

EVEN	COLUMN
CONTACT	ROW ID

ODD COLUMN
CONTACT ROW ID
ODD & EVEN COLUMNS
ARE OFFSET

HOUSING

/SEE NOTE 6

IMLA A-

SIG PAIR
CENTERS

6X 3.6
GROUND
CENTERS

6X 3.6
SIGNAL
CENTERS

TOP SURFACE
OF DCARD

— ORGANIZER

156X 1.40^{+0.15}_{-0.20}

$$84X \quad 1.60^{+0.15}_{-0.20}$$

0.20
GROUNDS
SFF NOTE 18

10131766-101LF
STANDARD MATE RECEPTACLE
SCALE 6:1

(25.10)

(4.60)

A horizontal number line with an arrow pointing to the left at its left end. At the right end of the line, the interval $(35, 60)$ is labeled.

← 9 00 →

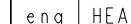
9.20
C OF EVEN COLUMNS

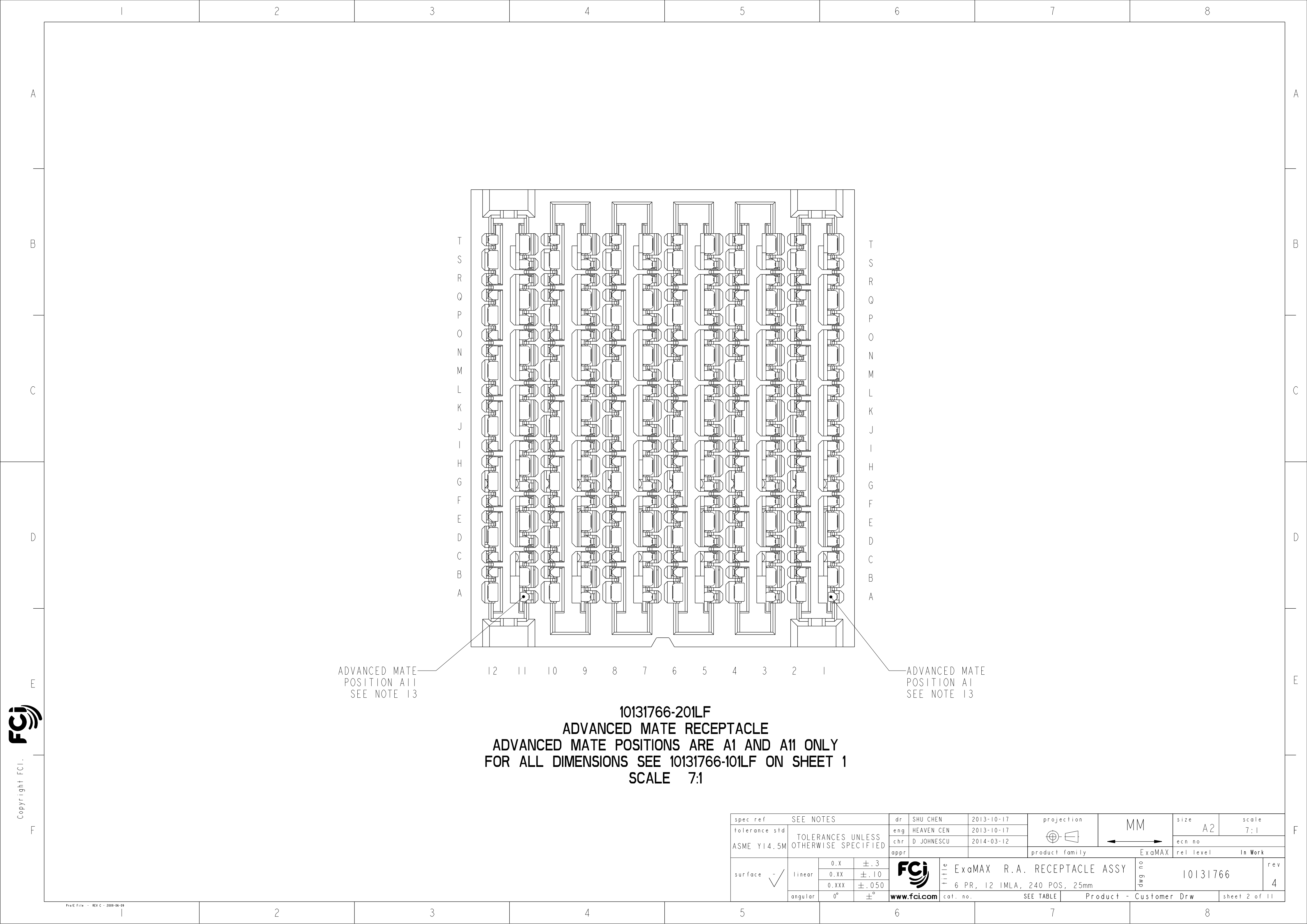
19X 1.2
PER COLUMN

156X 1.40^{+0.15}_{-0.20}

$$84X \quad 1.60^{+0.15}_{-0.20}$$

0.20
GROUNDS
SFF NOTE 18

spec ref	SEE NOTES		dr	SHU CHEN		2013-10-17				size	A2		scale	6:1			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	HEAVEN CEN		2013-10-17				ecn no							
ASME Y14.5M			chr	D. JOHNESCU		2014-03-12				product family	ExaMAX						
	linear	0.X	±.3			title	ExaMAX R.A. RECEPTACLE ASSY				dwg no	10131766				rev	4
		0.XX	±.10														
		0.XXX	±.050														
	angular	0°	±0°														



