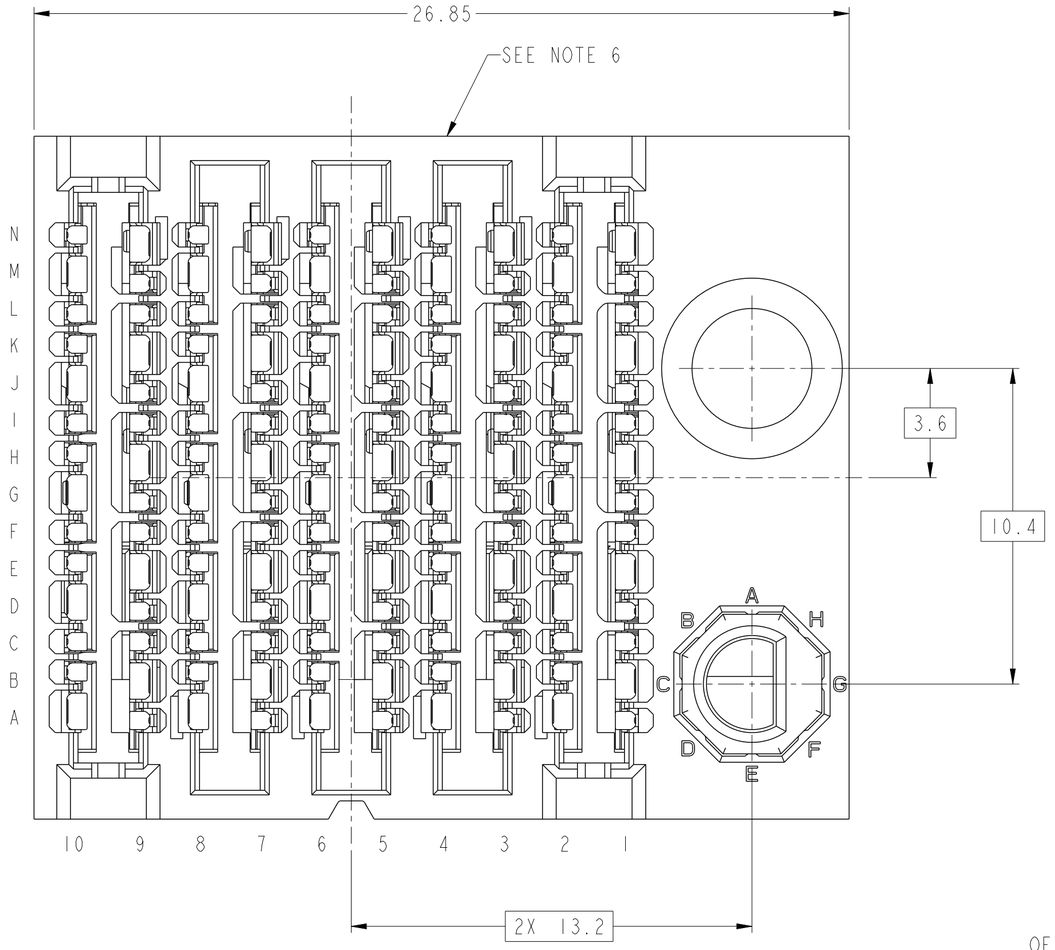


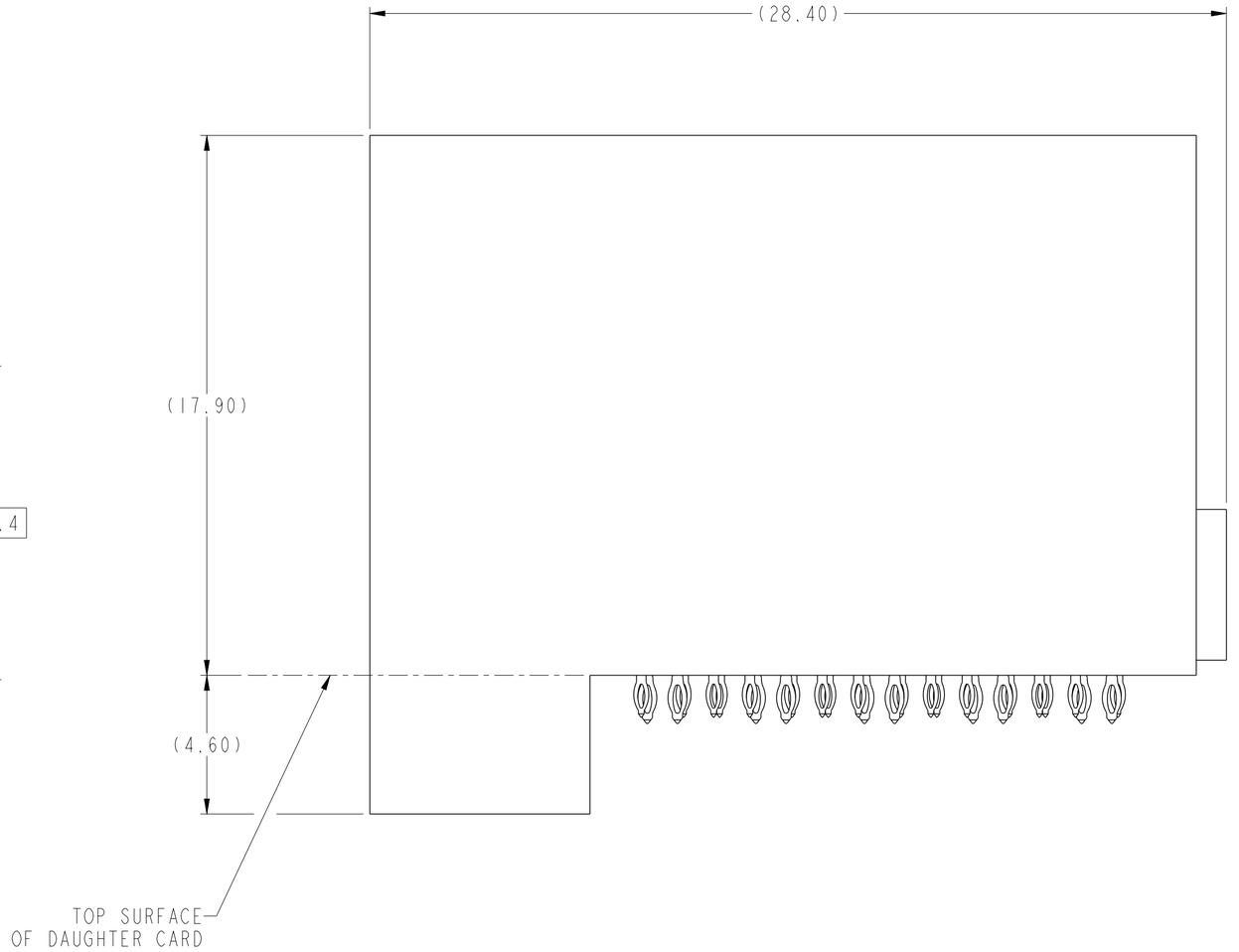
DETAIL A
SCALE 20:1

10137004-X01YLF RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, & 11
SCALE 10:1

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spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family -		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE	dwg no 10137004		rev C
		0.XX	±.10			ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall			
		0.XXX	±.050			cat. no. -	Product - Customer Drw		sheet 5 of 11
	angular	0°	±°						

