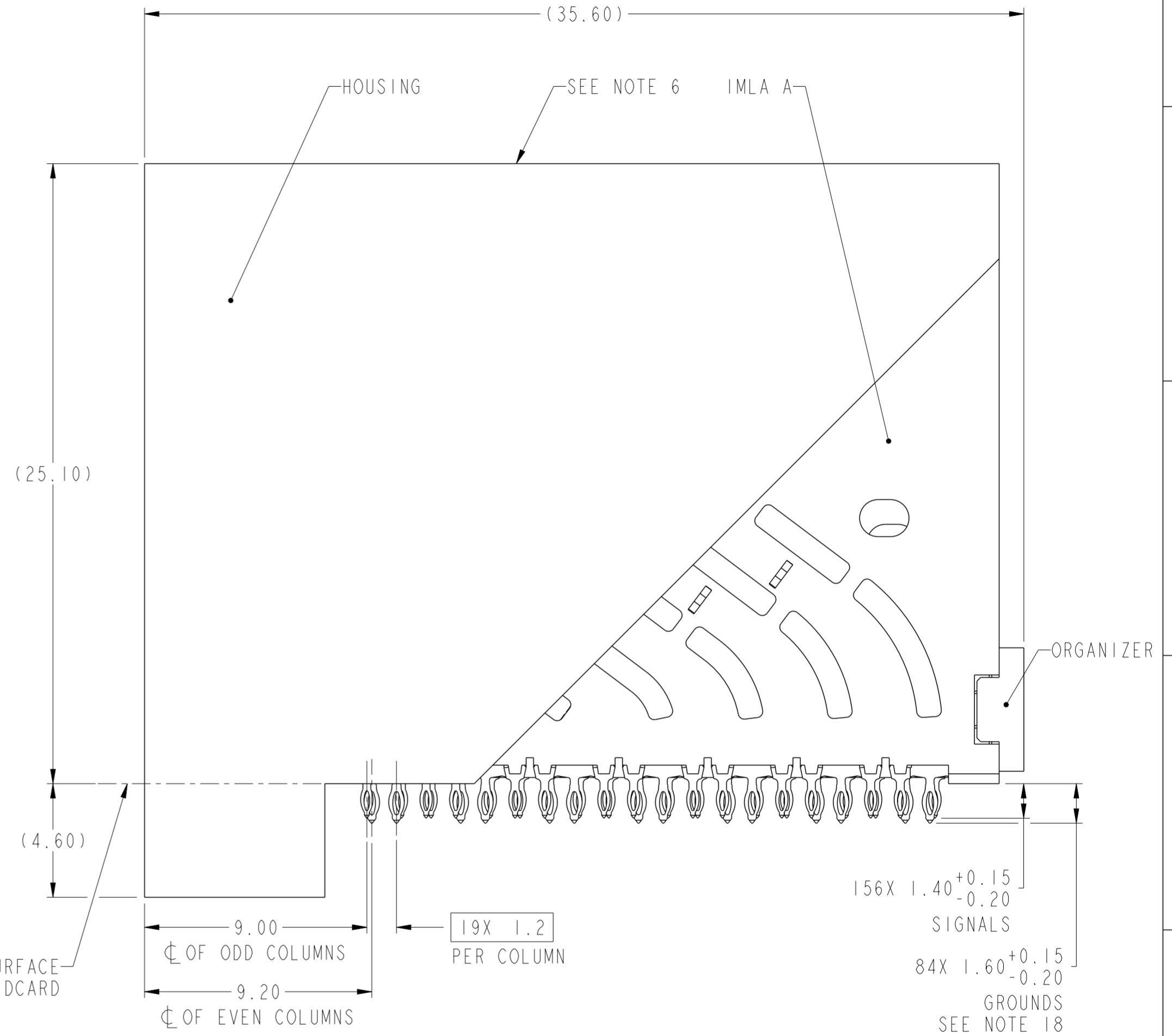
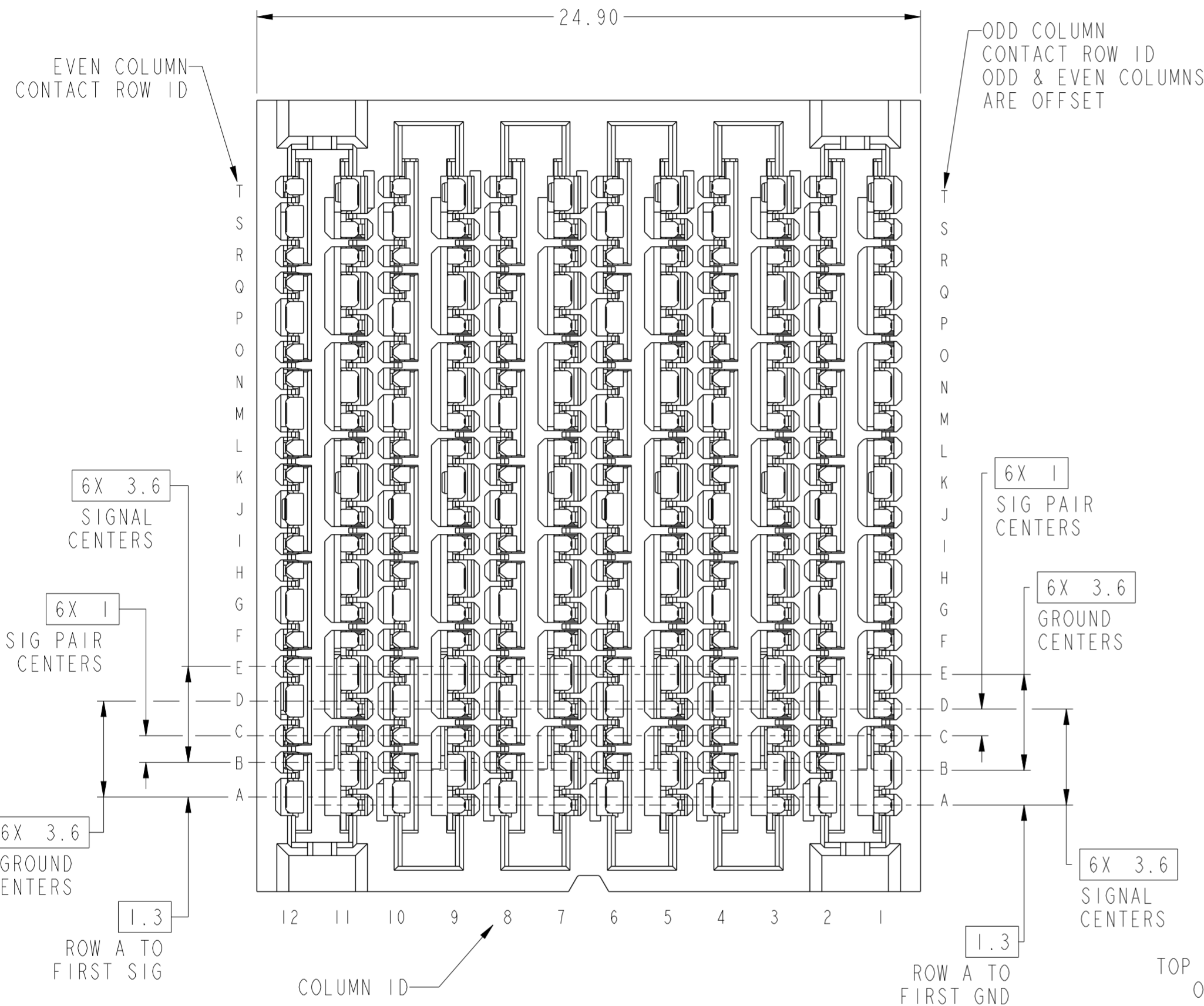