ADVANCED MATE
POSITION A11
SEE NOTE 13

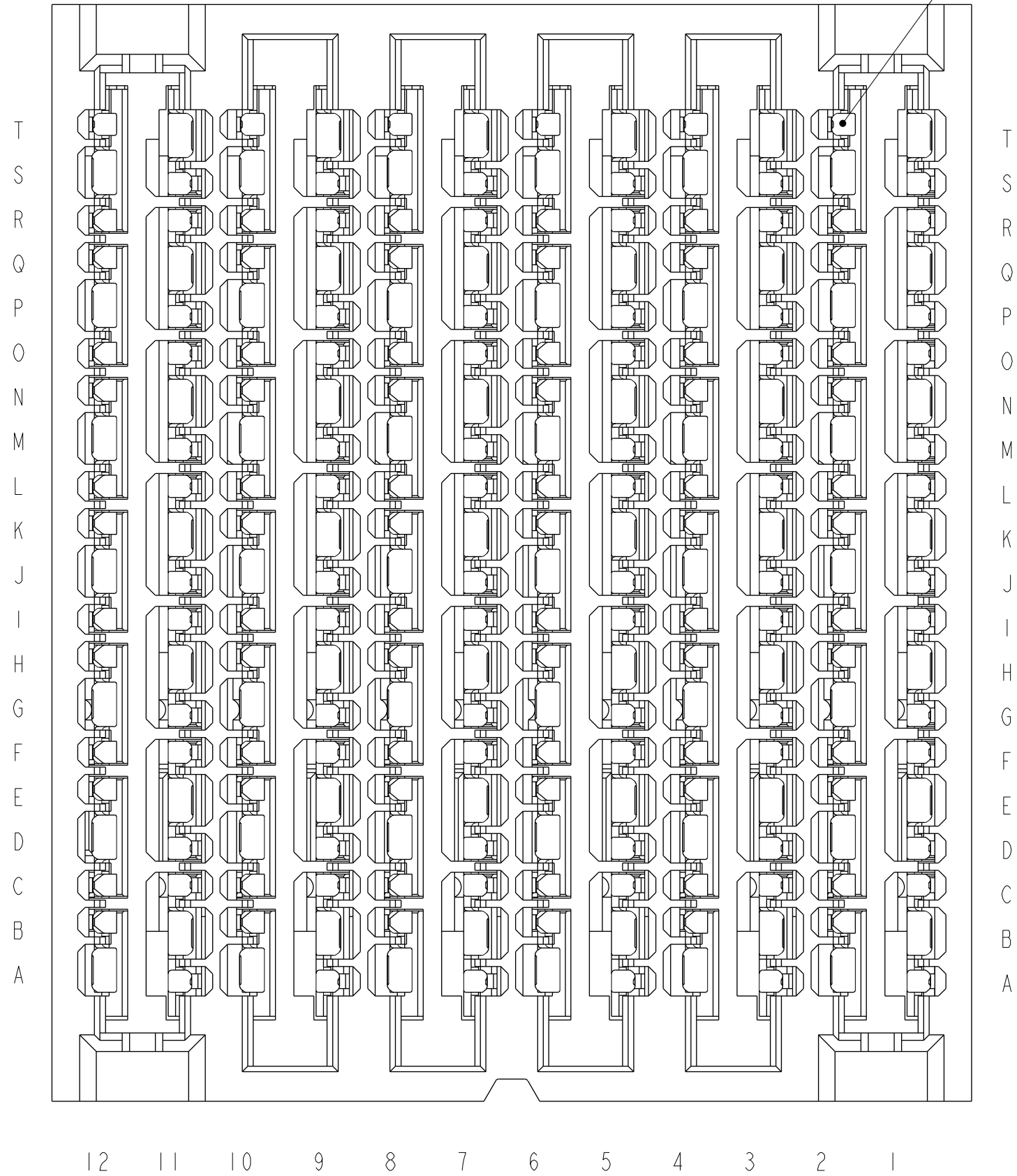
ADVANCED MATE
POSITION A1
SEE NOTE 13

10131766-201LF
ADVANCED MATE RECEPTACLE
ADVANCED MATE POSITIONS ARE A1 AND A11 ONLY
FOR ALL DIMENSIONS SEE 10131766-101LF ON SHEET 1
SCALE 7:1

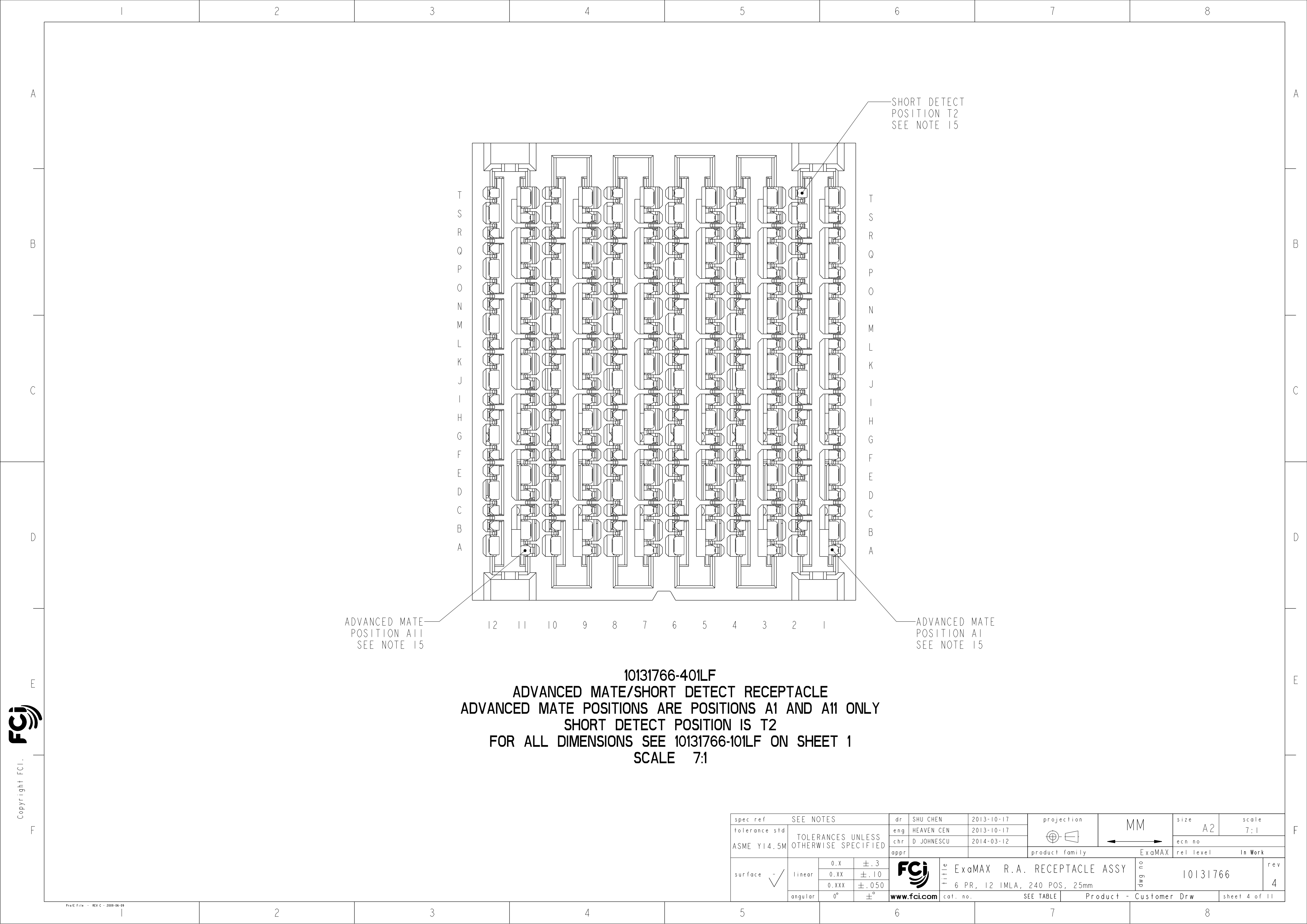
spec ref		SEE NOTES			dr		SHU CHEN		2013-10-17		projection		MM		size		A2		scale		7:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng		HEAVEN CEN		2013-10-17						ecn no		rel level		In Work			
ASME Y14.5M					chr		D JOHNSCU		2014-03-12													
					appr																	
surface		linear					title		ExaMAX R.A. RECEPTACLE ASSY		dwg no		10131766		rev		4					
																			0.X		±.3	
																			0.XX		±.10	
																			0.XXX		±.050	
																			angular		0°	
					www.fci.com		cat. no.		SEE TABLE		Product - Customer Drw		sheet 2 of 11									
											ExaMAX											
											ExaMAX R.A. RECEPTACLE ASSY											
											6 PR, 12 IMLA, 240 POS, 25mm											
											10131766											
											4											

10131766-301LF
SHORT DETECT RECEPTACLE
SHORT DETECT POSITION IS T2
FOR ALL DIMENSIONS SEE 10131766-101LF ON SHEET 1
SCALE 7:1

