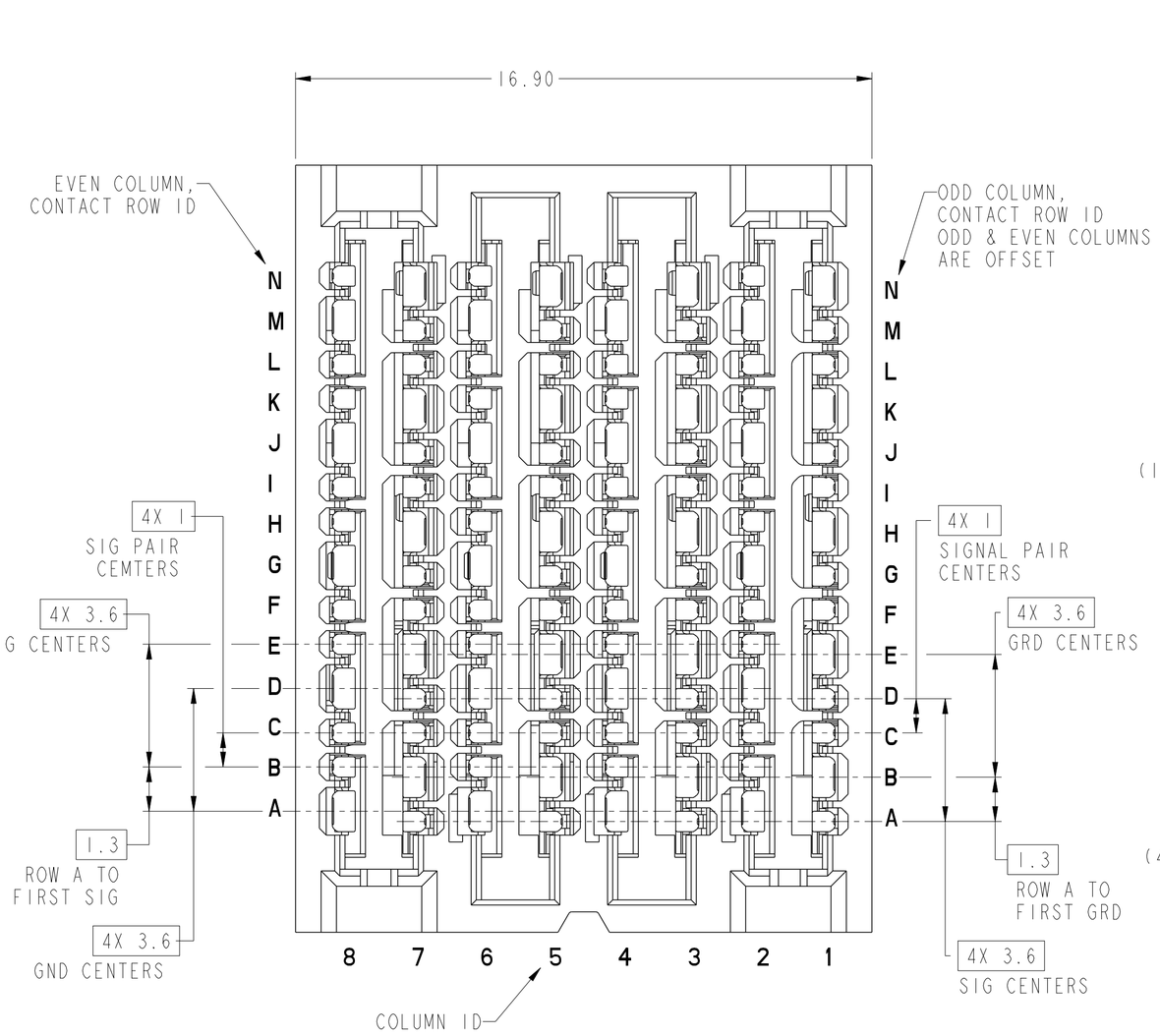
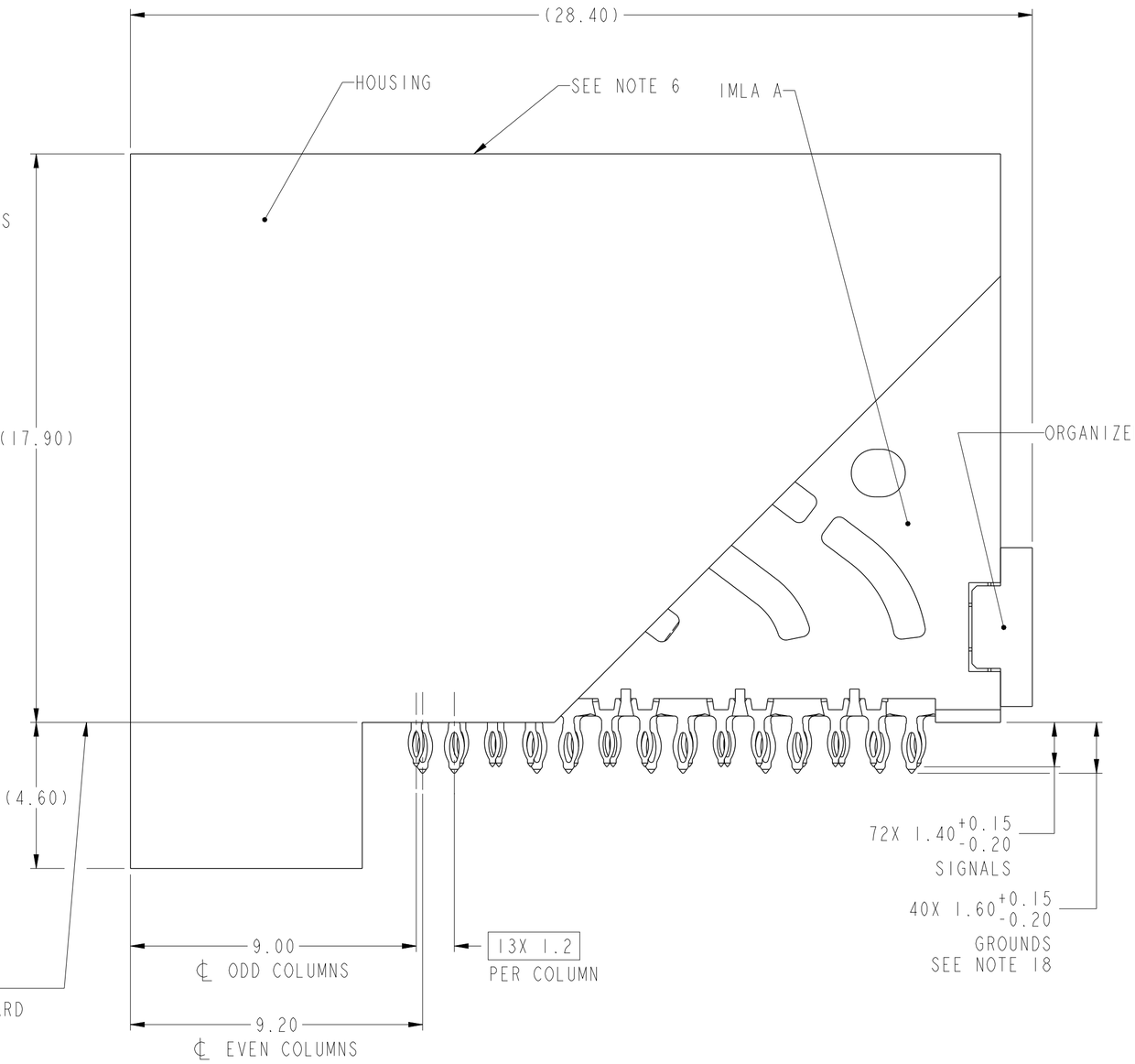
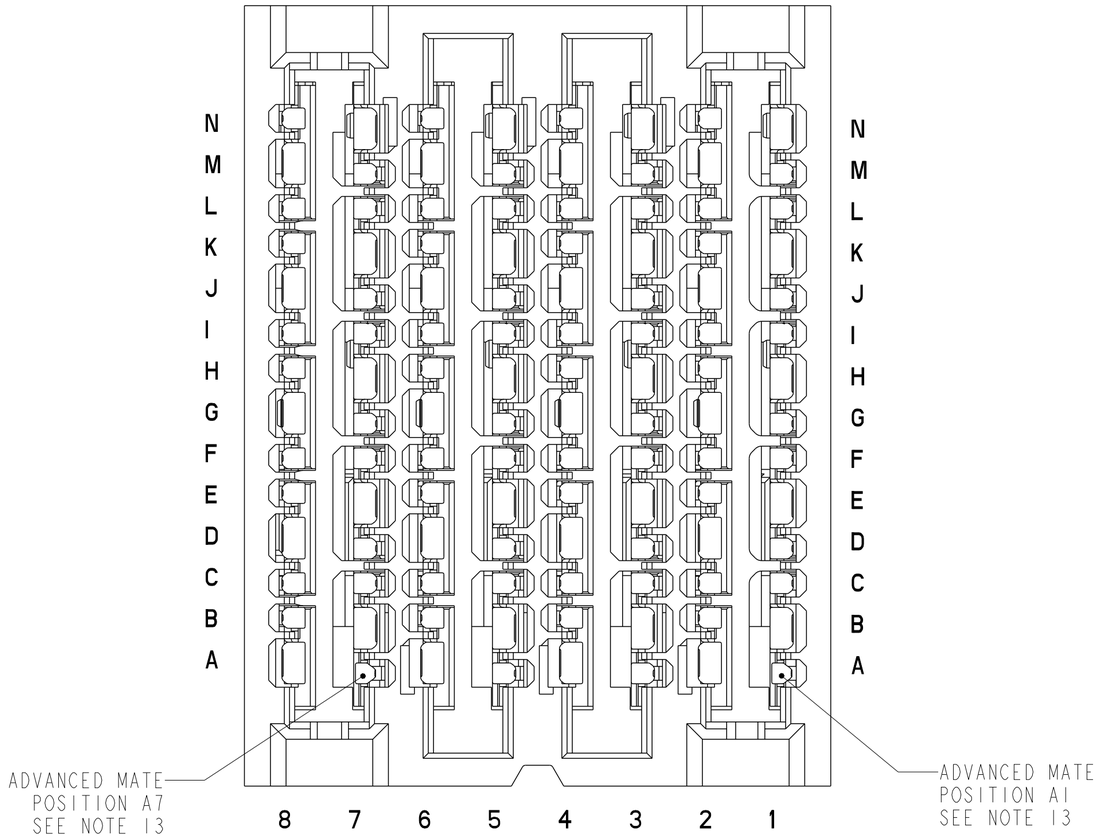
PRODUCT NUMBER
SEE TABLE