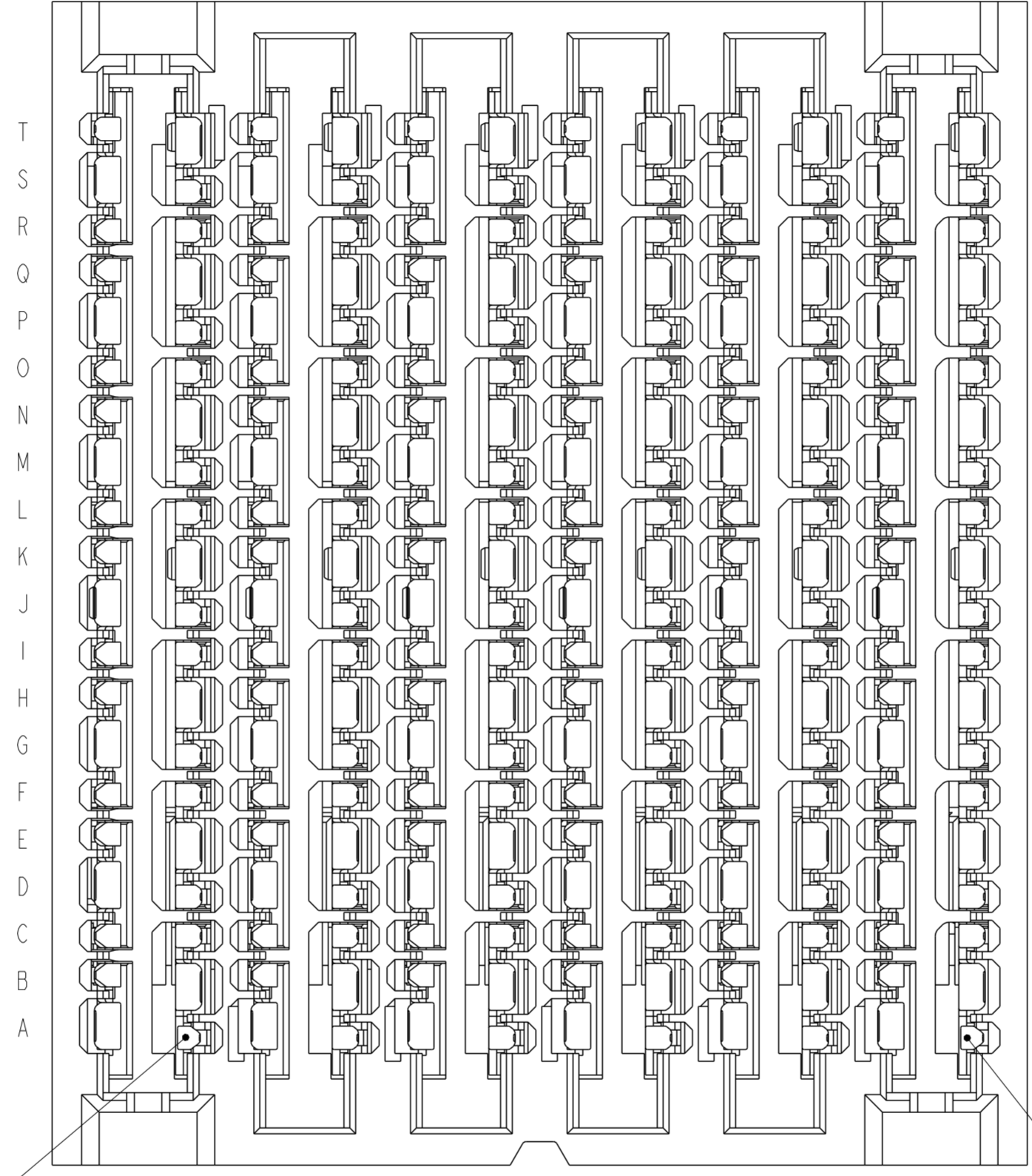


