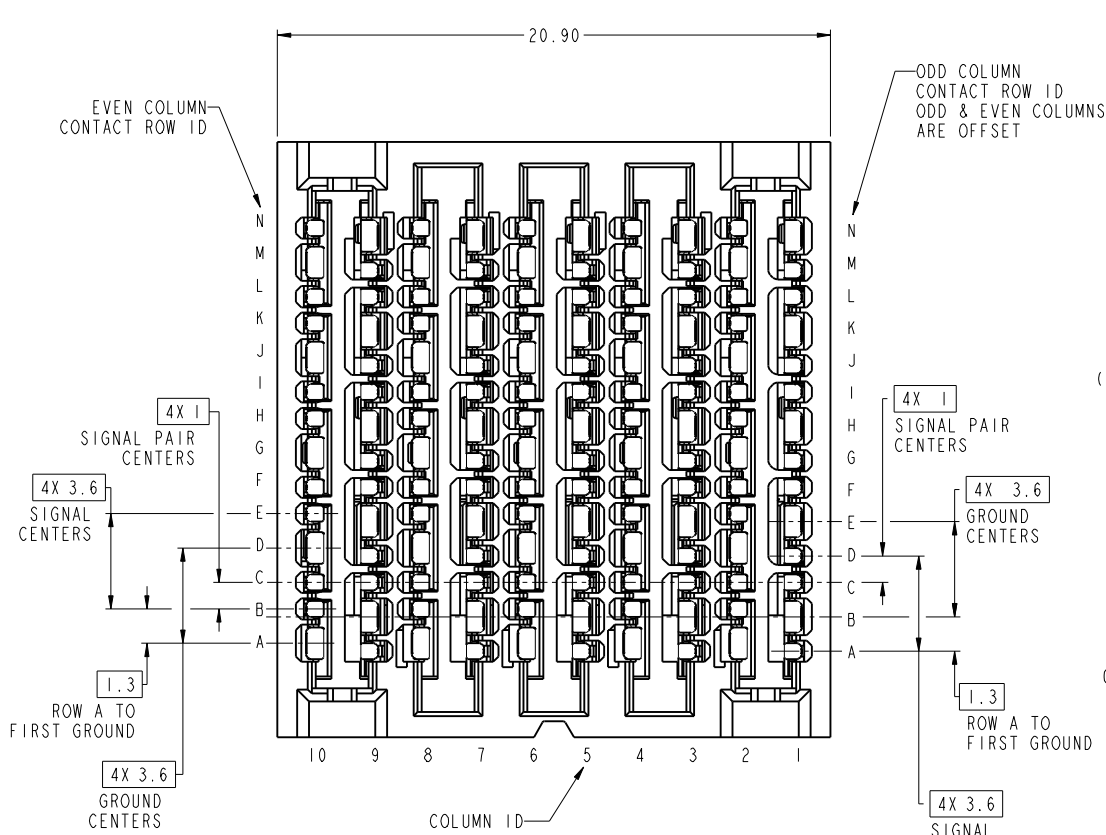
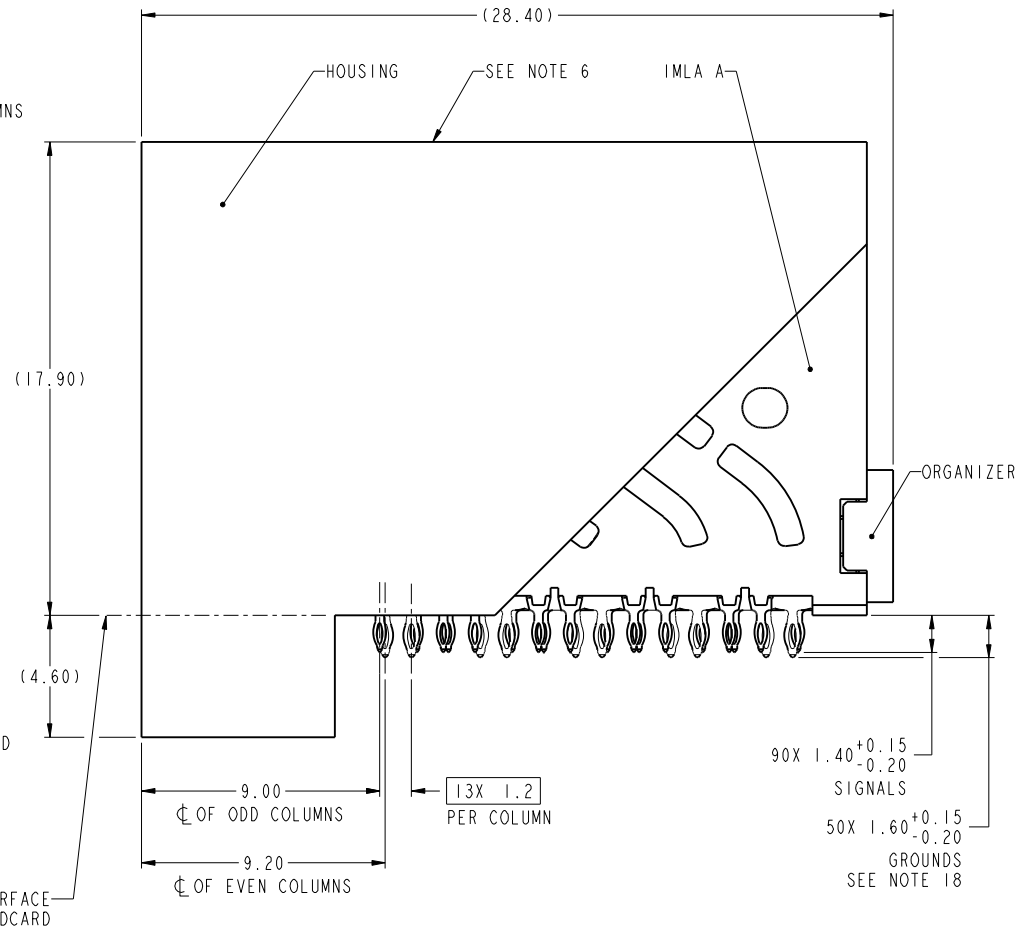