SHORT DETECT
POSITION T2
SEE NOTE 14



spec ref		SEE NOTES			dr		SHU CHEN		2013-10-17		projection		MM		size		A2		scale		7:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng		HEAVEN CEN		2013-10-17						ecn no		rel level		In Work			
ASME Y14.5M					chr		D JOHNSCU		2014-03-12													
					appr																	
											product family		ExaMAX									
surface		linear		0.X		±.3				title		ExaMAX R.A. RECEPTACLE ASSY		dwg no		10131766		rev		4		
				0.XX		±.10																
				0.XXX		±.050																
		angular		0°		±°																www.fci.com



ADVANCED MATE
POSITION A11
SEE NOTE 15

ADVANCED MATE
POSITION A1
SEE NOTE 15

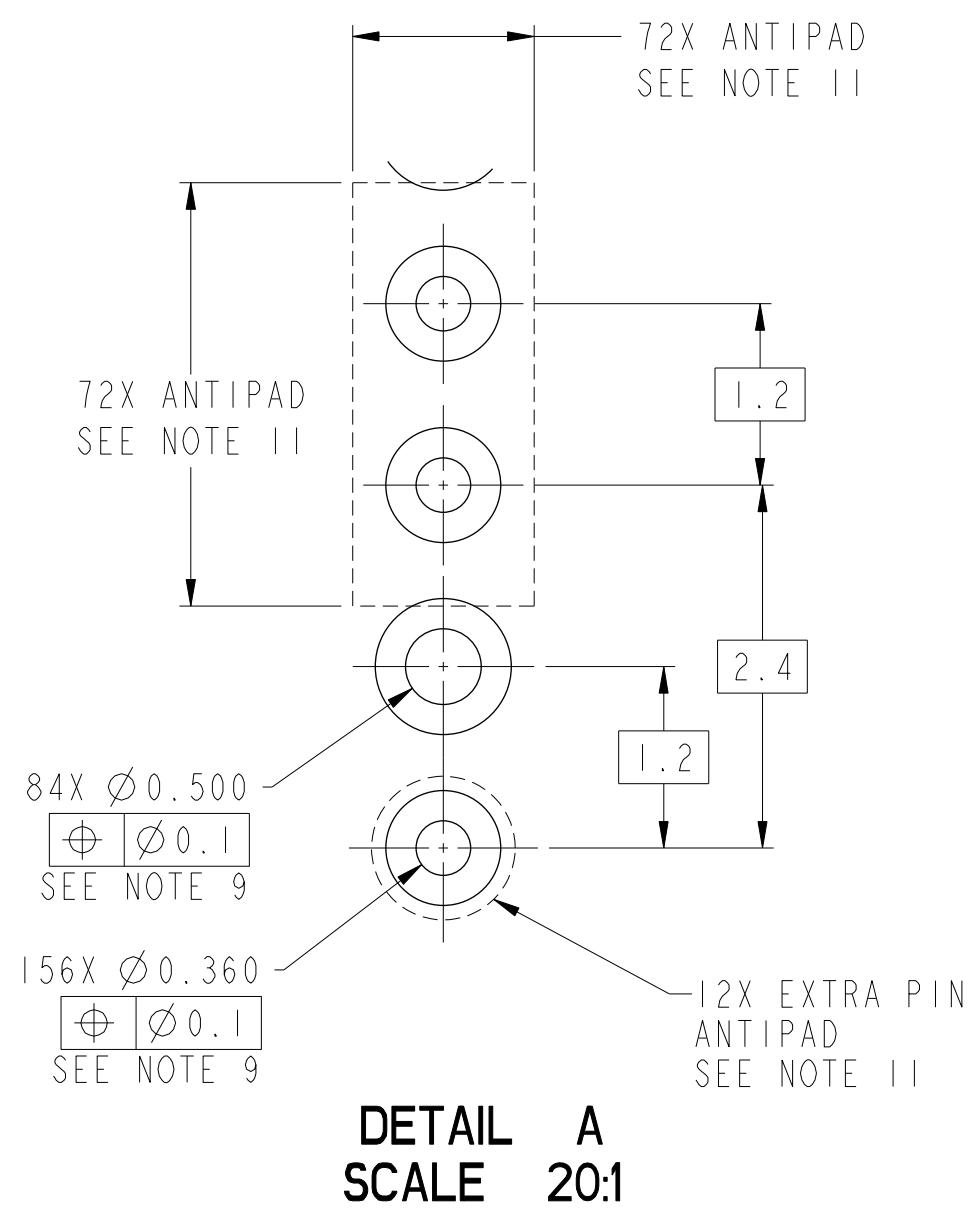
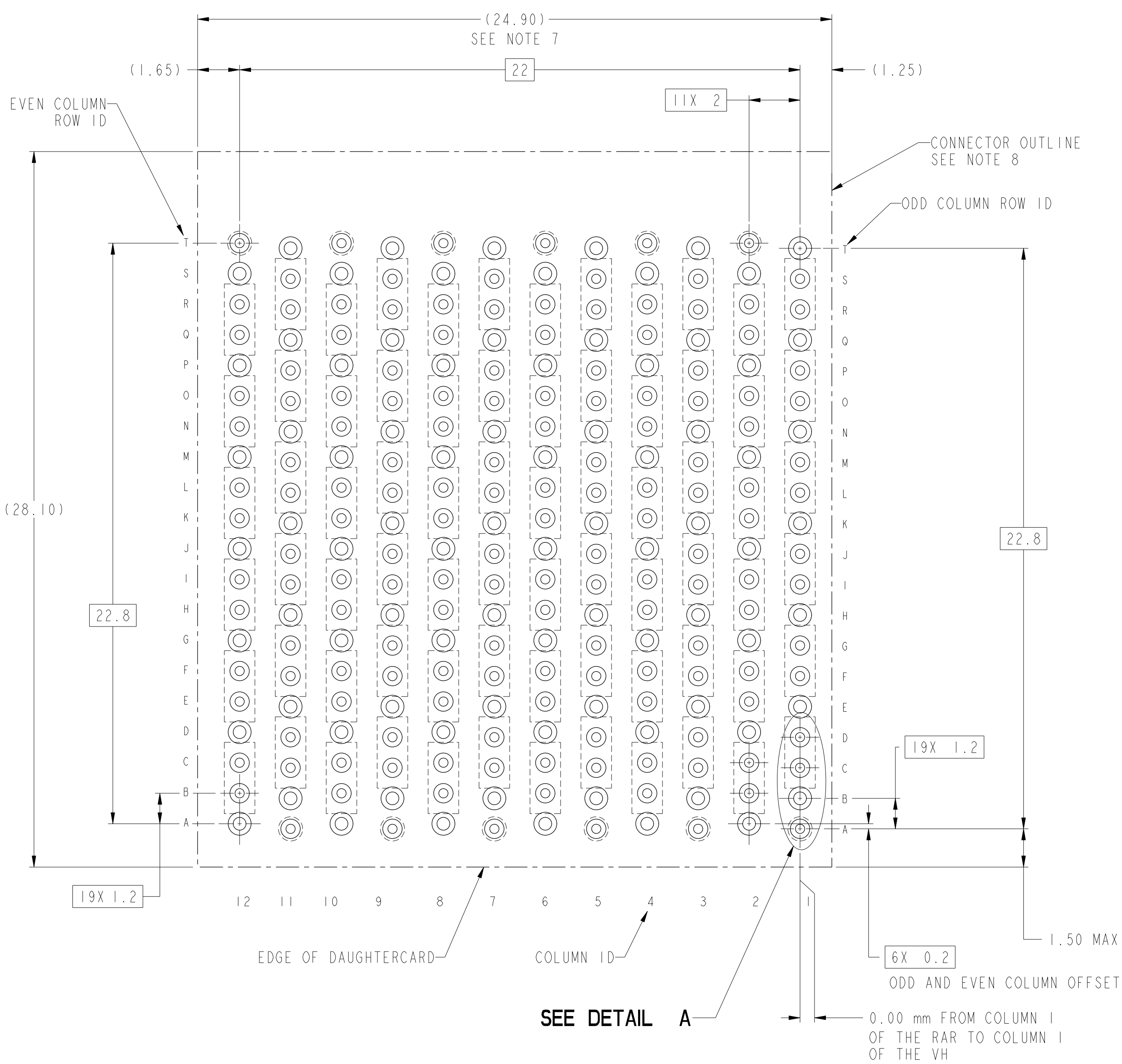
SHORT DETECT
POSITION T2
SEE NOTE 15