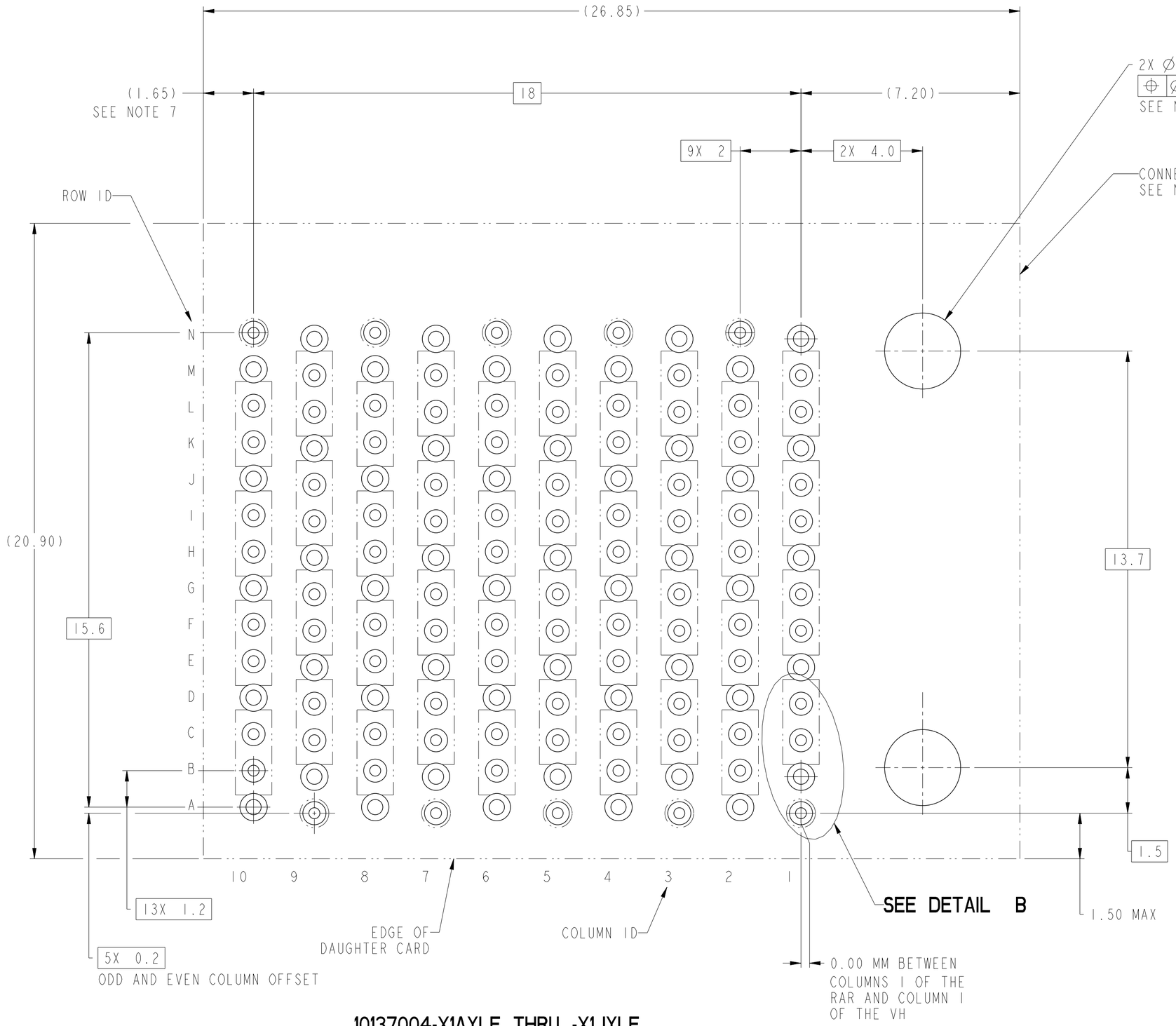


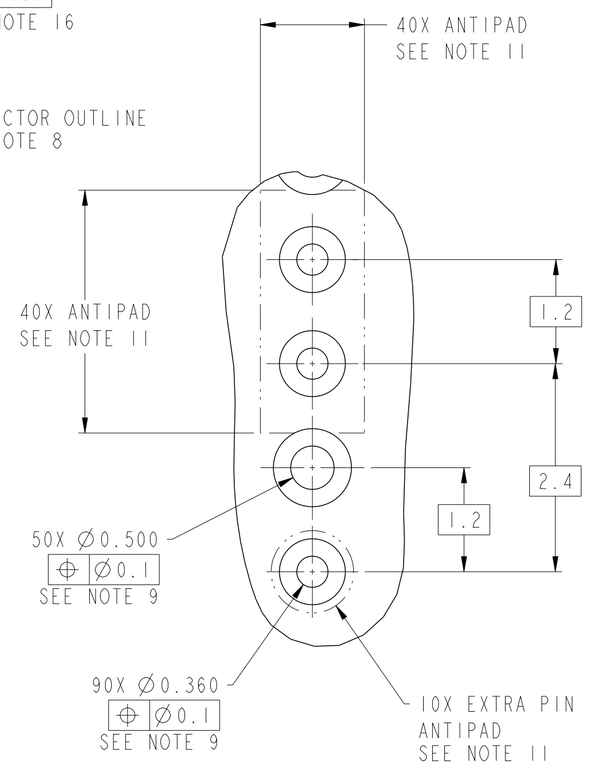


10137004-X1AYLF THRU 10137004-X1JYLF
RIGHT GUIDANCE (SEE NOTE 17)
FOR ALL OTHER DIMENSIONS SEE 10137004-101YLF ON SHEET 1

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spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			
				chr	-	-			ecn no ELX-DG-35549-1
				appr	Heaven Cen	2020/04/22	product family ExaMax		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		dwg no 10137004	rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°		cat. no.		Product - Customer Drw		sheet 6 of 11