10135216-101LF
STANDARD MATE RECEPTACLE
SCALE 8:1

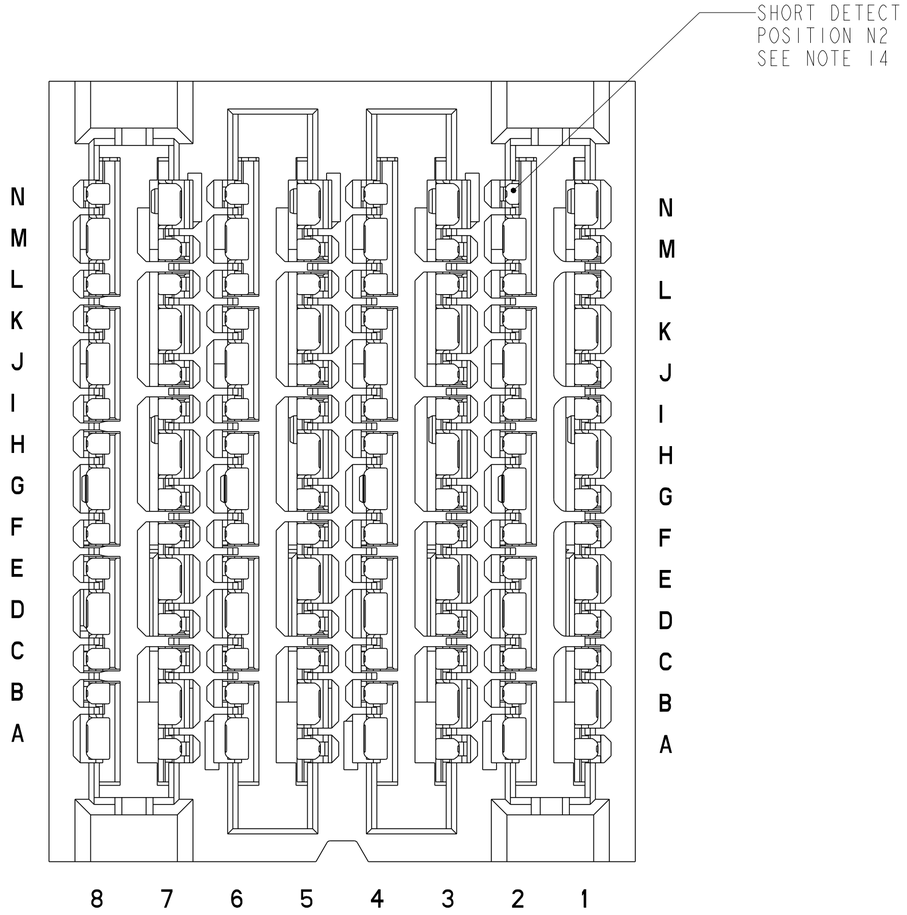


spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family	ExaMax	rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no	10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	±°		cat. no.	SEE TABLE	Product - Customer Drw		sheet 1 of 11