10131766-401LF
ADVANCED MATE/SHORT DETECT RECEPTACLE
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A11 ONLY
SHORT DETECT POSITION IS T2
FOR ALL DIMENSIONS SEE 10131766-101LF ON SHEET 1
SCALE 7:1

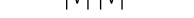


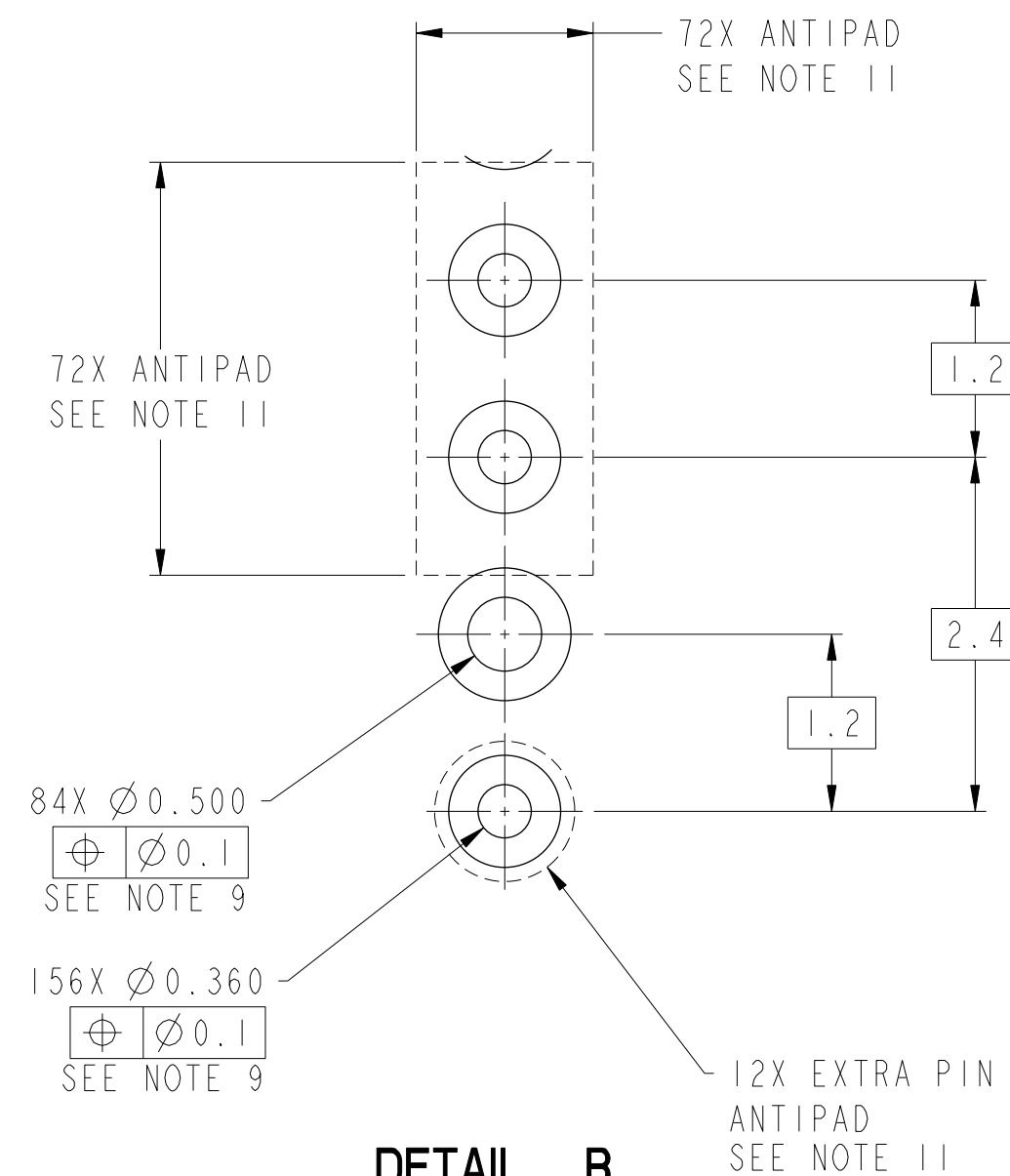
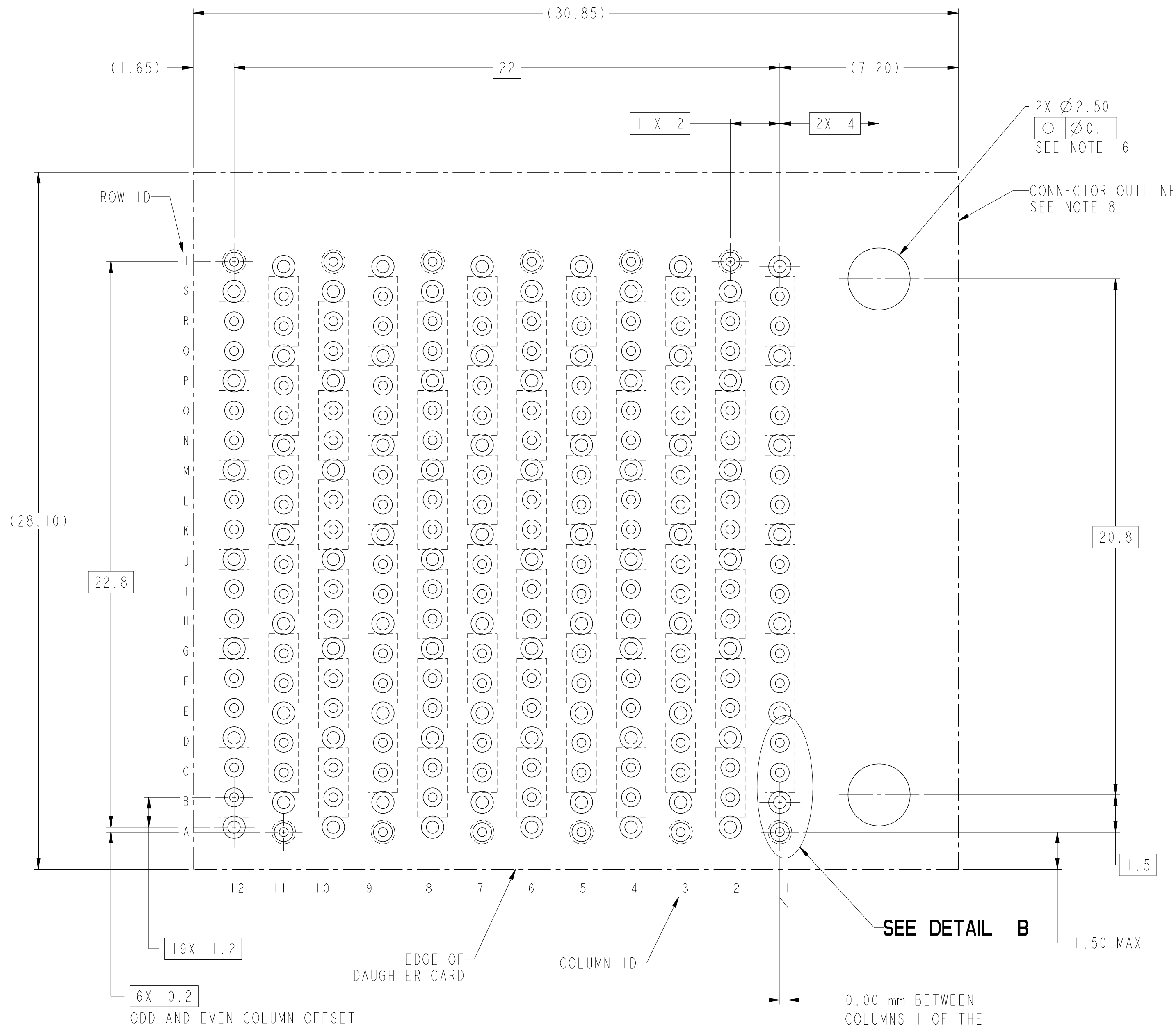
Copyright FCI.