PRODUCT NUMBER  
SEE TABLE



10137004-101LF  
STANDARD MATE RECEPTACLE



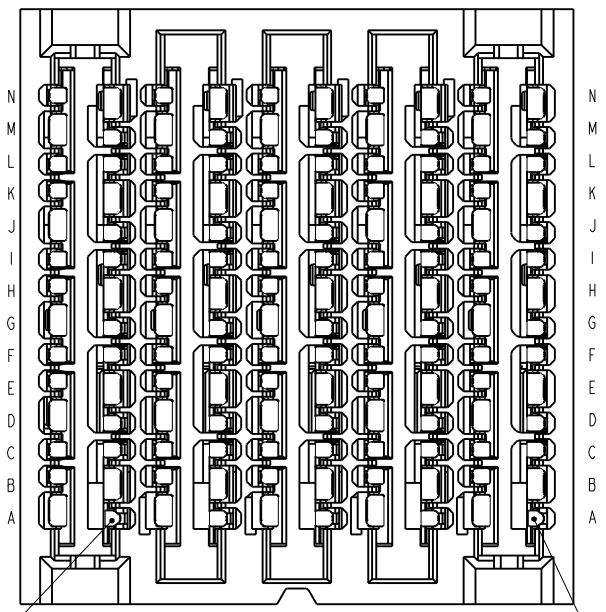
spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1							
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no										
ISO 406		chr	HEAVEN CEN	2015-10-08			product family	ExaMax	rel level	In Work							
ISO 1101		appr					<b>ExaMAX R.A. RECEPTACLE</b>	<b>10137004</b>	<b>3</b>	<b>rev</b>							
surface	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	linear	0.X	±.3		0.XX	±.10		0.XXX	±.050	angular	0°	±°	<b>ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall</b>	<b>cat. no.</b>	<b>Product - Customer Draw</b>	<b>sheet 1 of 11</b>
linear	0.X	±.3															
	0.XX	±.10															
	0.XXX	±.050															
angular	0°	±°															

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1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F



ADVANCED MATE POSITION A9  
SEE NOTE 13

ADVANCED MATE POSITION A1  
SEE NOTE 13

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

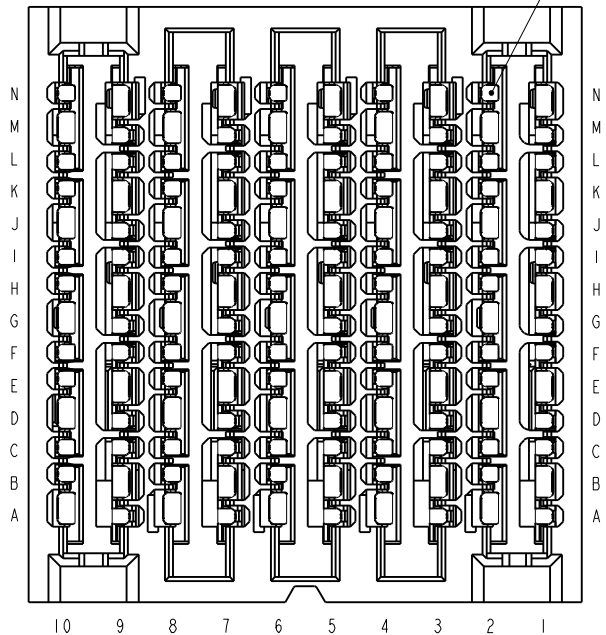
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spec ref	SEE NOTES		dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	JACKIE CHEN	2015-10-08			ech no				
ISO 406			chr	HEAVEN CEN	2015-10-08			product family	ExaMax	rel level	In Work	
ISO 1101			appr					ang no	10137004		rev	3
surface	linear	0.X	±.3			<b>ExaMAX R.A. RECEPTACLE</b>						
		0.XX	±.10			ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall						
	angular	0°	±°		cat. no.	<b>Product - Customer Drw</b>		sheet 2 of 11				