10135216-201LF
ADVANCED MATE RECEPTACLE
ADVANCED MATE POSITIONS ARE A1 & A7 ONLY
FOR ALL DIMENSIONS SEE 10135216-101LF ON SHEET 1
SCALE 8:1

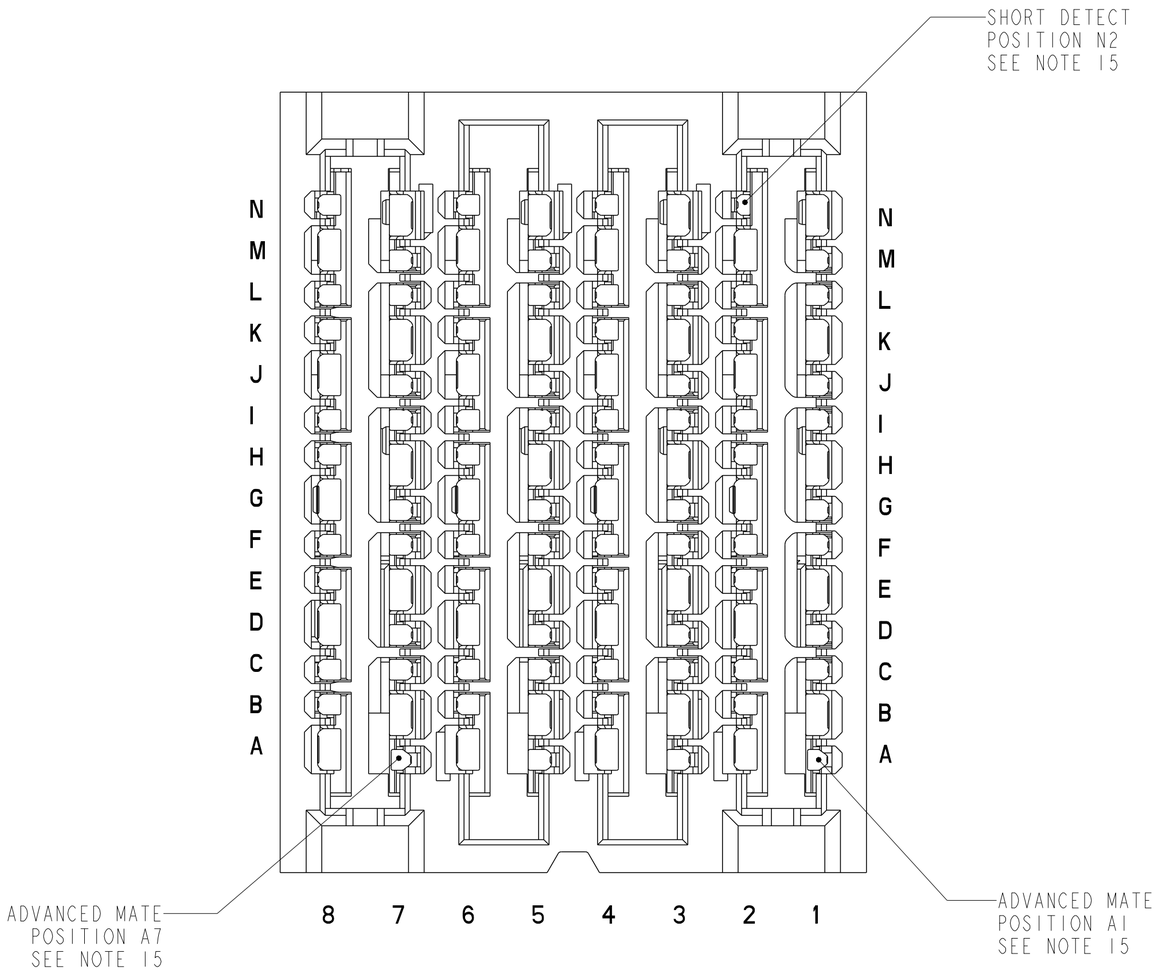
spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2	scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01				
				chr	-	-			ecn no	-
				appr	-	-	product family	ExaMax	rel level	Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY			dwg no	10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA				
		0.XXX	±.050							
	angular	0°	±°			cat. no. SEE TABLE	Product - Customer Drw		sheet 2 of 11	



10135216-301LF
SHORT DETECT RECEPTACLE
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10135216-101LF ON SHEET 1
SCALE 8:1