spec ref	SEE NOTES			dr	SHU CHEN		2013-10-17		projection MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	HEAVEN CEN		2013-10-17			ecn no rel level In Work			
ASME Y14.5M				chr	D JOHNSCU		2014-03-12						
				appr			product family				ExaMAX		
surface ✓	linear	0.X	±.3	FCi	title	ExaMAX R.A. RECEPTACLE ASSY				dwg no 10131766	rev	4	
		0.XX	±.10										
		0.XXX	±.050			6 PR, 12 IMLA, 240 POS, 25mm							
	angular	0°	±°			www.fci.com	cat. no.	SEE TABLE	Product - Customer Drw				sheet 4 of 11



10131766-X01
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, & 11
SCALE 8:1

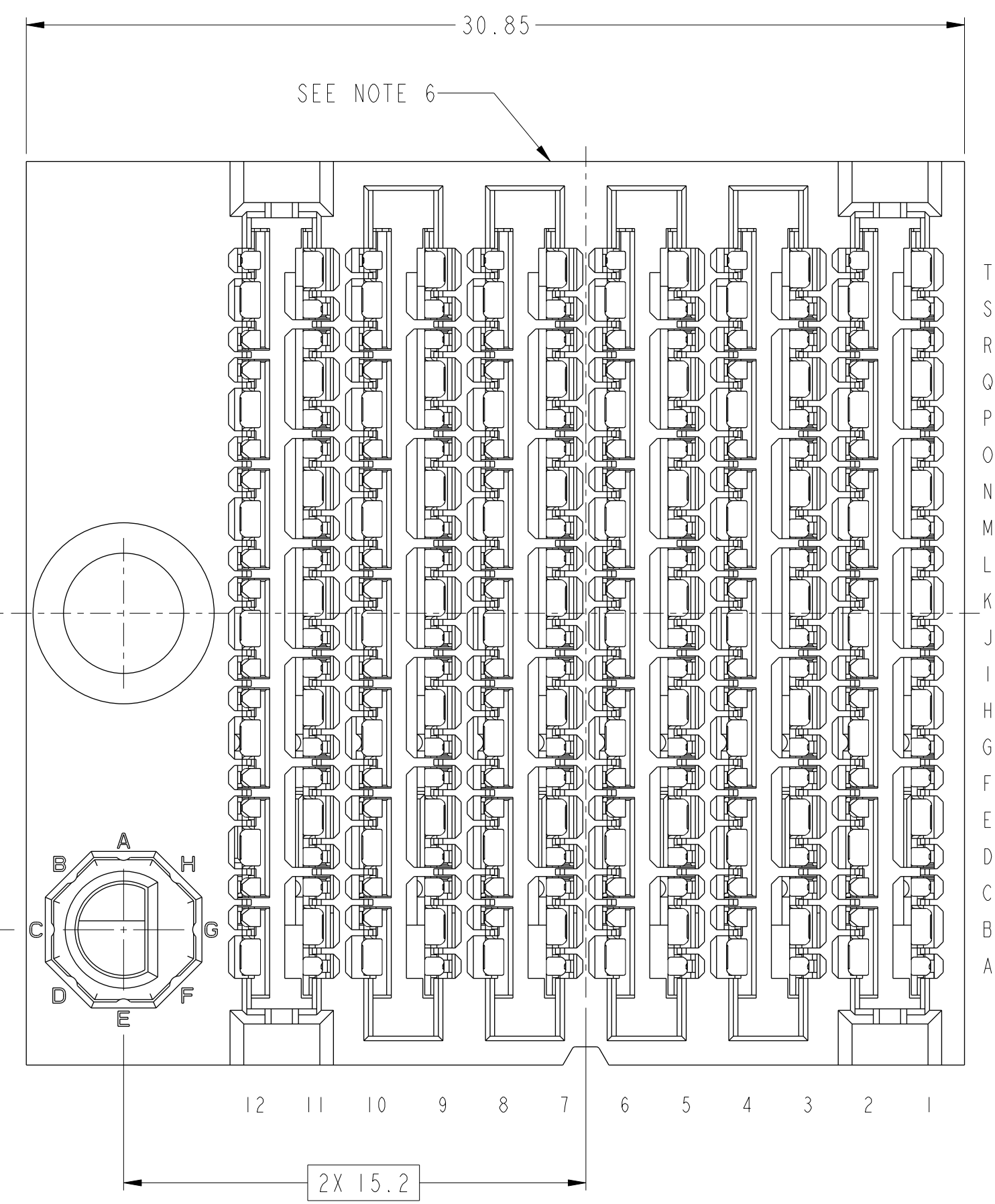
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tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng		HEAVEN CEN		2013-10-17						ecn no		rel level		In Work		rev	
ASME Y14.5M					chr		D JOHNSCU		2014-03-12													
					appr								product family		-							
surface		linear		0.X		±.3				title		ExaMAX R.A. RECEPTACLE ASSY		dwg no		10131766		4				
✓		0.XX		±.10																		
		0.XXX		±.050																		
		angular		0°		±°		www.fci.com		cat. no.		-		Product- Customer Drw		sheet 5 of 11						