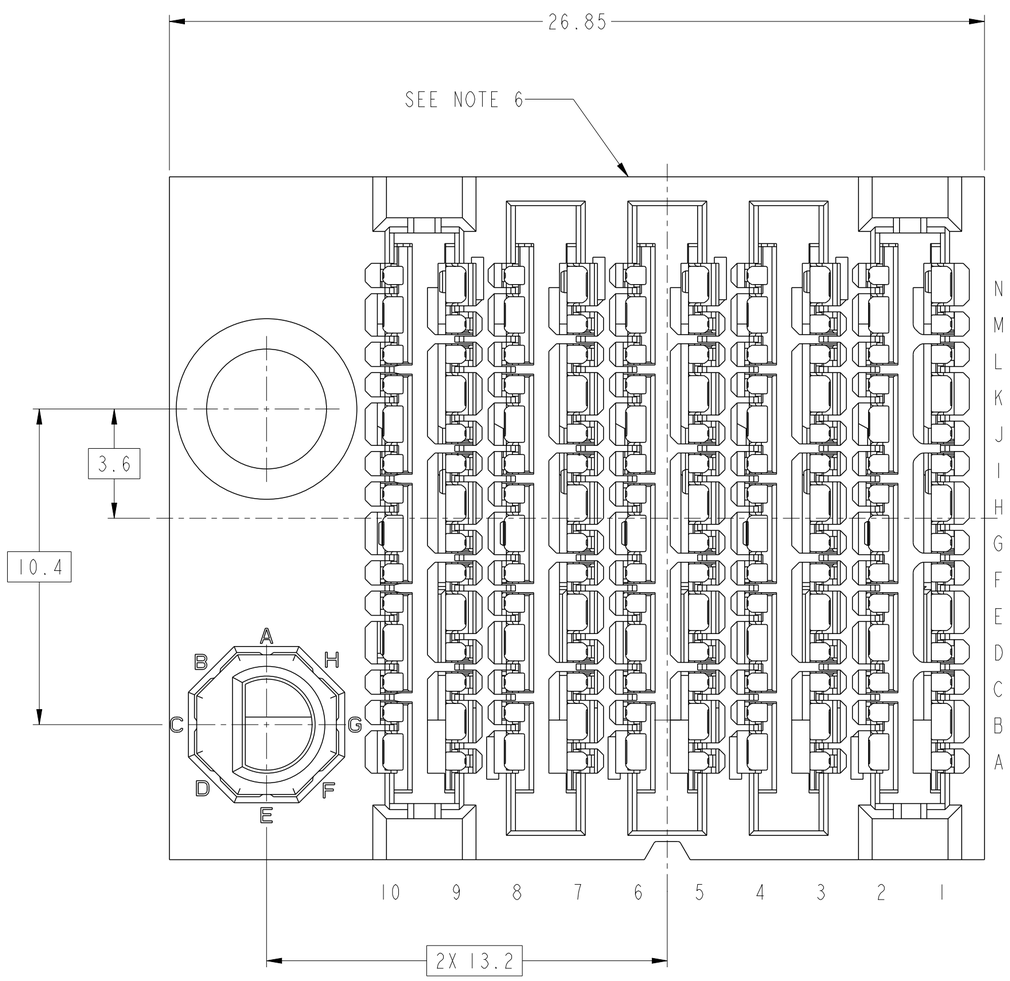


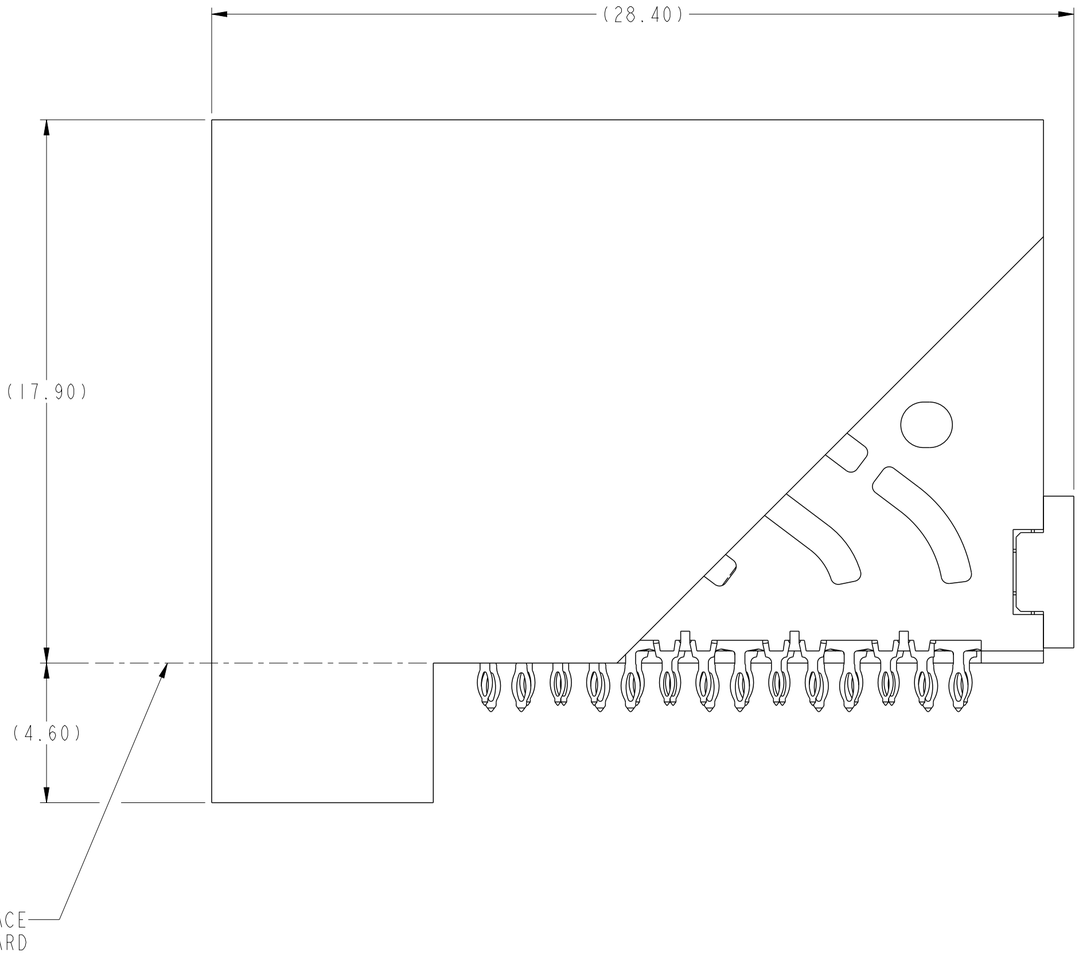
DETAIL B
SCALE 20:1

10137004-X1AYLF THRU -X1JYLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 1:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family -		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no	10137004	rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	± °		cat. no. -	Product - Customer Drw			sheet 7 of 11