PRODUCT NUMBER  
SEE TABLE



10131766-101LF  
STANDARD MATE RECEPTACLE  
SCALE 6:1

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31		MM	A2	-	-	-
ISO 406		chr	-	ecn no						
ISO 1101		appr	-	product family	ExaMAX	rel level	Preliminary			
surface	linear	0.X	±.3		title		ExaMAX R.A. RECEPTACLE ASSY	dwg no 10131766	rev 9	sheet 1 of 11
		0.XX	±.10		6 PR, 12 IMLA, 240 POS, 25mm					
		0.XXX	±.050		cat. no. SEE TABLE					
ISO 1302	angular	0°	±°	Product - Customer Drw						



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

**Amphenol FCI**

© 2016 AFci

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	
ISO 406		chr	-							
ISO 1101		appr	-		product family	ExaMAX	rel level	Preliminary		
surface	linear			title ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 25mm		dwg no	10131766		rev	9
ISO 1302	angular	0°	±°	cat. no.	SEE TABLE	Product - Customer Drw		sheet 2 of 11		

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

B

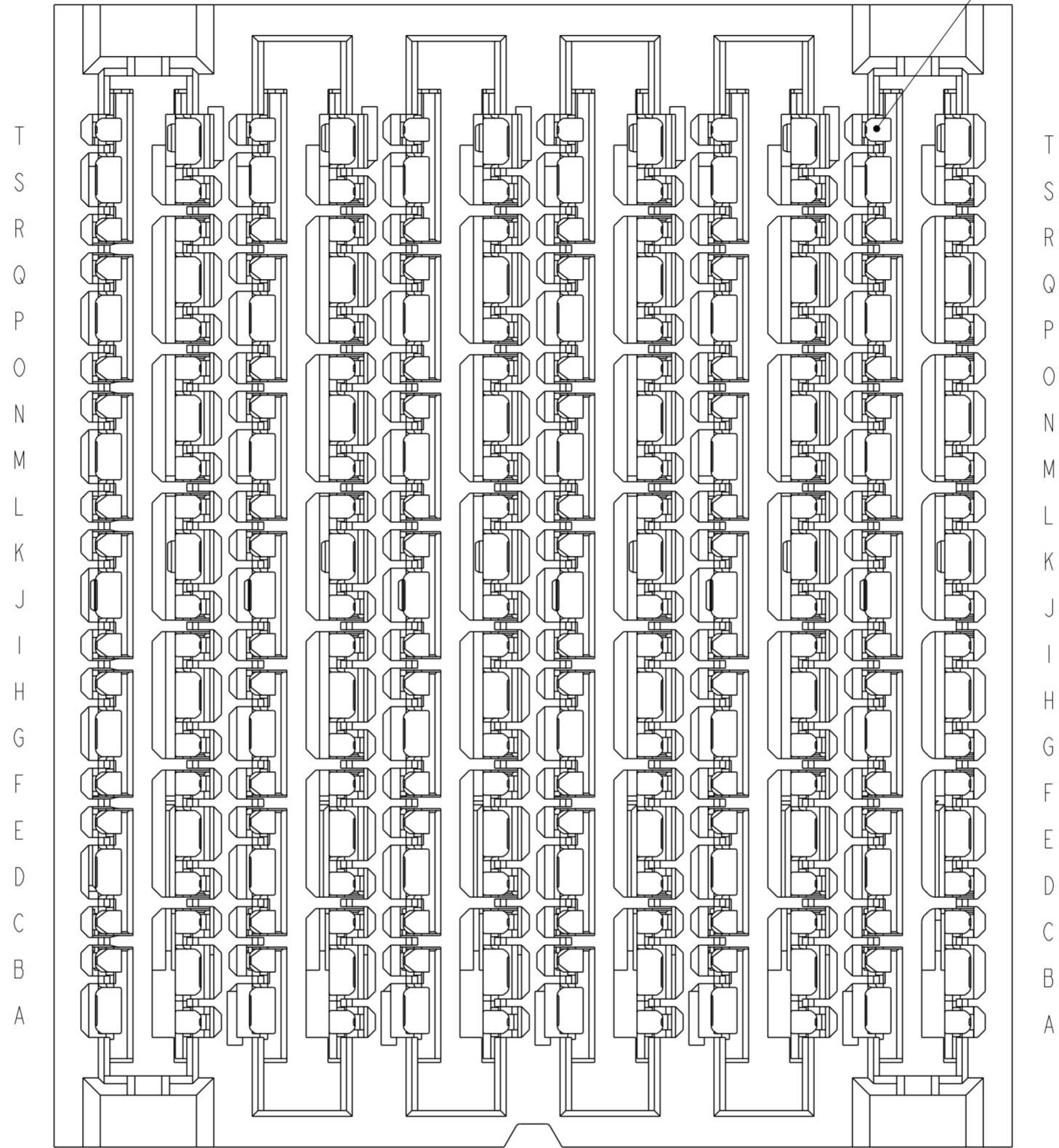
C

D

E

F

SHORT DETECT  
POSITION T2  
SEE NOTE 14



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

Amphenol  
FCi

© 2016 AFCi

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	
ISO 406		chr	-						Preliminary	
ISO 1101		appr	-		product family	ExaMAX	rel level			
surface	linear	Amphenol FCi			title		ExaMAX R.A. RECEPTACLE ASSY		dwg no	10131766
	angular				6 PR, 12 IMLA, 240 POS, 25mm		rev		9	
ISO 1302	0.X ±.3 0.XX ±.10 0.XXX ±.050 0° ±°	cat. no.			SEE TABLE	Product - Customer Drw		sheet 3 of 11		