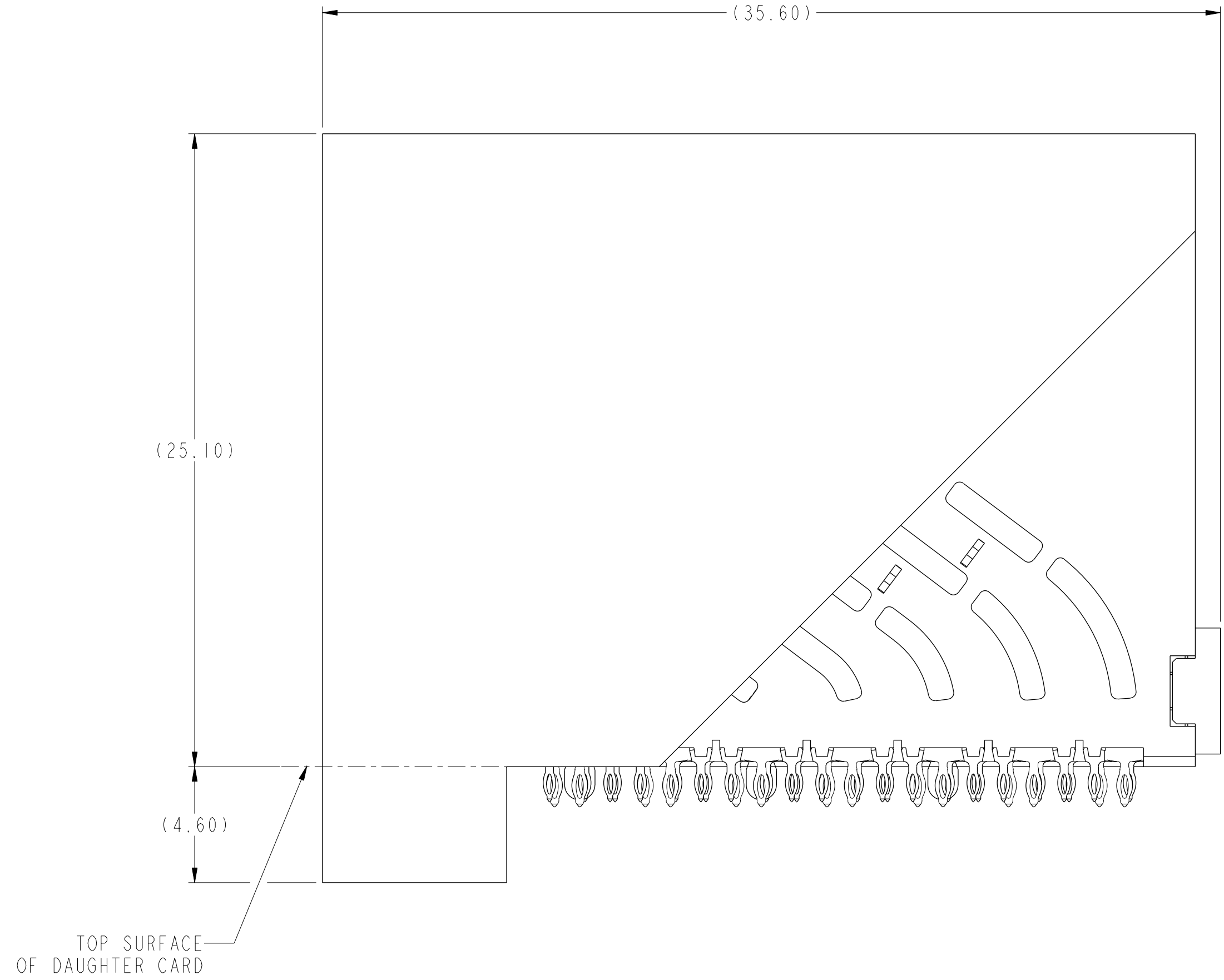
10131766-X1ALF THRU -X1JLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 8, 9, 11 & 16
SCALE 8:1

spec ref		SEE NOTES		dr		SHU CHEN		2013-10-17		projection		MM		size		A2		scale		1:1			
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng		HEAVEN CEN		2013-10-17						ecn no		rel level		In Work					
ASME Y14.5M				chr		D JOHNSCU		2014-03-12															
		appr								product family												-	
surface		linear				title		ExaMAX R.A. RECEPTACLE ASSY		6 PR, 12 IMLA, 240 POS, 25mm		dwg no		10131766		rev		4					
																				0.X		±.3	
																				0.XX		±.10	
				0.XXX		±.050																	
		angular		0°		±°		www.fci.com		cat. no.		-		Product - Customer Drw		sheet 7 of 11							