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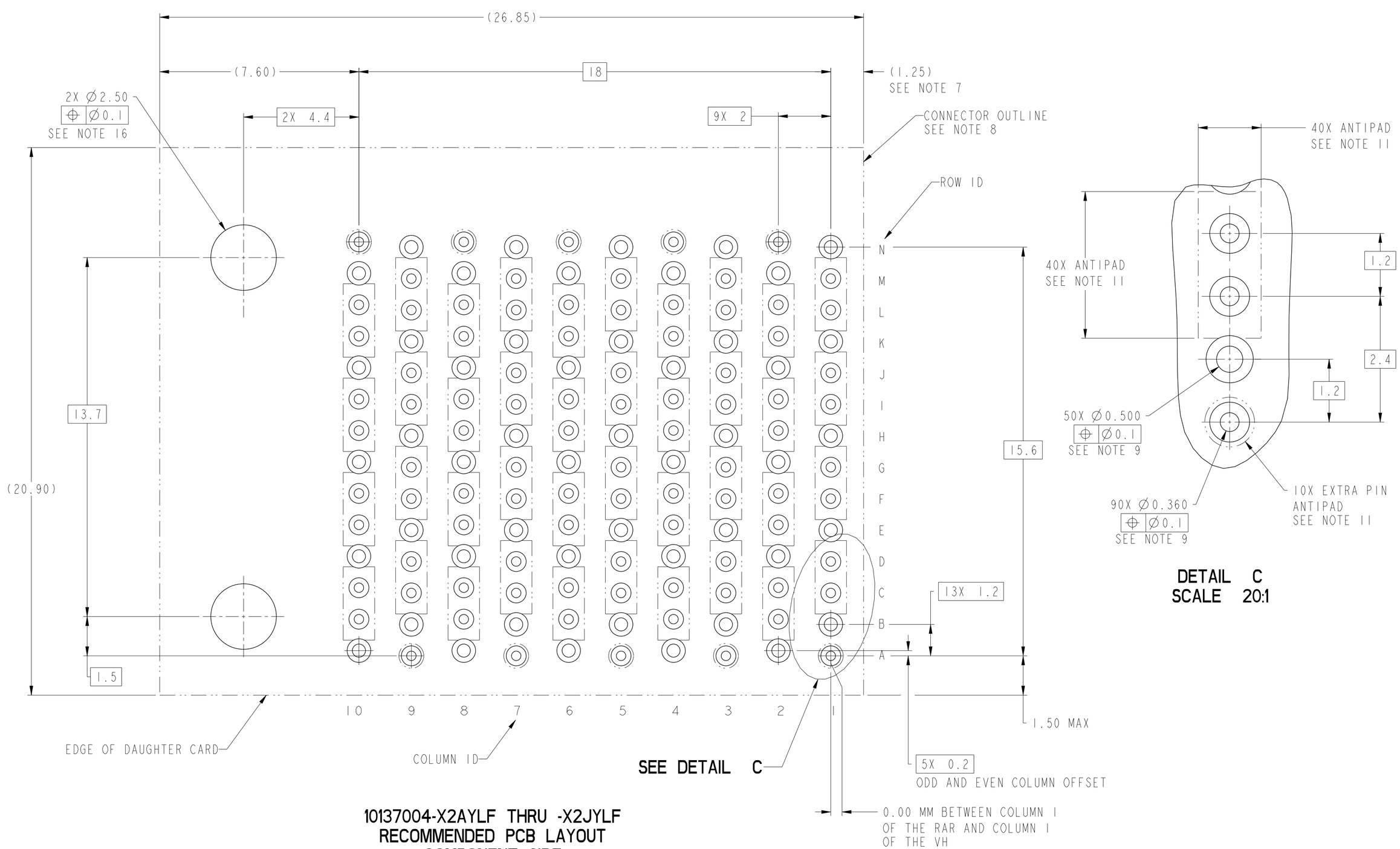