1 2 3 4 5 6 7 8

SHORT DETECT  
POSITION N2  
SEE NOTE 14

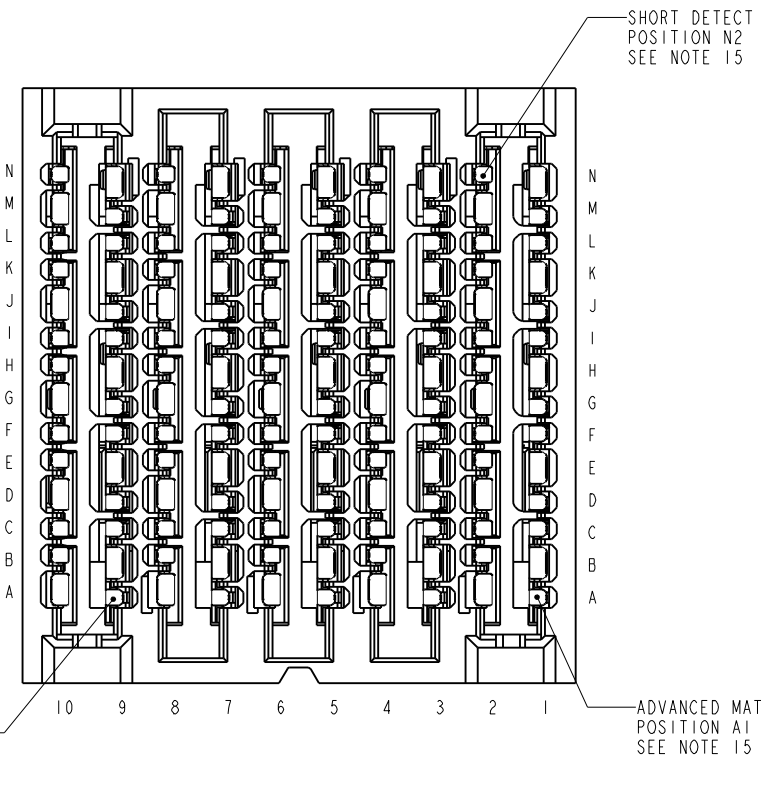


**10137004-301LF**  
**SHORT DETECT RECEPTACLE**  
**SHORT DETECT POSITION IS N2**  
**FOR ALL DIMENSIONS SEE 10137004-101LF ON SHEET 1**

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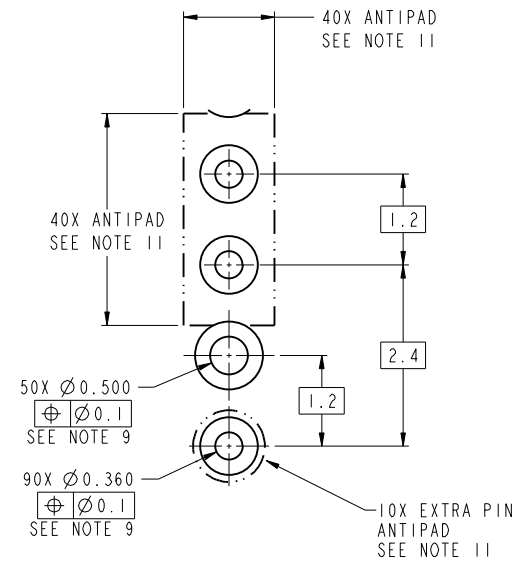
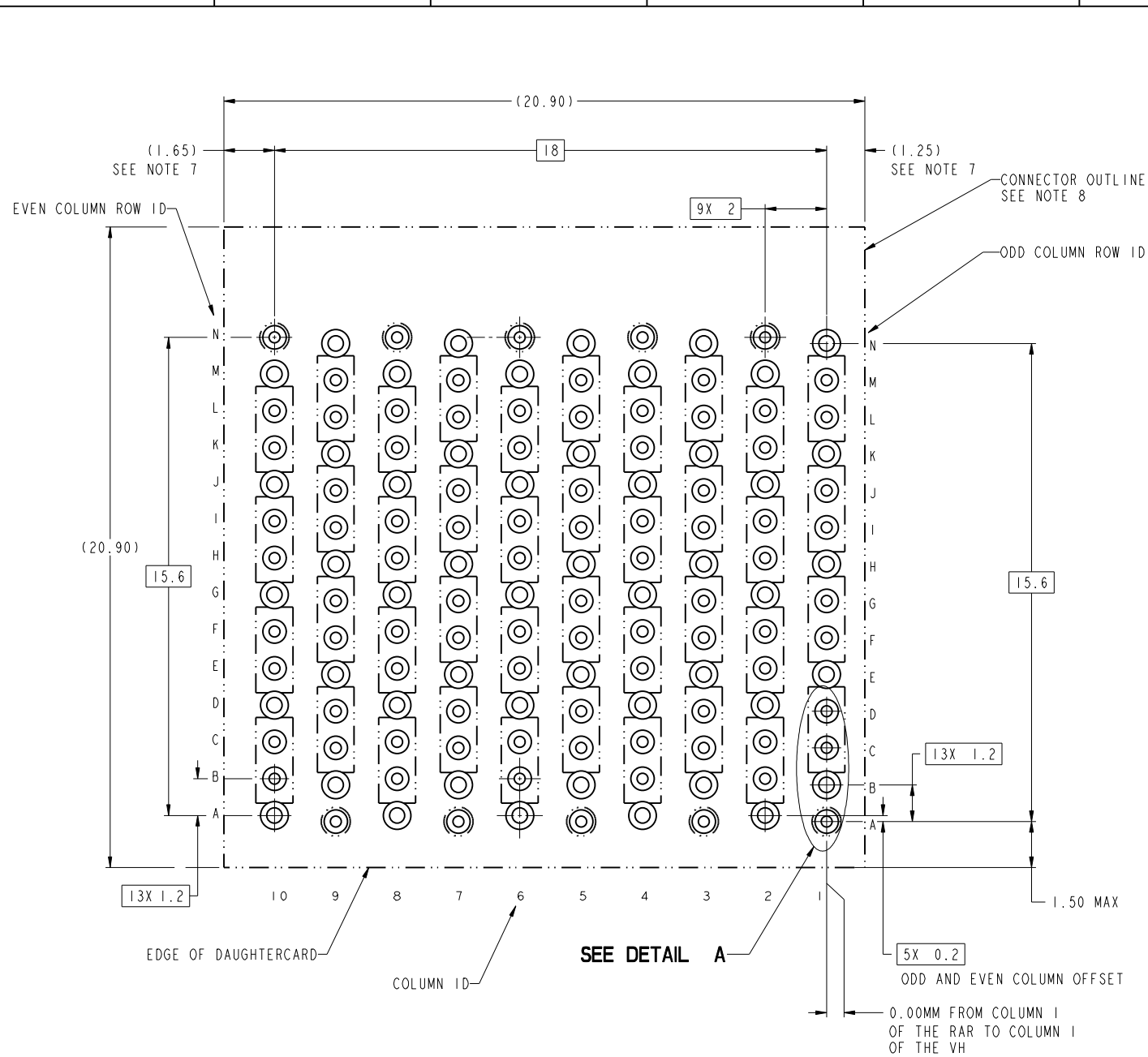
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spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no	rel level	In Work	
ISO 406		chr	HEAVEN CEN	2015-10-08						
ISO 1101		appr			product family	ExaMax				
surface	linear angular	0.X	±.3		title <b>ExaMAX R.A. RECEPTACLE</b>		ang no <b>10137004</b>	rev <b>3</b>	cat. no. Product - Customer Draw	sheet 3 of 11
		0.XX	±.10		ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall					
		0.XXX	±.050							
ISO 1302		0°	±°							