A
B
C
D
E
F

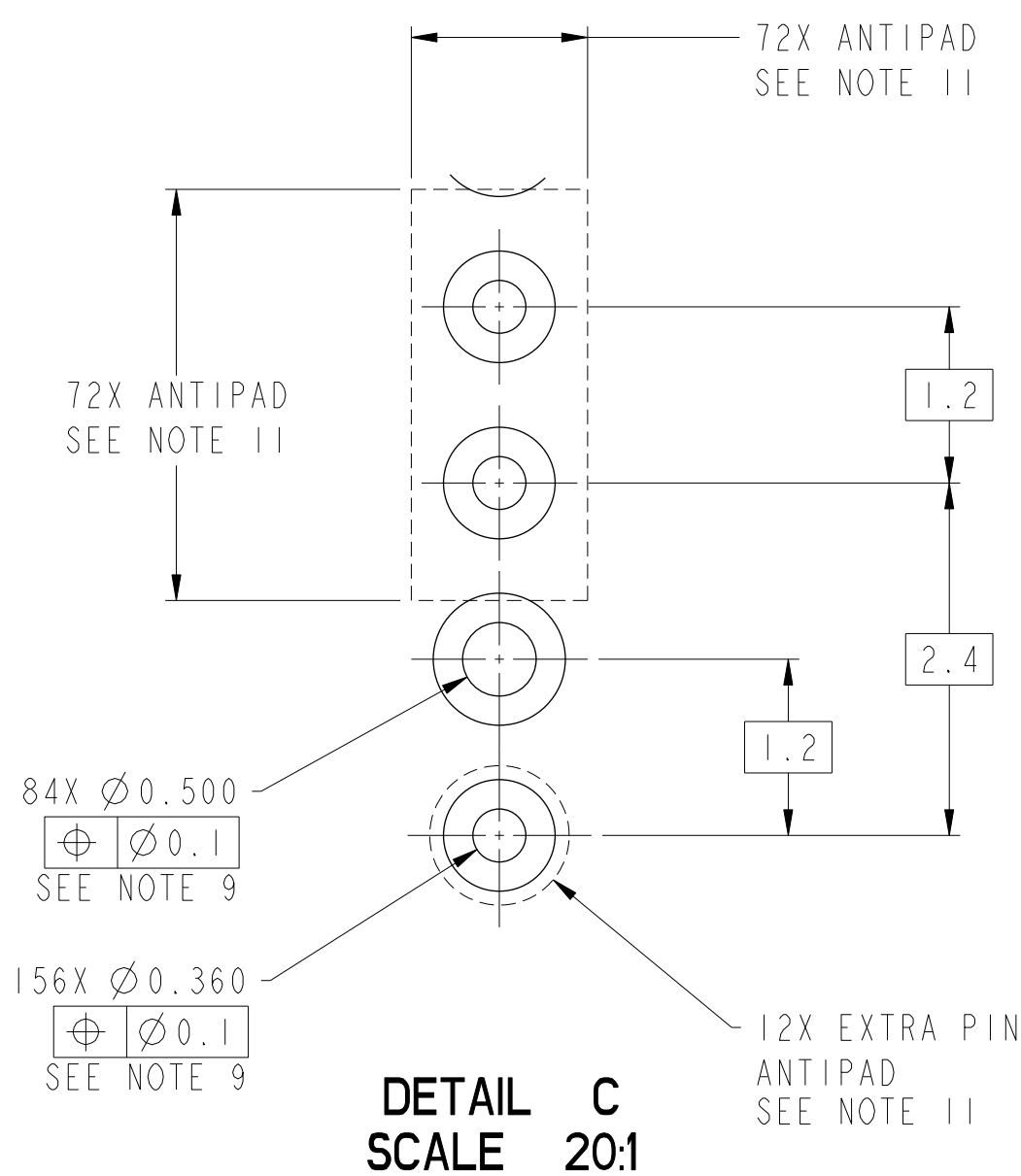
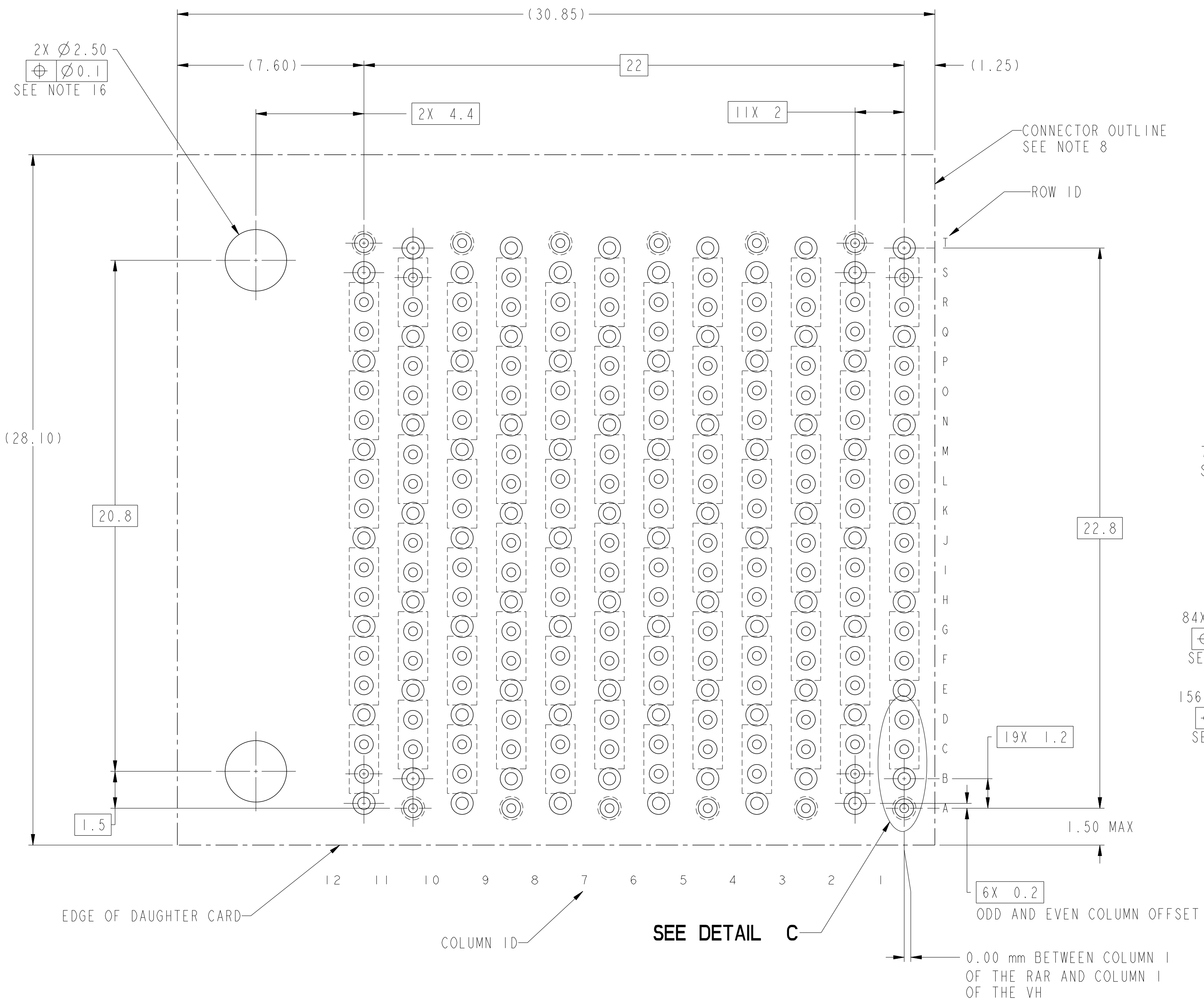


10131766-X2ALF THRU 10131766-X2JLF
LEFT GUIDANCE (SEE NOTE 17)
FOR ALL OTHER DIMENSIONS SEE 10131766-101LF ON SHEET 1
SCALE 6:1



spec ref	SEE NOTES	dr	SHU CHEN	2013-10-17	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	HEAVEN CEN	2013-10-17	chr	D JOHNESECU	2014-03-12	ecn no		
ASME Y14.5M		appr			product family	ExaMAX	rel level	In Work		
surface	linear	0.X	±.3	FCI	title	ExaMAX R.A. RECEPTACLE ASSY	no	10131766	rev	4
		0.XX	±.10	www.fci.com	cat. no.	SEE TABLE	Product - Customer Drw	sheet 8 of 11		
		0.XXX	±.050							
	angular	0°	±°							

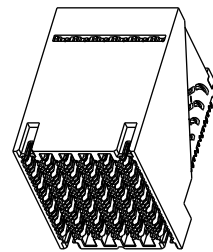
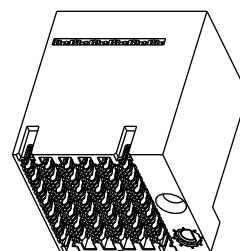
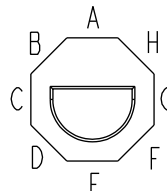
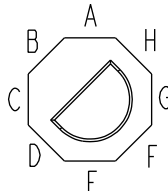
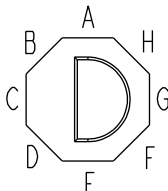
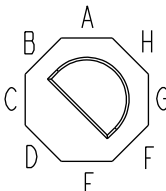
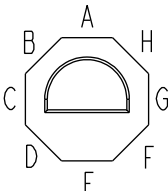
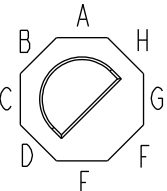
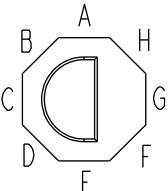
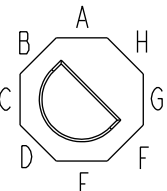
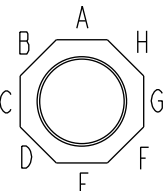
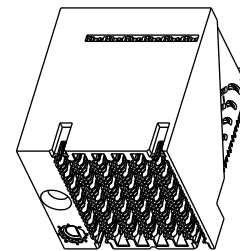
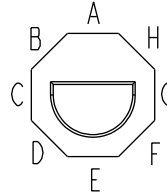
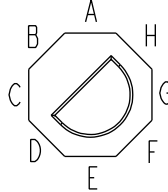
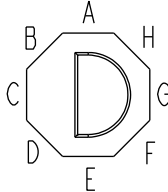
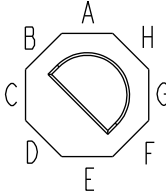
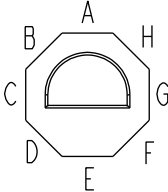
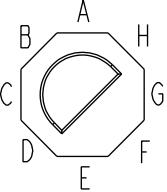
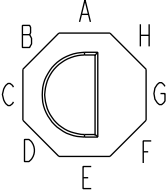
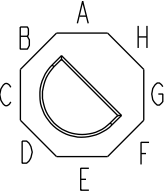
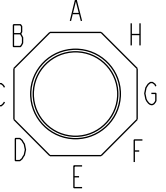
1 2 3 4 5 6 7 8