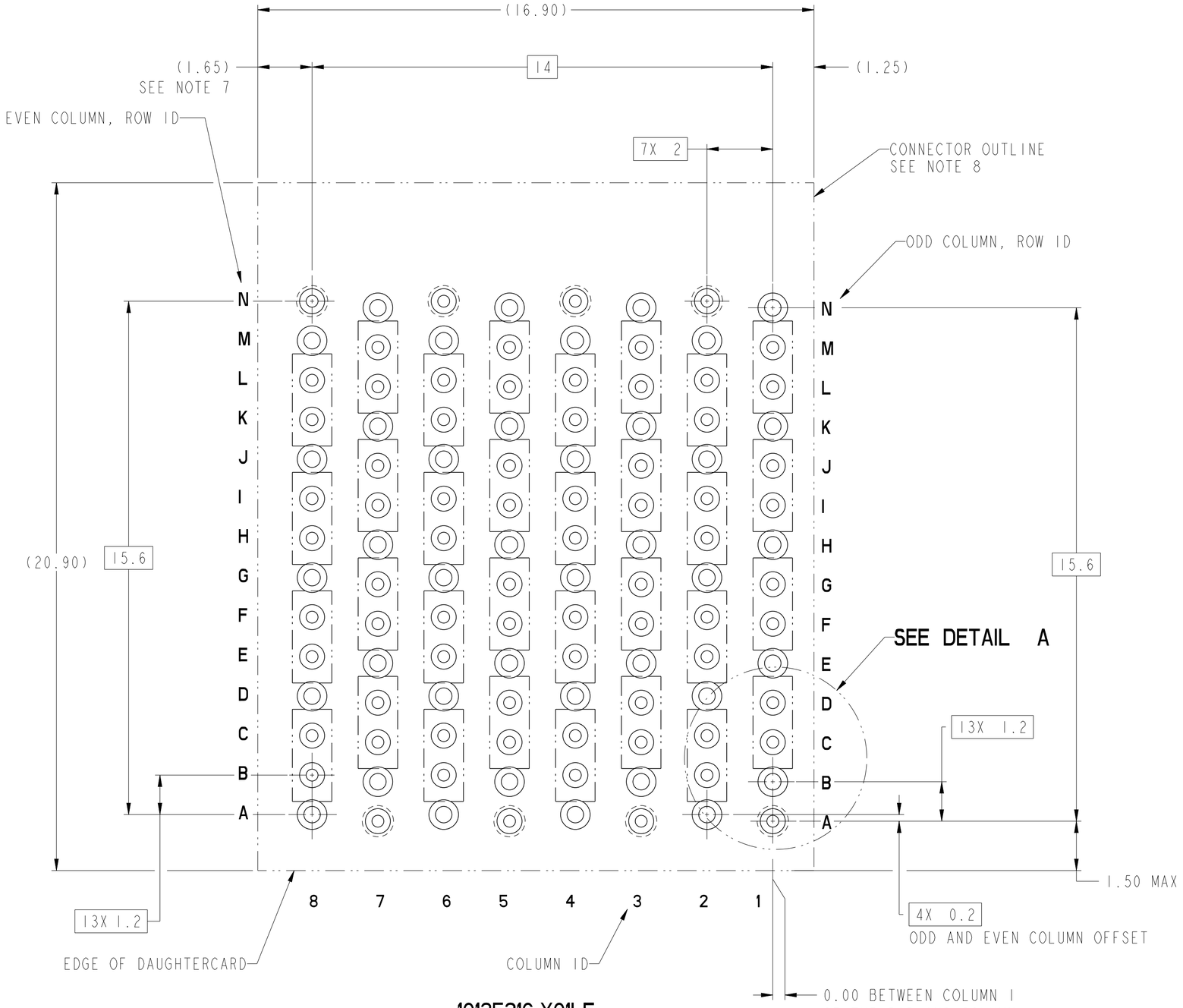
spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family ExaMax		rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no	10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	±°			cat. no. SEE TABLE	Product - Customer Drw		sheet 3 of 11

Creo File - REV E - 2016-02-12

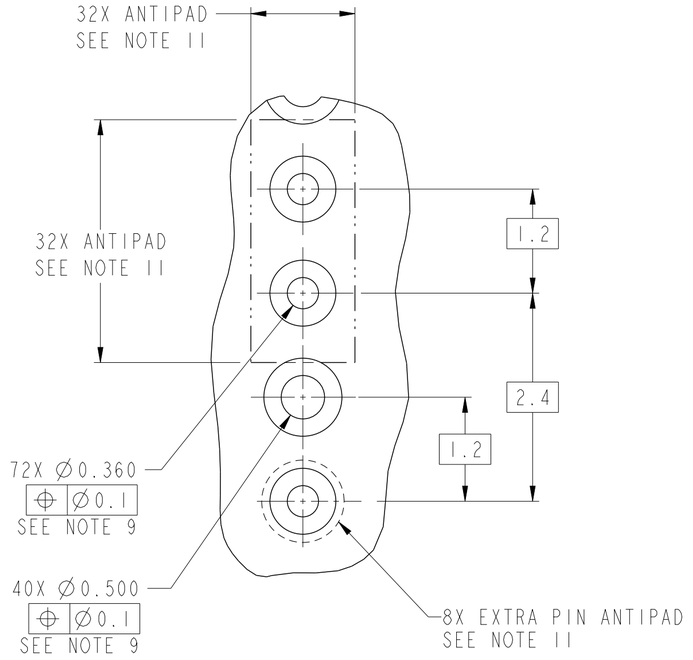


10135216-401LF
ADVANCE MATE/SHORT DETECT RECEPTACLE
ADVANCED MATE POSITIONS ARE A1 & A7 ONLY
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10135216-101 ON SHEET 1
SCALE 8:1

spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family ExaMax		rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no 10135216		rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	± °		cat. no.	SEE TABLE	Product - Customer Drw		sheet 4 of 11