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

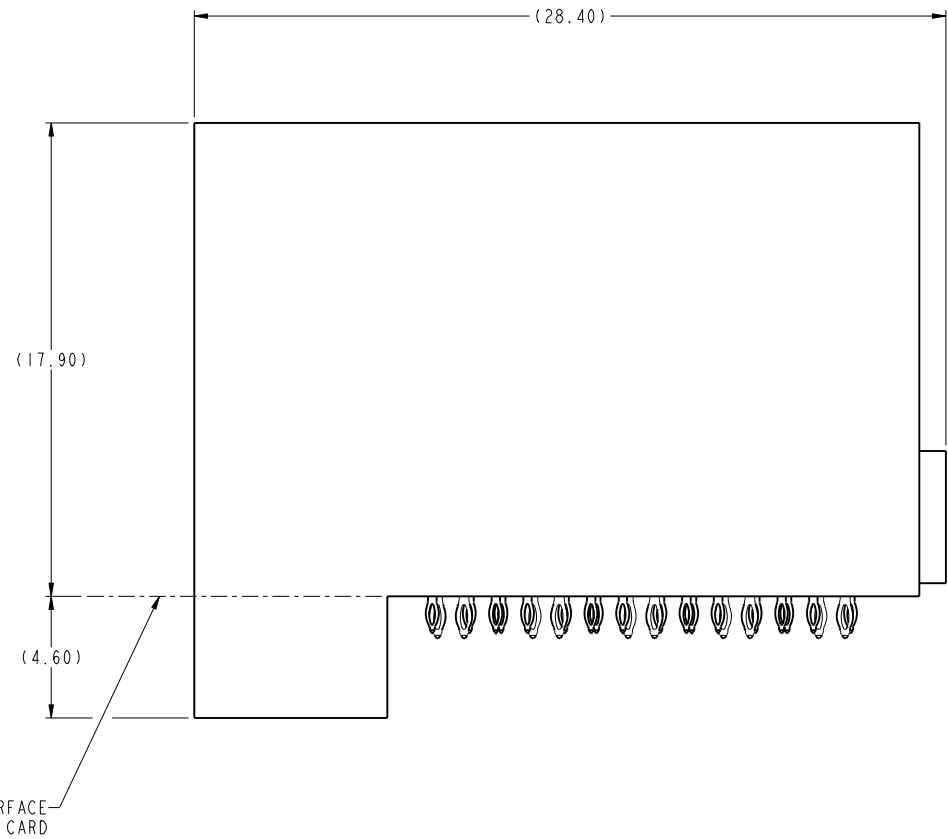
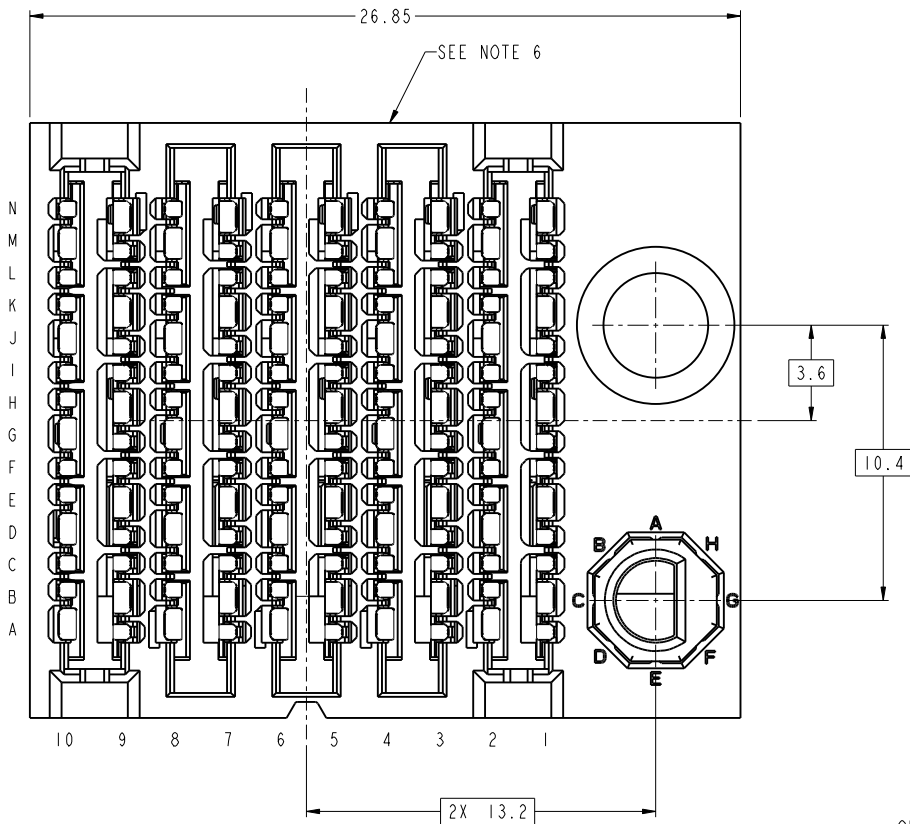
spec ref	SEE NOTES		dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	JACKIE CHEN	2015-10-08			ech no				
ISO 406			chr	HEAVEN CEN	2015-10-08			rel level	In Work			
ISO 1101			appr			product family	ExaMax					
surface	-	linear	0.X	±.3			<b>ExaMAX R.A. RECEPTACLE</b> ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	eng no	10137004		rev	3
			0.XX	±.10								
			0.XXX	±.050								
ISO 1302		angular	0°	±°		cat. no.	Product - Customer Drw		sheet 4 of 11			



DETAIL A  
SCALE 20:1

10137004-X01 RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, & 11  
SCALE 10:1

spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no			
ISO 406		chr	HEAVEN CEN	2015-10-08			rel level	In Work		
ISO 1101		appr			product family		eng no	10137004	rev	3
surface	linear	0.X	±.3		<b>ExaMAX R.A. RECEPTACLE</b>		Product - Customer Draw	sheet 5 of 11		
		0.XX	±.10		ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall					
	angular	0°	±°							