10137004-X2AYLF THRU 10137004-X2JYLF
LEFT GUIDANCE (SEE NOTE 17)
FOR ALL OTHER DIMENSIONS SEE 10137004-101YLF ON SHEET 1

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spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family	ExaMax	rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no	10137004	rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°		cat. no.	Product - Customer Drw			sheet 8 of 11



DETAIL C
SCALE 20:1

10137004-X2AYLF THRU -X2JYLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

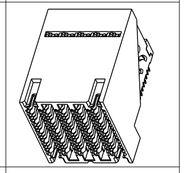
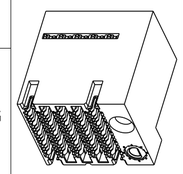
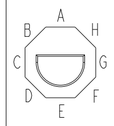
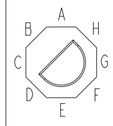
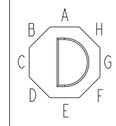
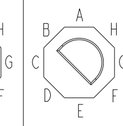
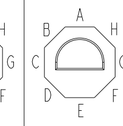
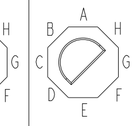
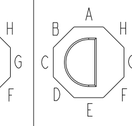
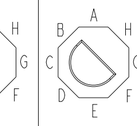
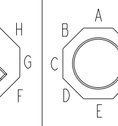
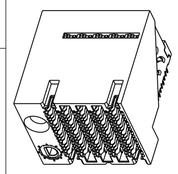
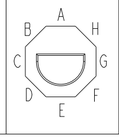
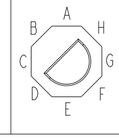
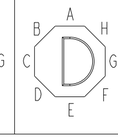
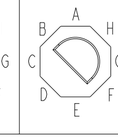
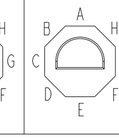
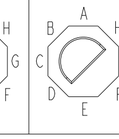
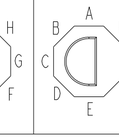
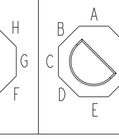
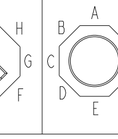
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spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			ecn no ELX-DG-35549-1
				chr	-	-			
				appr	Heaven Cen	2020/04/22	product family -		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	dwg no	10137004	rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°			cat. no. -	Product - Customer Drw		sheet 9 of 11

10137004 - Y Y Y Y L F

PLATING
SEE NOTE 2

ASSEMBLY PART NUMBER	DESCRIPTION
10137004-1YYYLF	STANDARD MATE
10137004-2YYYLF	ADVANCED MATE
10137004-3YYYLF	SHORT DETECT
10137004-4YYYLF	ADVANCED MATE & SHORT DETECT

MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER									BASE MODULE
WITHOUT END GUIDES MODULE (SEE SHEET 1)	01									
RIGHT GUIDANCE MODULE (SEE SHEET 6)	1A	1B	1C	1D	1E	1F	1G	1H	1J (NO KEY)	
										
LEFT GUIDANCE MODULE (SEE SHEET 8)	2A	2B	2C	2D	2E	2F	2G	2H	2J (NO KEY)	
										

Amphenol FCi

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spec ref	SEE NOTES		dr	Terry Luo	2015/10/08	projection	MM	size A2	scale 1:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1
			chr	-	-			rel level	Released
surface -	linear	0.X ±.3	appr	Heaven Cen	2020/04/22	product family -			
		0.XX ±.10	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		dwg no 10137004		rev C
		0.XXX ±.050							
	angular	0° ±°		cat. no. -		Product - Customer Drw		sheet 10 of 11	

NOTES:

(1)- CONNECTOR MATERIALS:
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
CONTACT: COPPER ALLOY
ORGANIZER: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0