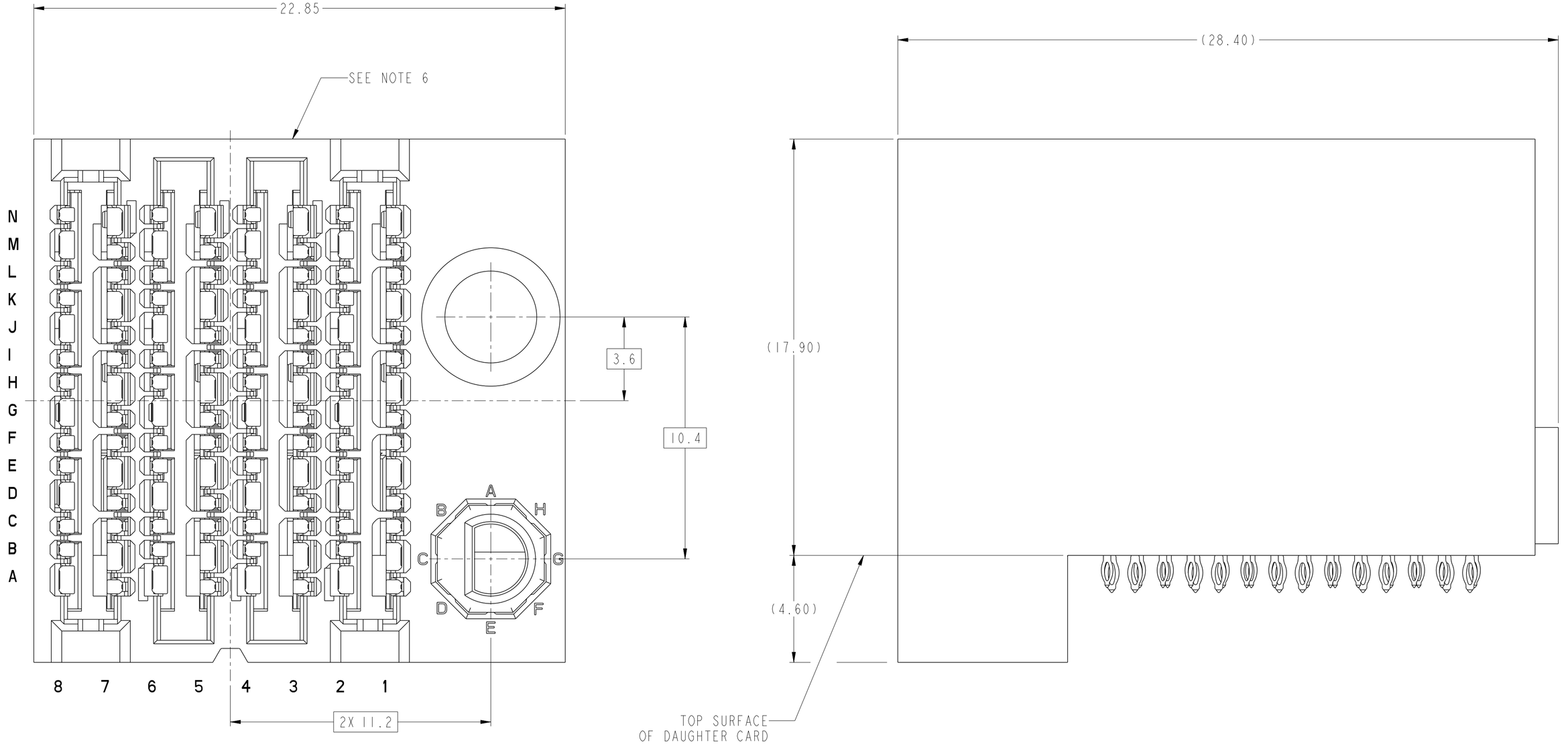


10135216-X01LF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, & 11
SCALE 10:1



DETAIL A
SCALE 20:1

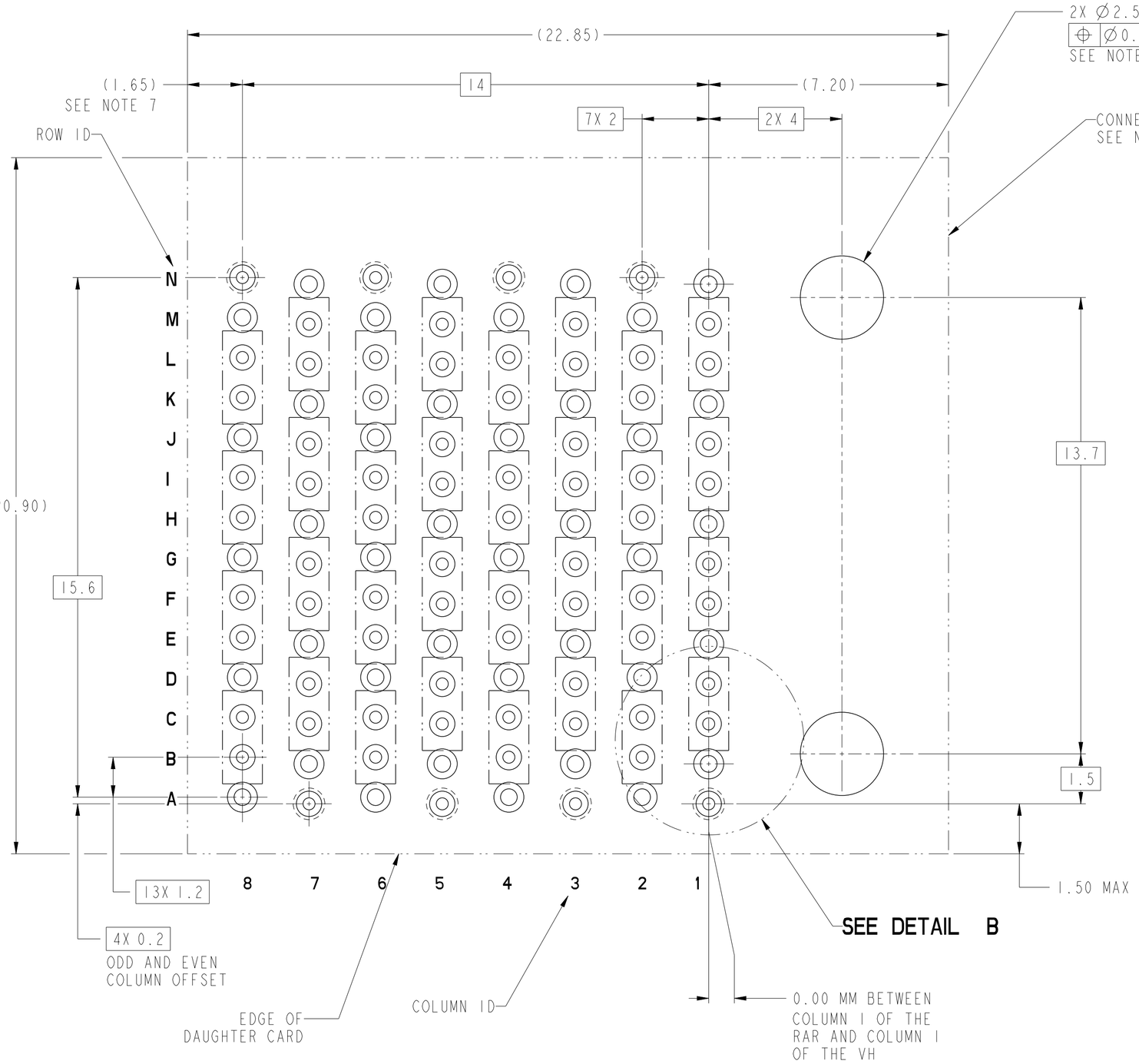
spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 5:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family -		rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no 10135216		rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	±°			cat. no. -	Product - Customer Drw		sheet 5 of 11

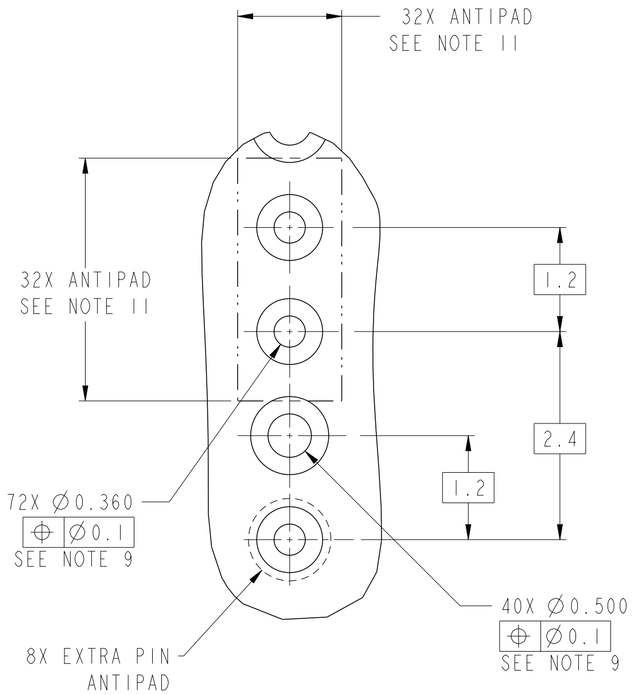


10135216-X1ALF THRU -X1JLF
RIGHT GUIDANCE (SEE NOTE 17)
FOR ALL DIMENSION SEE 10135216-101LF ON SHEET 1
SCALE 8:1

spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2	scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no	-
				chr	-	-			rel level	Preliminary
				appr	-	-	product family	ExaMax		
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY			dwg no 10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA				
		0.XXX	±.050							
	angular	0°	±°		cat. no.	SEE TABLE	Product - Customer Drw		sheet 6 of 11	