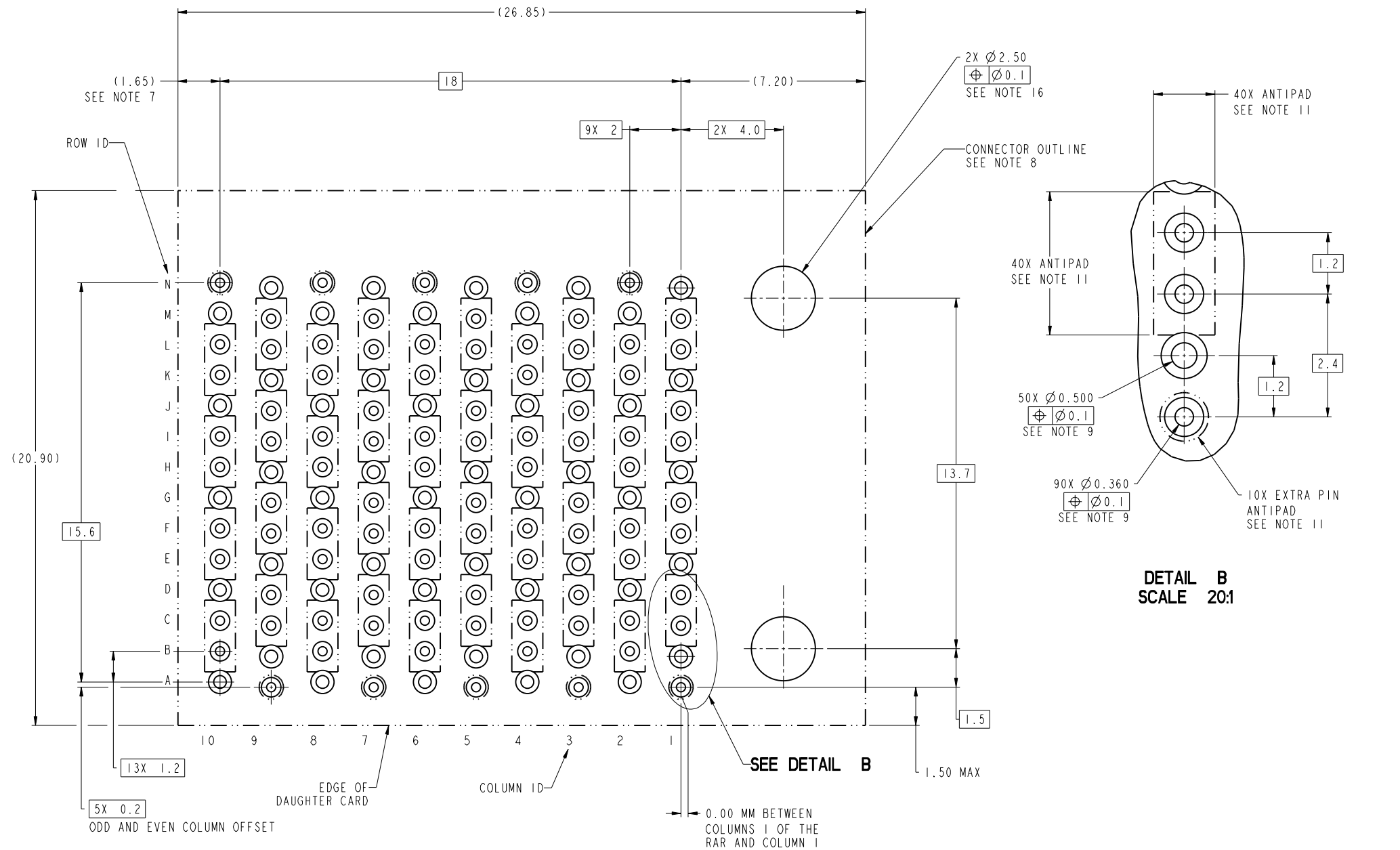


10137004-X1ALF THRU 10137004-X1JLF  
 RIGHT GUIDANCE (SEE NOTE 17)  
 FOR ALL OTHER DIMENSIONS SEE 10137004-101LF ON SHEET 1

spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no			
ISO 406		chr	HEAVEN CEN	2015-10-08			rel level	In Work		
ISO 1101		appr			product family	ExaMax				
surface	<input checked="" type="checkbox"/> linear <input type="checkbox"/> angular	0.X	±.3		<b>ExaMAX R.A. RECEPTACLE</b>		eng no <b>10137004</b>	rev <b>3</b>		
		0.XX	±.10		ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall					
ISO 1302		0.XXX	±.050	cat. no.	<b>Product - Customer Draw</b>		sheet 6 of 11			