A

B

C

D

E

F

A

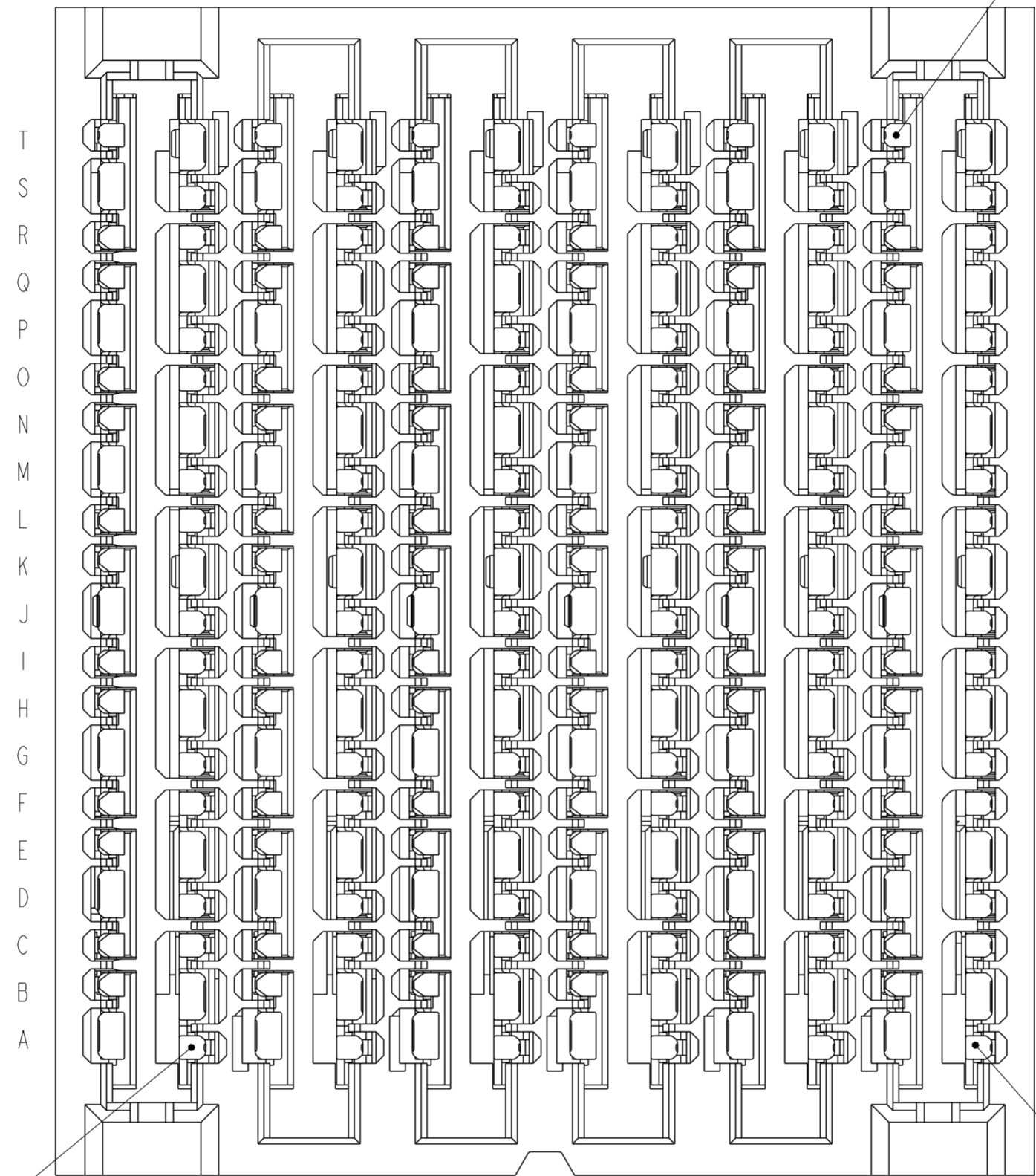
B

C

D

E

F



SHORT DETECT  
POSITION T2  
SEE NOTE 15

ADVANCED MATE  
POSITION A11  
SEE NOTE 15

ADVANCED MATE  
POSITION A1  
SEE NOTE 15

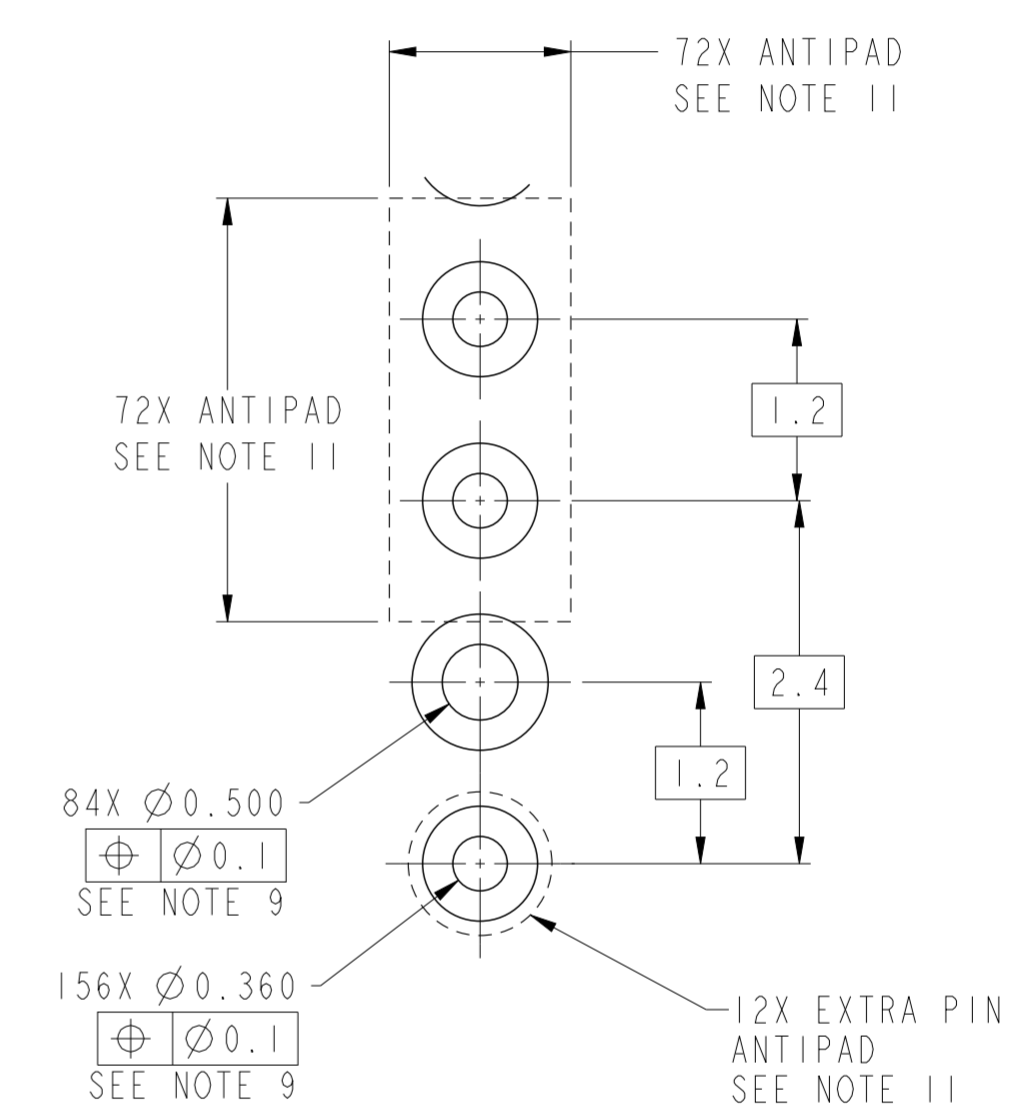