Creo File - REV E - 2016-02-12

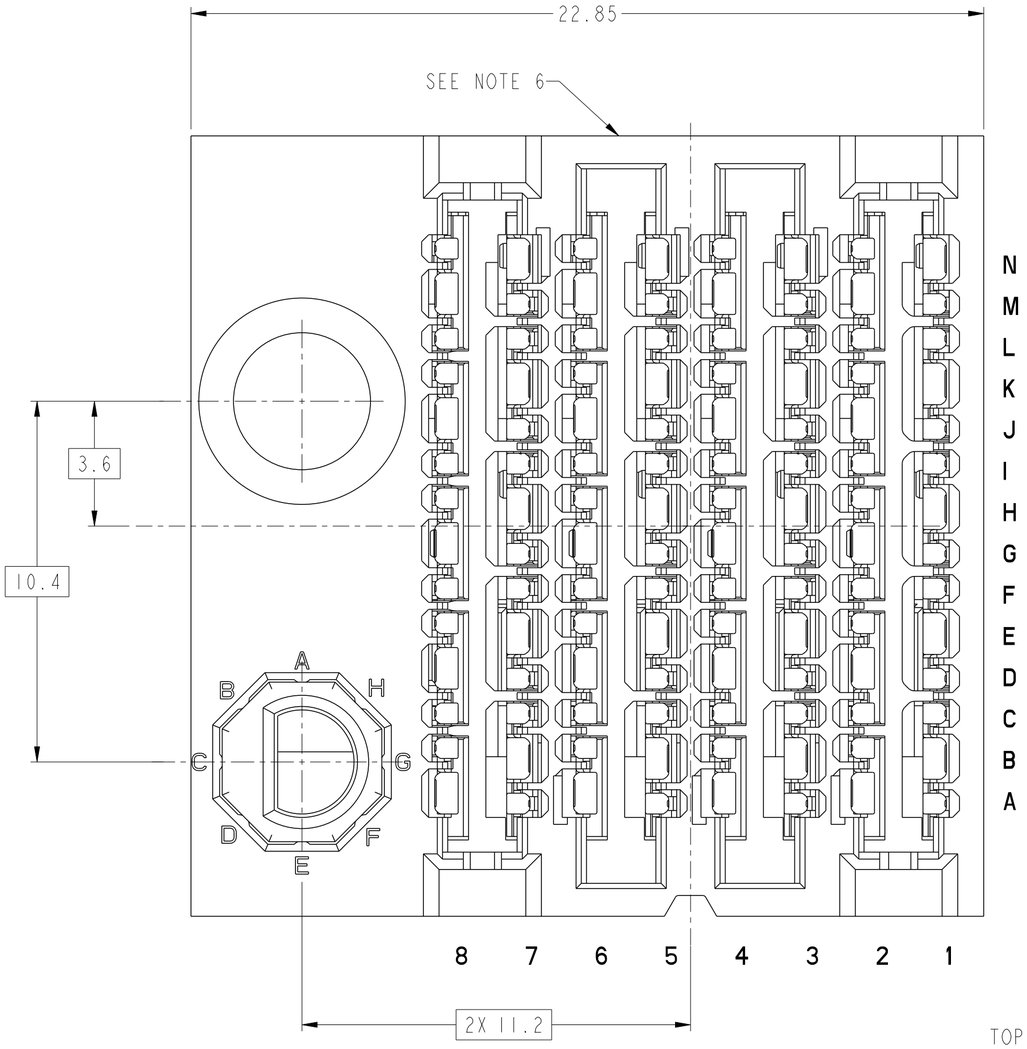


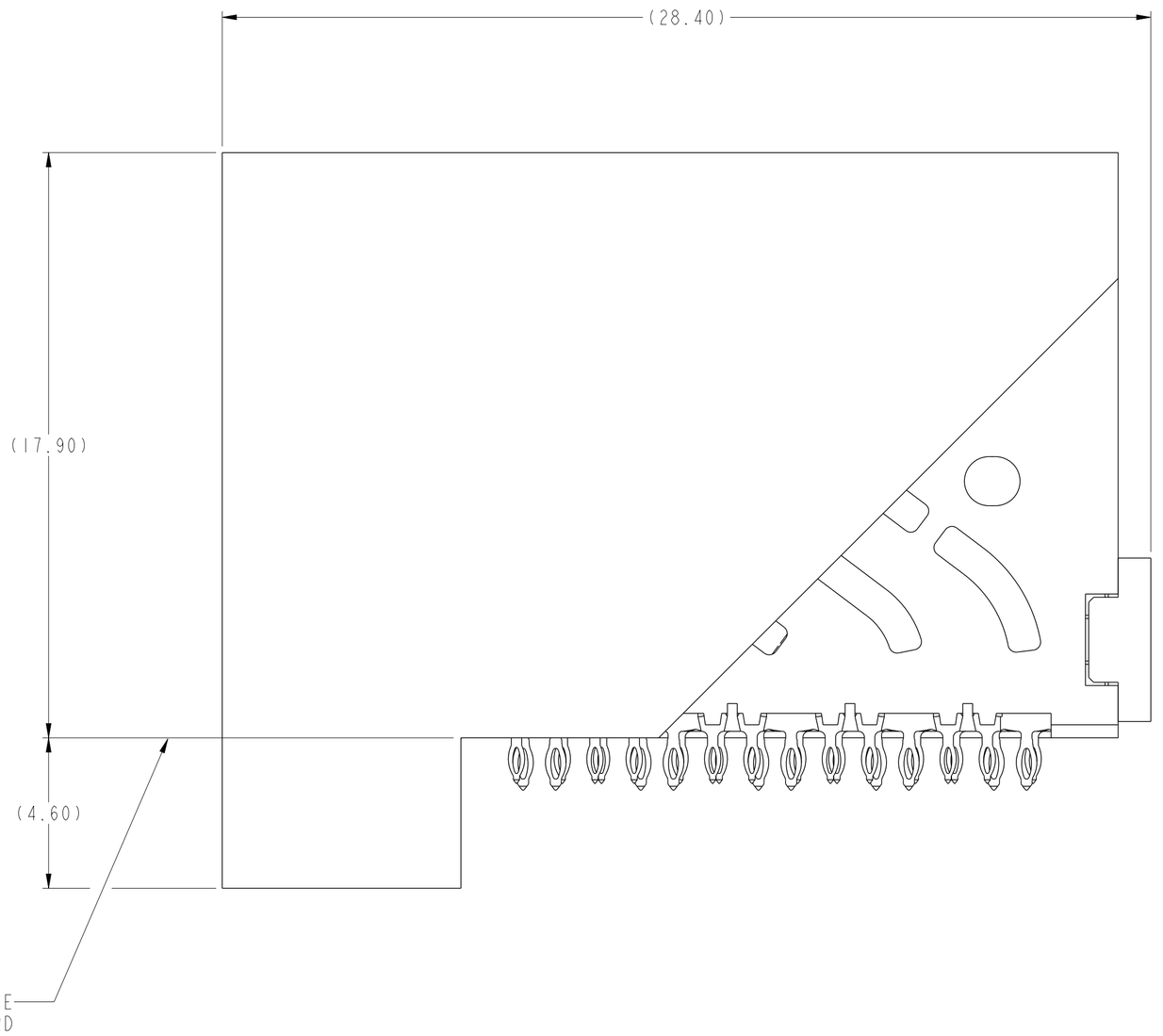


DETAIL B
SCALE 20:1

10135216-X1ALF THRU -X1JLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

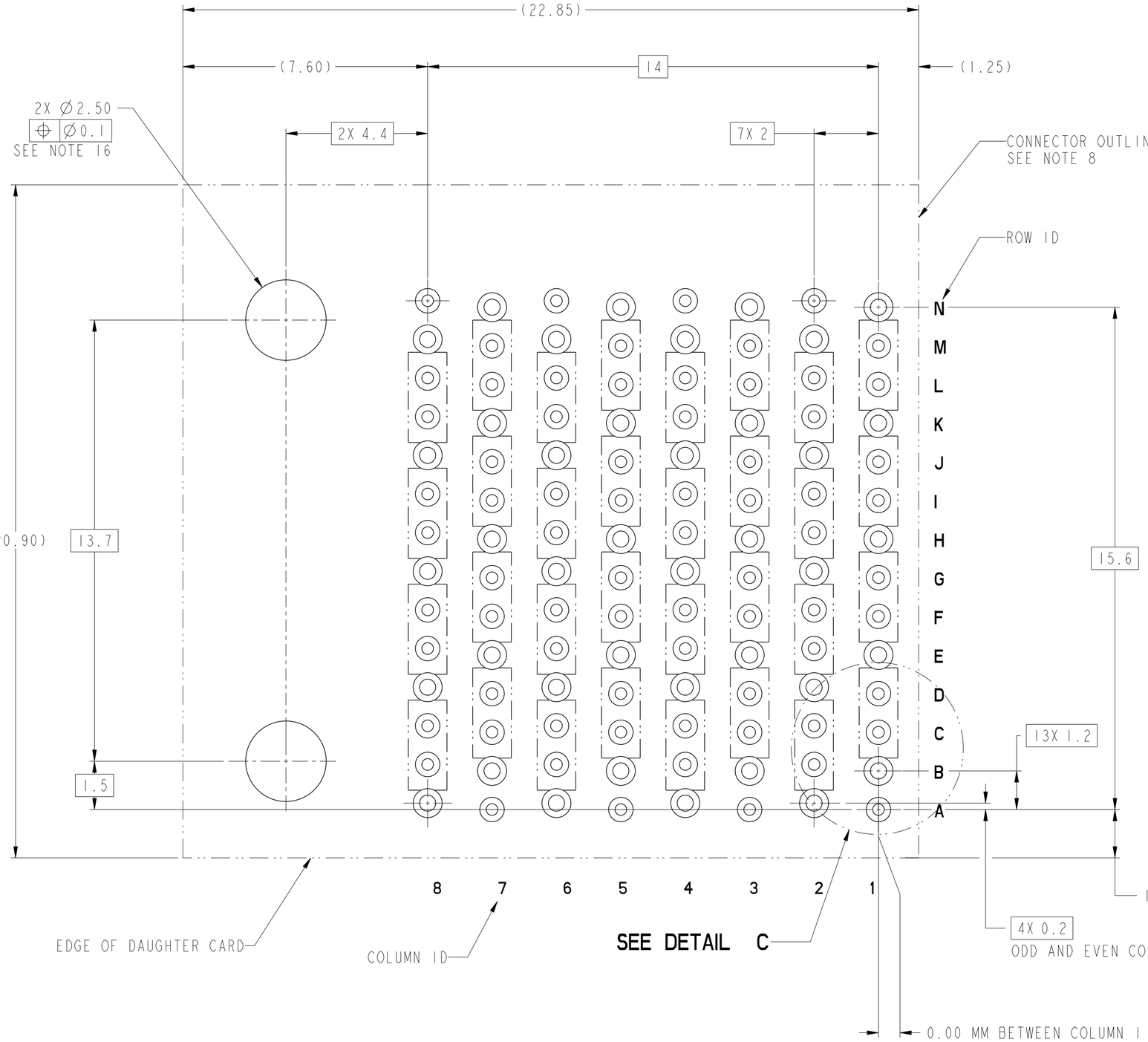
spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 3:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family -		rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY 4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA	dwg no	10135216	rev 2
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°			cat. no. -	Product - Customer Drw		sheet 7 of 11