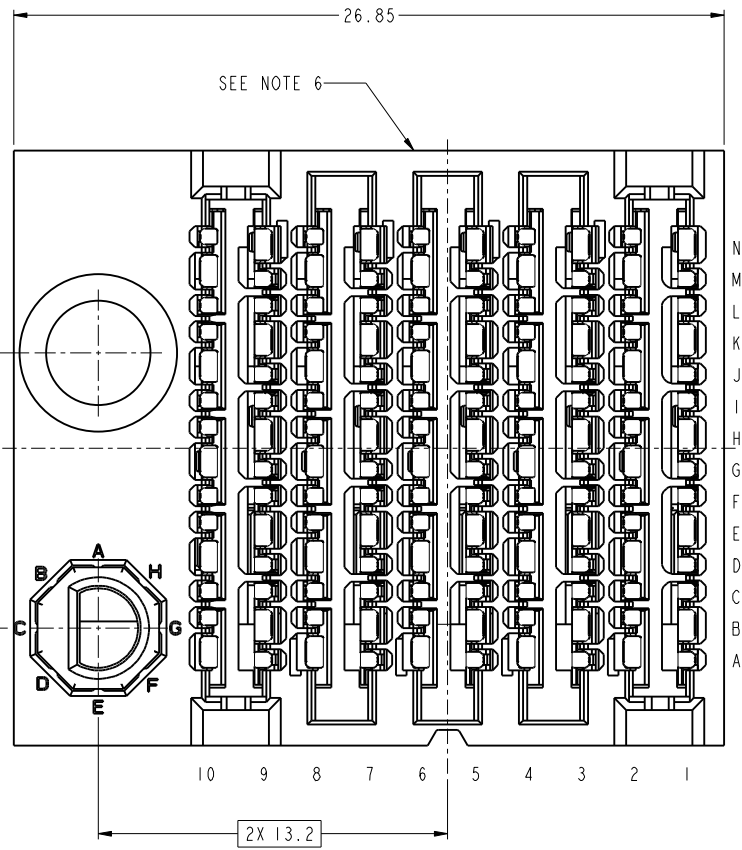
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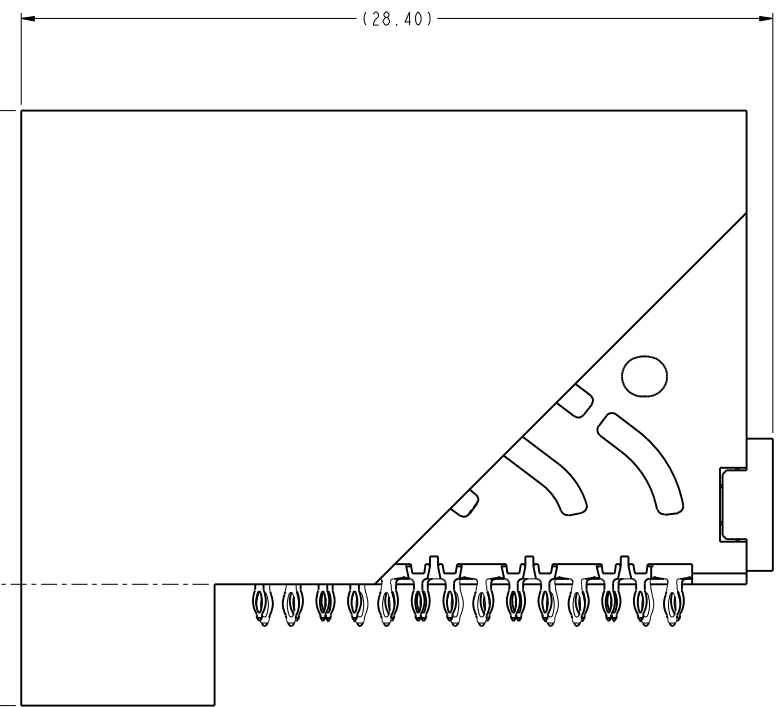
**10137004-X1ALF THRU -X1JLF  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, 11 & 16  
SCALE 10:1**

spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no			
ISO 406		chr	HEAVEN CEN	2015-10-08			rel level	In Work		
ISO 1101		appr			product family					