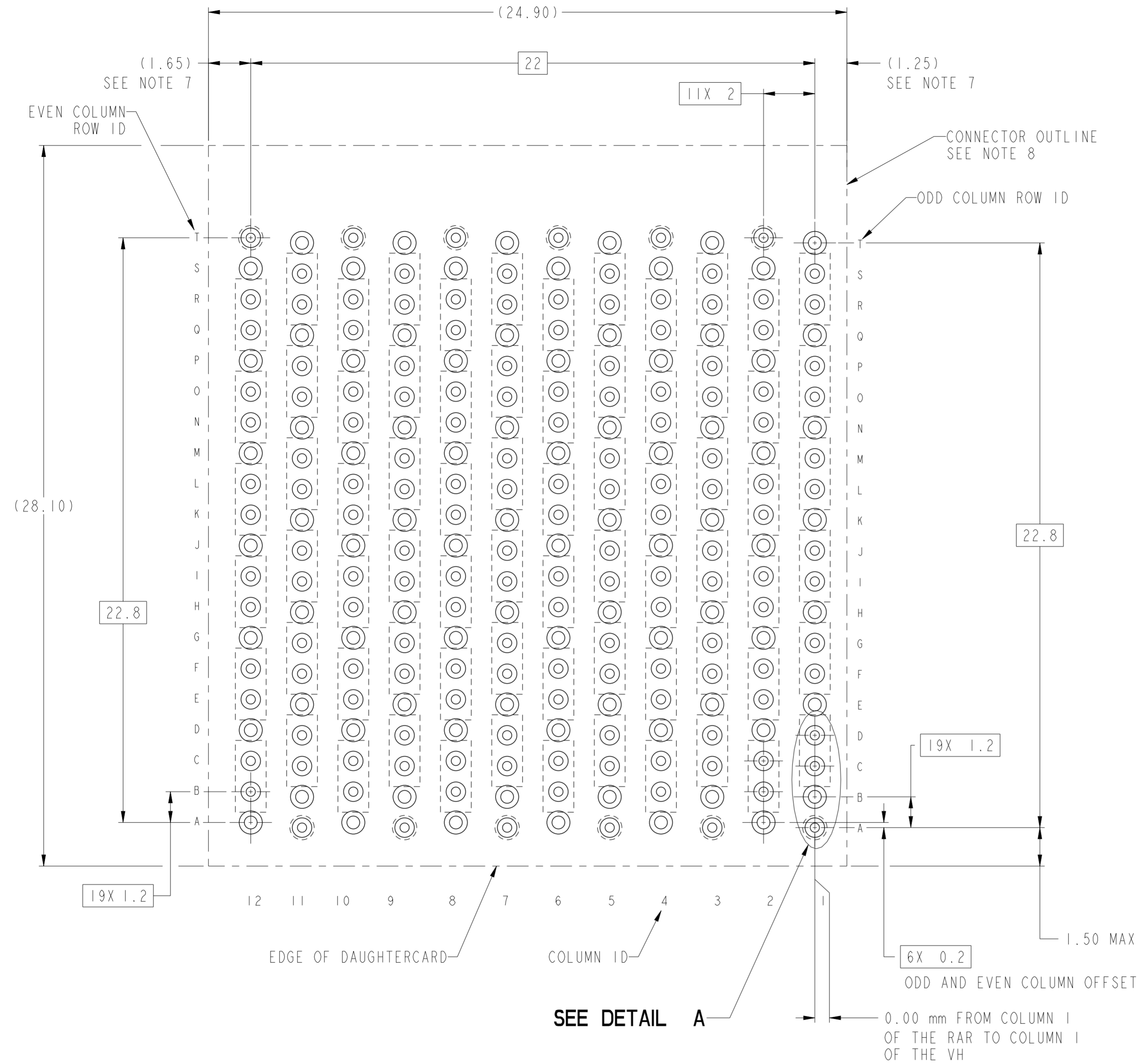
**10131766-401LF**  
**ADVANCED MATE/SHORT DETECT RECEPTACLE**  
 ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A11 ONLY  
 SHORT DETECT POSITION IS T2  
 FOR ALL DIMENSIONS SEE 10131766-101LF ON SHEET 1  
 SCALE 7:1