2 - CONTACT PLATING:
SEPARABLE INTERFACE:
-YYYLF:PERFORMANCE-BASED PLATING, QUALIFIED TO MEET THE REQUIREMENTS OF FCI PRODUCT SPECIFICATION GS-12-1096 INCLUDING TELCORDIA GR-1217-CORE (NOVEMBER 1995) CENTRAL OFFICE TEST SEQUENCE
-YYY2LF:GXT+ OVER NICKEL
-YYY9LF:GXT OVER NICKEL
PRESS-FIT TAILS: TIN OVER NICKEL (LEAD FREE)

3 - PRODUCT SPECIFICATION: GS-12-1096

4.- APPLICATION SPECIFICATION GS-20-0361.

5 - PACKAGING MEETS GS-14-920 LEAD FREE LABELING SPECIFICATION.

(6)- PRODUCT MARKING, (PROTOTYPE, PART NUMBER & LOT CODE), ON THIS SURFACE.

(7)- THE MINIMUM VIA SPACING BETWEEN STACKED CONNECTORS IS 3.0 MM FOR THIS RAR AND THE MATING HEADER. REFER TO THE APPLICATION SPECIFICATION FOR DETAILS.

(8)- CONNECTOR OUTLINE MAY BE SCREEN PRINTED ONTO CUSTOMER PCB TO BE USED AS A GUIDE FOR MANUAL CONNECTOR PLACEMENT.

(9)- REFER TO CUSTOMER DRAWING 10119933 FOR INFORMATION ON PCB HOLE DIAMETERS AND PLATING OPTIONS

10 - THIS PRODUCT MEETS THE EUROPEAN UNION DIRECTIVES & OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-47-0004.

(11)- REFER TO ROUTING GUIDE GS-20-0511 FOR RECOMMENDATIONS ON OPTIMIZATION OF FOOTPRINT AND TRACE ROUTING LAYOUT.

12 - THE HOUSING WILL WITHSTAND EXPOSURE TO 260° C PEAK TEMPERATURE FOR 10-30 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.

(13)- THE ADVANCED MATE RECEPTACLE, 10137004-2YYYLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

(14)- THE SHORT DETECT RECEPTACLE, 10137004-3YYYLF, WHEN MATED WITH A STANDARD MATE VERTICAL HEADER OR A STANDARD MATE RIGHT-ANGLE HEADER WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

(15)- THE ADVANCED MATE/SHORT DETECT RECEPTACLE, 10137004-4YYYLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS AND 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

(16)- FOR CONNECTORS WITH EITHER A RIGHT OR LEFT GUIDE MODULE, TWO PHILLIPS PAN HEAD M2 HOLD DOWN SCREWS MUST BE USED TO SECURE THE CONNECTOR TO THE PCB. THE SCREW LENGTH SHALL BE 2.0-6.0mm PLUS THE THICKNESS OF THE BOARD. SCREWS ARE NOT PROVIDED WITH CONNECTOR.

(17)- LEFT / RIGHT INTEGRATED GUIDE ORIENTATION IS DETERMINED BY THE LOCATION OF THE GUIDE FEATURES WHEN LOOKING AT THE MATING FACE OF THE RIGHT ANGLE RECEPTACLE. THE LEFT / RIGHT DESIGNATION OF THE MATING HEADER IS DEFINED BY THE RIGHT ANGLE RECEPTACLE THAT IT MATES WITH (i.e. A RIGHT GUIDE VERTICAL HEADER MATES WITH A RIGHT GUIDE RIGHT ANGLE RECEPTACLE.)

(18)- ALL GROUND CONTACTS ARE COMMONED WITHIN A COLUMN.

spec ref	SEE NOTES			dr	Terry Luo	2015/10/08	projection	MM	size A2 / scale 7:1
tolerance std ASME Y14.5M	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12			
				chr	-	-			ecn no ELX-DG-35549-1
				appr	Heaven Cen	2020/04/22	product family ExaMax		rel level Released
surface -	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPTACLE ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		dwg no 10137004	rev C
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°		cat. no.		Product - Customer Drw		sheet 11 of 11

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