10131766-X2ALF THRU -X2JLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 8, 9, 11 & 16
SCALE 8:1

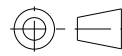
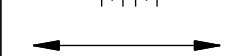
spec ref		SEE NOTES		dr	SHU CHEN	2013-10-17	projection		MM	size	A2	scale	8:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	HEAVEN CEN	2013-10-17				←→	ecn no	rel level	In Work	
ASME Y14.5M				chr	D JOHNSCU	2014-03-12								
				appr			product family		-					
surface		linear	0.X	±.3		title	ExaMAX R.A. RECEPTACLE ASSY				dwg no	10131766	rev	4
			0.XX	±.10										
			0.XXX	±.050										
		angular	0°	±°	www.fci.com	cat. no.	-	Product - Customer Drw				sheet 9 of 11		

10131766 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION	STATUS	MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER										BASE MODEL	STATUS
10131766-1YYLF	STANDARD MATE	NOT TOOLED	WITHOUT END GUIDES MODULE (SEE SHEET 1)	01											NOT TOOLED
10131766-2YYLF	ADVANCED MATE														
10131766-3YYLF	SHORT DETECT														
10131766-4YYLF	ADVANCED MATE & SHORT DETECT														
			RIGHT GUIDANCE MODULE (SEE SHEET 6)	1A	1B	1C	1D	1E	1F	1G	1H	1J (NO KEY)		NOT TOOLED	
															
			LEFT GUIDANCE MODULE (SEE SHEET 8)	2A	2B	2C	2D	2E	2F	2G	2H	2J (NO KEY)		NOT TOOLED	
															



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spec ref		SEE NOTES		dr	SHU CHEN	2013-10-17	projection			MM	size	A2	scale	1:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	HEAVEN CEN	2013-10-17					ecn no	rel level	In Work		
ASME Y14.5M				chr	D JOHNSCU	2014-03-12									
				appr			product family		-						
surface		linear	0.X	±.3		title	ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 25mm				dwg no	10131766		rev	4
			0.XX	±.10											
			0.XXX	±.050											
		angular	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:
0.76um GXT OVER 1.27um MIN Ni

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, (PART NUMBER & LOT CODE), ON THIS SURFACE.

⑦- THE MINIMUM CENTERLINE SPACING BETWEEN ADJACENT MODULES IS 25.0mm FOR -X01

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, 10131766-2XXLF, 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.

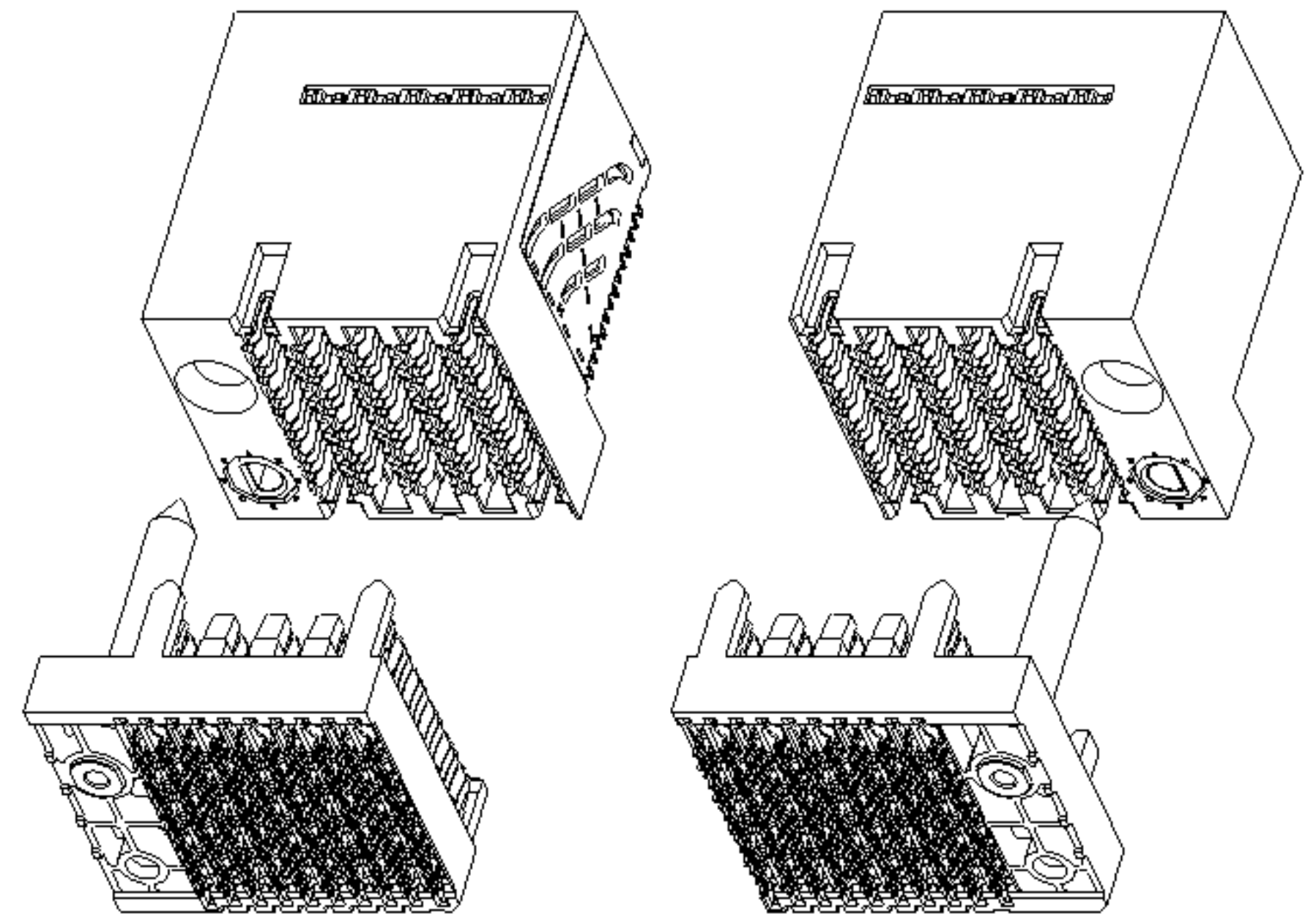
⑭ - THE SHORT DETECT RECEPTACLE, 10131766-3XXLF, WHEN MATED WITH A STANDARD MATE VERTICAL HEADER OR A STANDARD MATE RIGHT-ANGLE HEADER WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00mm AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

(15) - THE ADVANCE MATE/SHORT DETECT RECEPTACLE, 10131766-4XXLF, 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 SCREWS MAY 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		SHU CHEN		2013-10-17		projection				MM				size		A2		scale		6:1	
tolerance std		TOLERANCES UNLESS OTHERWISE SPECIFIED			eng		HEAVEN CEN		2013-10-17								ecn no		rel level				In Work			
ASME Y14.5M					chr		D JOHNESCU		2014-03-12								appr									
surface 		linear		0.X		±.3				title		ExaMAX R.A. RECEPTACLE ASSY		dwg no		10131766		rev		4						
				0.XX		±.10																				
				0.XXX		±.050																				
		angular		0°		±		www.fci.com		cat. no.		SEE TABLE		Product-		Customer Drw		sheet 11 of 11								

Mouser Electronics

Authorized Distributor

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[10131766-12ALF](#) [10131766-32JLF](#) [10131766-12ELF](#)