surface	linear	0.X	±.3		<b>ExaMAX R.A. RECEPTACLE</b>		ang no	10137004	rev	3
		0.XX	±.10		ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		cat. no.		Product - Customer Draw	sheet 7 of 11
	angular	0°	±°							



SEE NOTE 6

TOP SURFACE OF DAUGHTER CARD



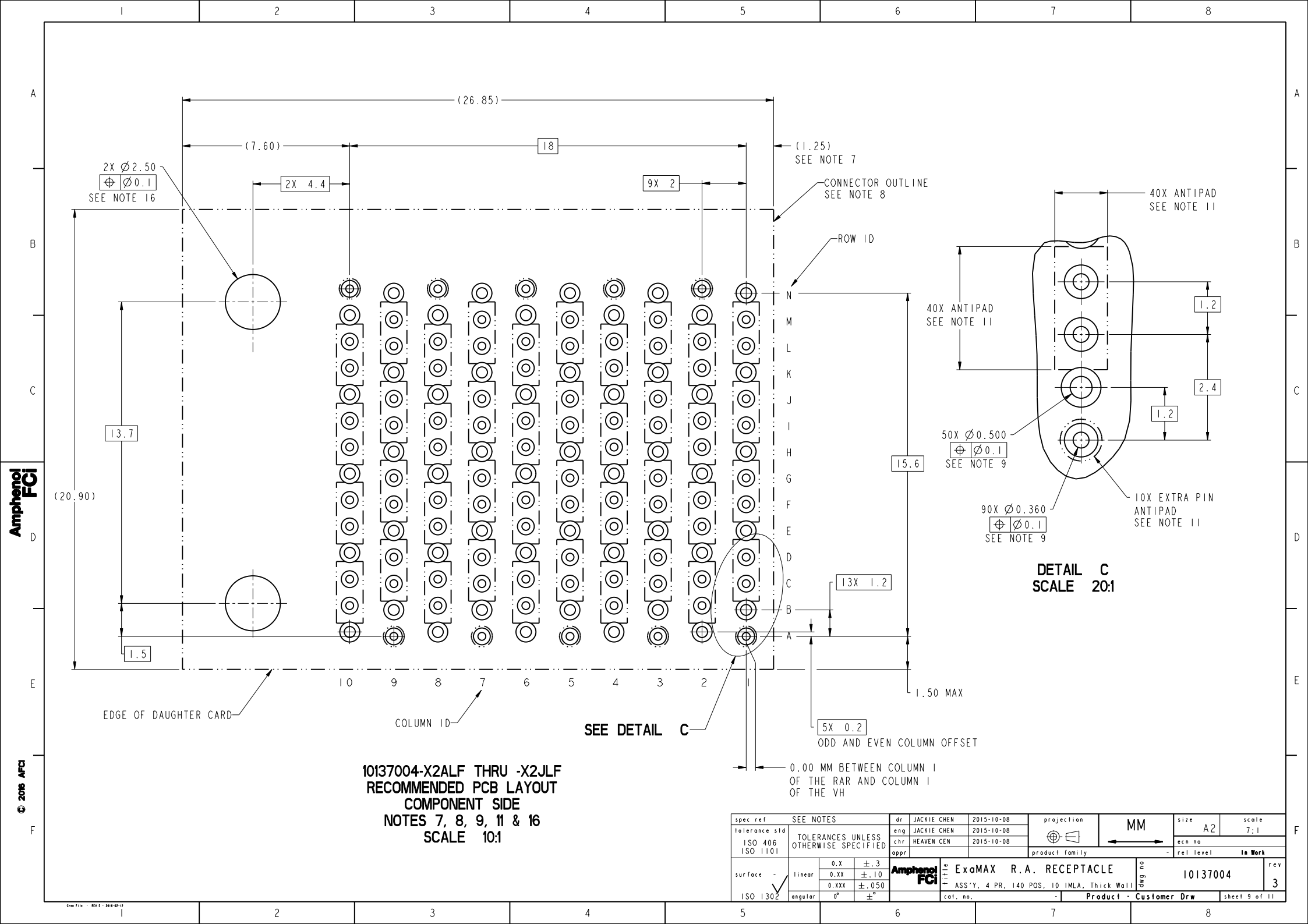
10137004-X2ALF THRU 10137004-X2JLF  
LEFT GUIDANCE (SEE NOTE 17)  
FOR ALL OTHER DIMENSIONS SEE 10137004-101LF ON SHEET 1

spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no	rel level	In Work	rev
ISO 406		chr	HEAVEN CEN	2015-10-08						
ISO 1101		appr			product family	ExaMax				
surface	linear	0.X	±.3		<b>ExaMAX R.A. RECEPTACLE</b>			10137004	3	
		0.XX	±.10		ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall					
ISO 1302	angular	0°	±°	cat. no.	Product - Customer Draw		sheet 8 of 11			

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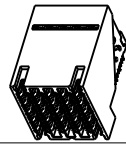










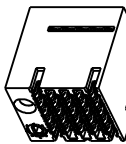









**10137004-X2ALF THRU -X2JLF  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, 11 & 16  
SCALE 10:1**

**DETAIL C  
SCALE 20:1**

spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no			
ISO 406		chr	HEAVEN CEN	2015-10-08			rel level	In Work		
ISO 1101		appr			product family					
surface	linear	0.X	±.3	<b>Amphenol FCI</b> <b>ExaMAX R.A. RECEPTACLE</b> ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall	ang no	10137004	rev	3		
		0.XX	±.10		cat. no.	Product - Customer Draw	sheet 9 of 11			
	angular	0°	±°							




10137004 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION
10137004-1YYLF	STANDARD MATE
10137004-2YYLF	ADVANCED MATE
10137004-3YYLF	SHORT DETECT
10137004-4YYLF	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)	
										

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spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no	rel level	In Work	
ISO 406 ISO 1101		chr	HEAVEN CEN	2015-10-08						
surface	<input checked="" type="checkbox"/> linear <input type="checkbox"/> angular	0.X	±.3	<b>Amphenol FCI</b> <b>ExaMAX R.A. RECEPTACLE</b> ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		cat. no.	ang no <b>10137004</b>	rev <b>3</b>	Product - Customer Draw	sheet 10 of 11
ISO 1302		0.XX	±.10							
		0.XXX	±.050							
	0°	±°								

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:  
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  
  
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 APPLICATION SPECIFICATION FOR TRACE ROUTING EXAMPLES THAT INCLUDE DIMENSIONS FOR ANTIPADS, TRACE WIDTH, TRACE SPACING, ETC.
- 12 - THE HOUSING WILL WITHSTAND EXPOSURE TO 260° C FOR 10-30 SECONDS IN A CONVECTION, INFRA-RED OR VAPOR PHASE REFLOW OVEN.
- ⑬ - THE ADVANCED MATE RECEPTACLE, 10137004-2XXLF, 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, 10137004-3XXLF, 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 ADVANCE MATE/SHORT DETECT RECEPTACLE, 10137004-4XXLF, 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 SCREW 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.

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spec ref	SEE NOTES	dr	JACKIE CHEN	2015-10-08	projection	MM	size	A2	scale	7:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	JACKIE CHEN	2015-10-08			ech no				
ISO 406		chr	HEAVEN CEN	2015-10-08			rel level	In Work			
ISO 1101		appr			product family	ExaMax					
surface	linear	Amphenol FCI		Title		ExaMAX R.A. RECEPTACLE		eng no	10137004	rev	3
	angular			ASS'Y, 4 PR, 140 POS, 10 IMLA, Thick Wall		cat. no.		Product - Customer Draw		sheet 11 of 11	