Amphenol  
FCi

© 2016 APCI

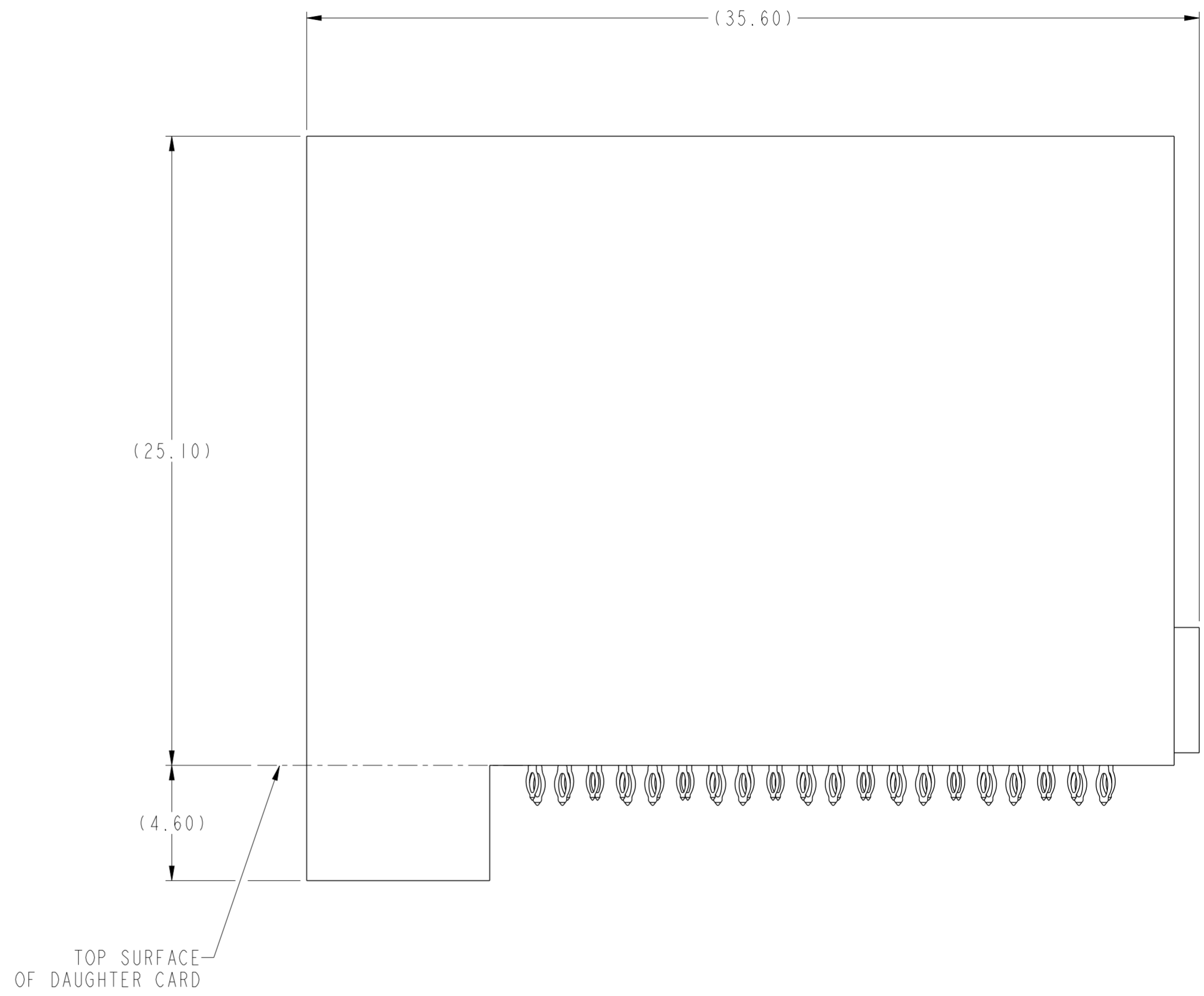
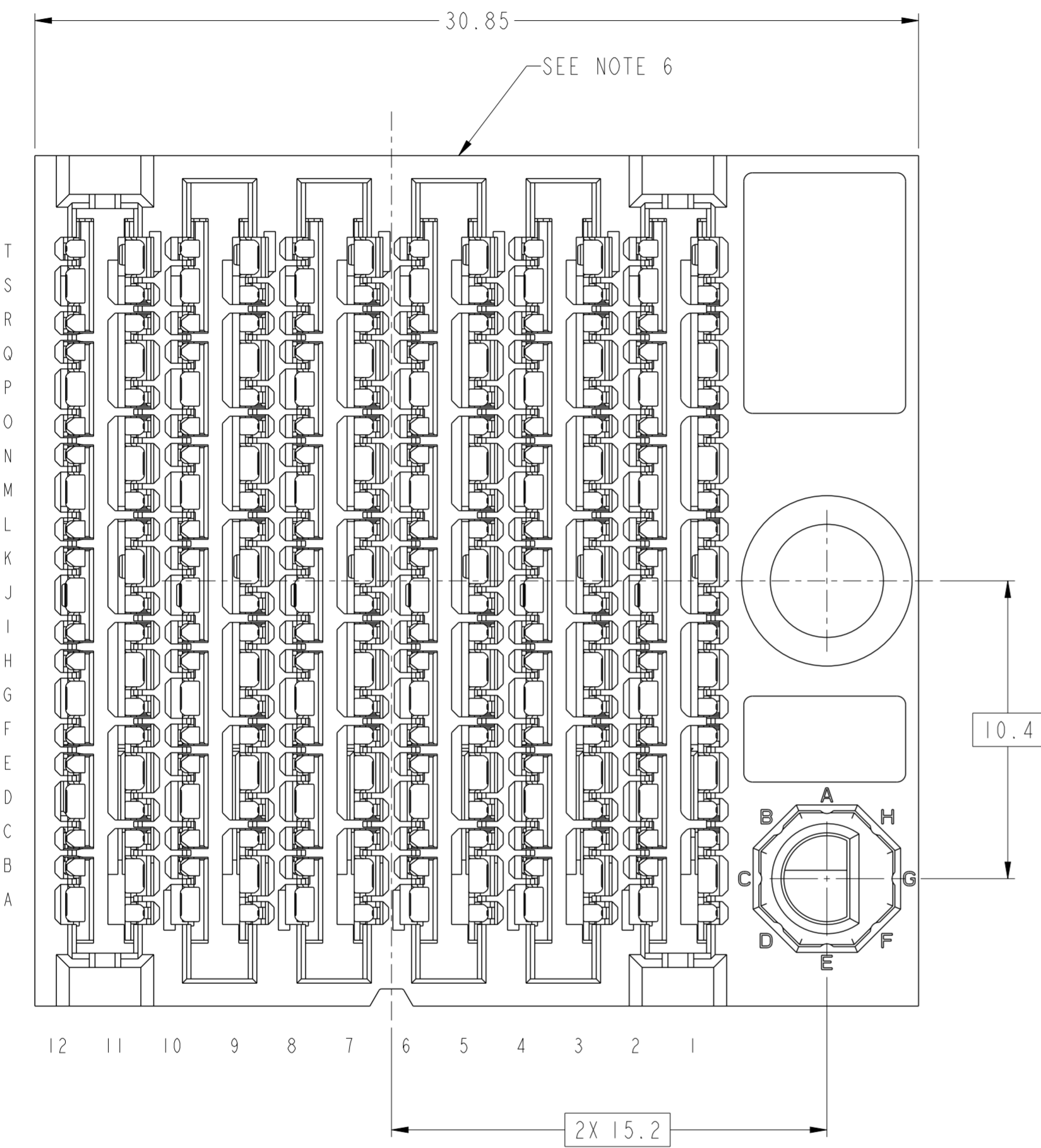
spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	
ISO 406		chr	-							
ISO 1101		appr	-		product family	ExaMAX	rel level	Preliminary		
surface	linear	Amphenol FCI			title		ExaMAX R.A. RECEPTACLE ASSY		dwg no	10131766
	angular	0.X	±.3		6 PR, 12 IMLA, 240 POS, 25mm		rev	9		
ISO 1302		0.XX	±.10		cat. no.	SEE TABLE	Product - Customer Drw		sheet 4 of 11	
		0.XXX	±.050							
		0°	±°							