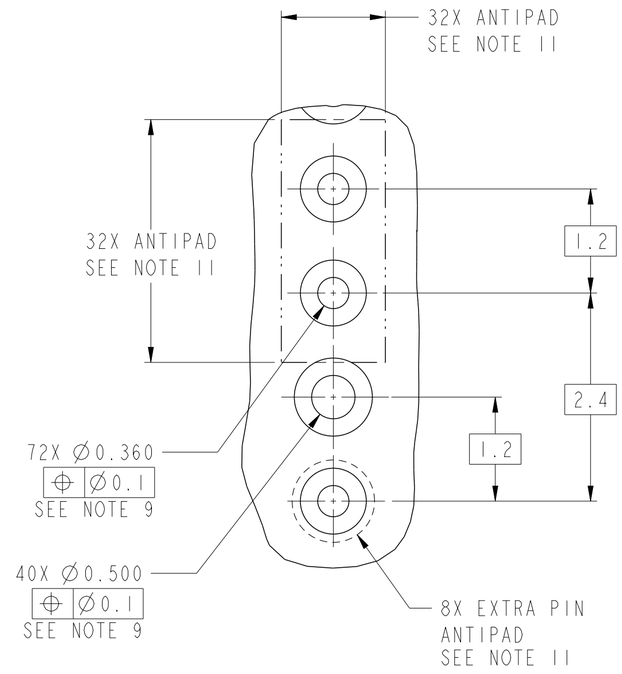




10135216-X2ALF THRU -X2JLF
LEFT GUIDANCE (SEE NOTE 17)
FOR ALL DIMENSIONS SEE 10135216-101LF ON SHEET 1
SCALE 8:1

spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family	ExaMax	rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no	10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	±°		cat. no.	SEE TABLE	Product - Customer Drw		sheet 8 of 11





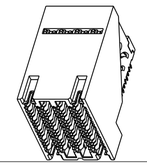
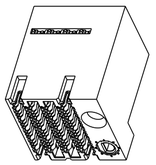
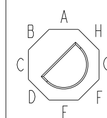
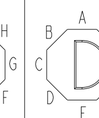
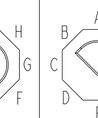
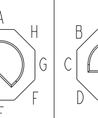
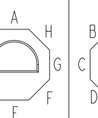
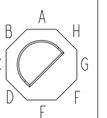
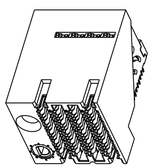
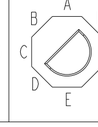
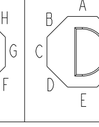
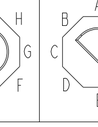
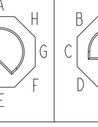
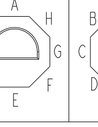
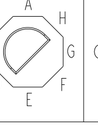
DETAIL C
SCALE 20:1

10135216-X2ALF THRU -X2JLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 3:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family -		rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no	10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	±°			cat. no. -	Product - Customer Drw		sheet 9 of 11

10135216 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION
10135216-1YYLF	STANDARD MATE
10135216-2YYLF	ADVANCED MATE
10135216-3YYLF	SHORT DETECT
10135216-4YYLF	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)	
										

spec ref	SEE NOTES		dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 1:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	Peng-Bing Fu	2016/04/01			ecn no -
			chr	-	-			
			appr	-	-	product family ExaMax		rel level Preliminary
surface - ISO 1302	linear	0.X ±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY	dwg no 10135216		rev 2
		0.XX ±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX ±.050						
	angular	0° ±°			cat. no. SEE TABLE	Product - Customer Drw		sheet 10 of 11

NOTES:

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

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, 10135216-2XXLF, 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.

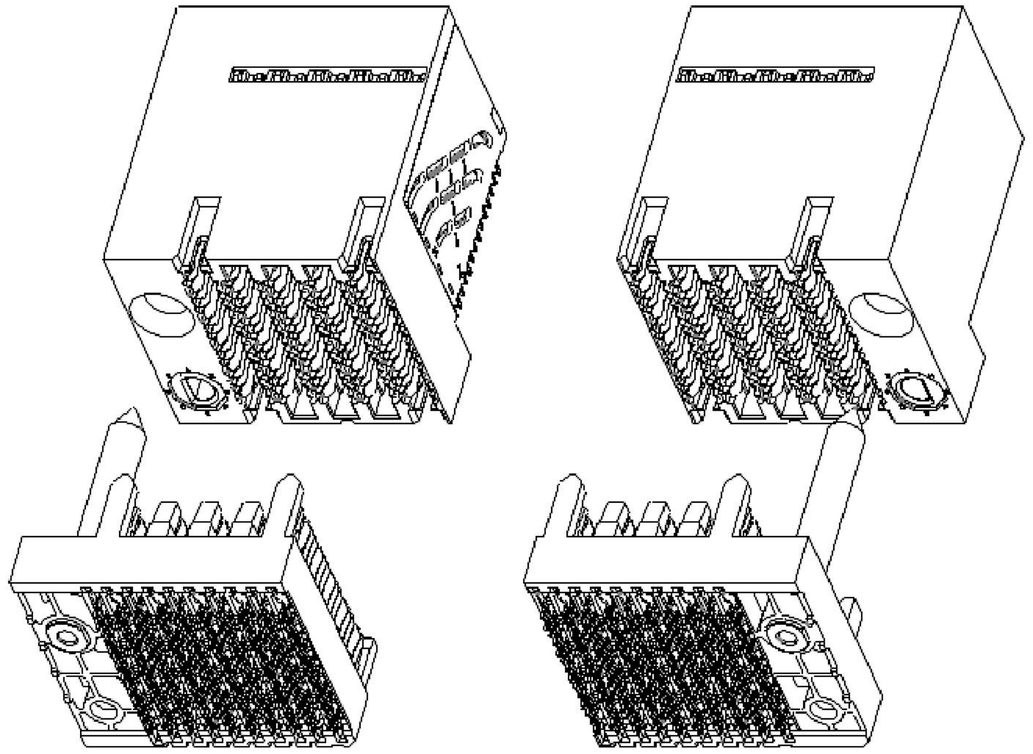
(14) - THE SHORT DETECT RECEPTACLE, 10135216-3XXLF, WHEN MATED WITH A STANDARD MATE VERTICAL HEADER OR A STANDARD MATE RIGHT-ANGLE HEADER WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

(15) - THE ADVANCE MATE/SHORT DETECT RECEPTACLE, 10135216-4XXLF, 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.



LEFT GUIDE

RIGHT GUIDE

ExaMAX INTEGRATED GUIDE ORIENTATION
4-PAIR 10-IMLA CONNECTORS SHOWN FOR REFERENCE ONLY
SEE NOTE 17

spec ref	SEE NOTES			dr	Greg Hull	2015/10/15	projection	MM	size A2 / scale 2:1
tolerance std ISO 406 ISO 1101	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2016/04/01			ecn no -
				chr	-	-			
				appr	-	-	product family ExaMax		rel level Preliminary
surface - ISO 1302	linear	0.X	±.3	Amphenol FCi	title	ExaMAX R.A. RECEPT. ASSY		dwg no 10135216	rev 2
		0.XX	±.10			4 PR, 85 Ohm, THICK WALL, 112 POS, 8 IMLA			
		0.XXX	±.050						
	angular	0°	±°		cat. no.	SEE TABLE	Product - Customer Drw		sheet 11 of 11