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

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	8:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level <b>Preliminary</b>	rev <b>9</b>
ISO 406		chr	-	product family			-			
ISO 1101		appr	-	product family ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 25mm		dwg no 10131766	Product - Customer Drw		sheet 5 of 11	
surface	linear	Amphenol FCI		cat. no.						
ISO 1302	angular	0.X	±.3							
		0.XX	±.10							
		0.XXX	±.050							
		0°	±°							



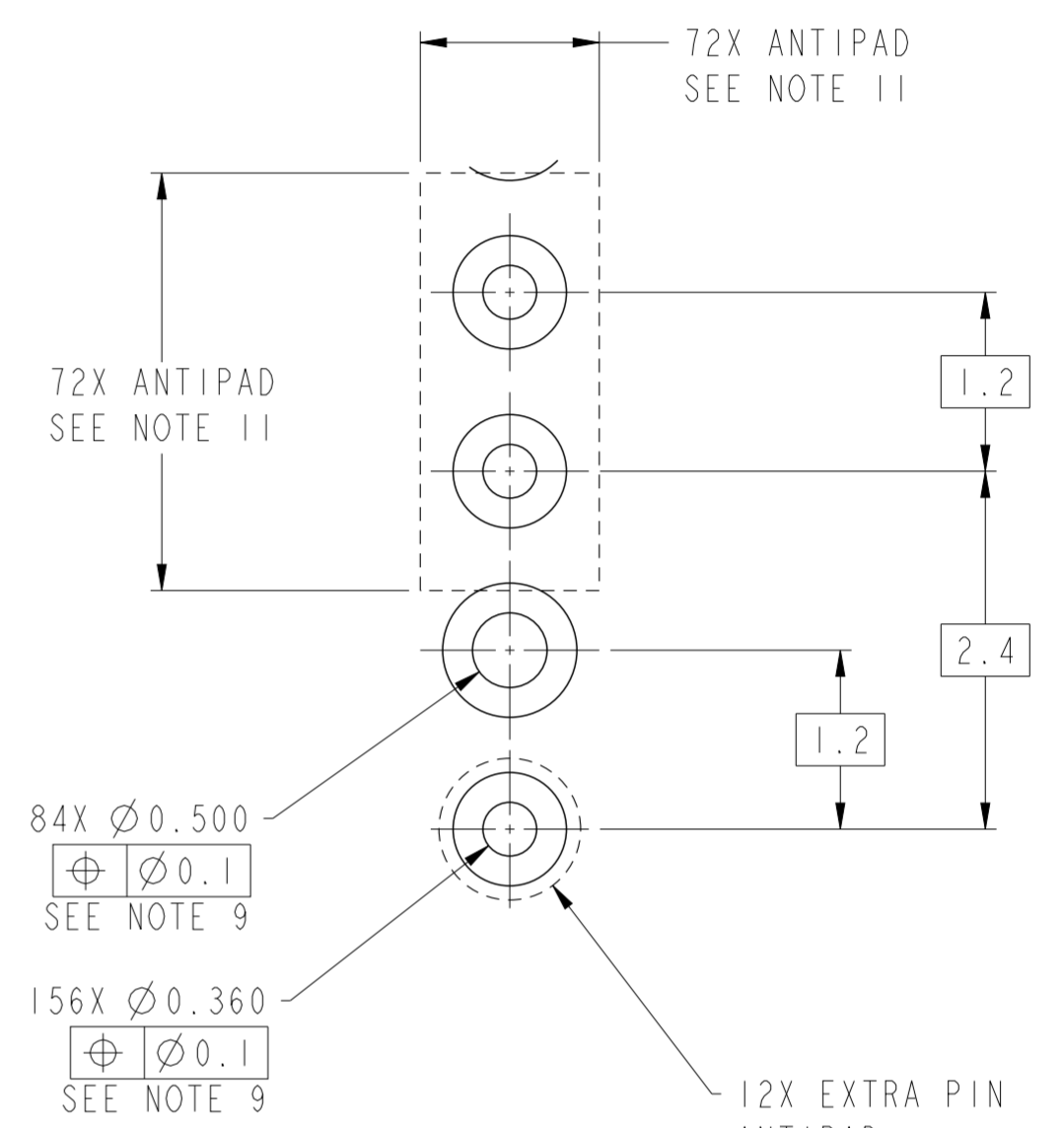
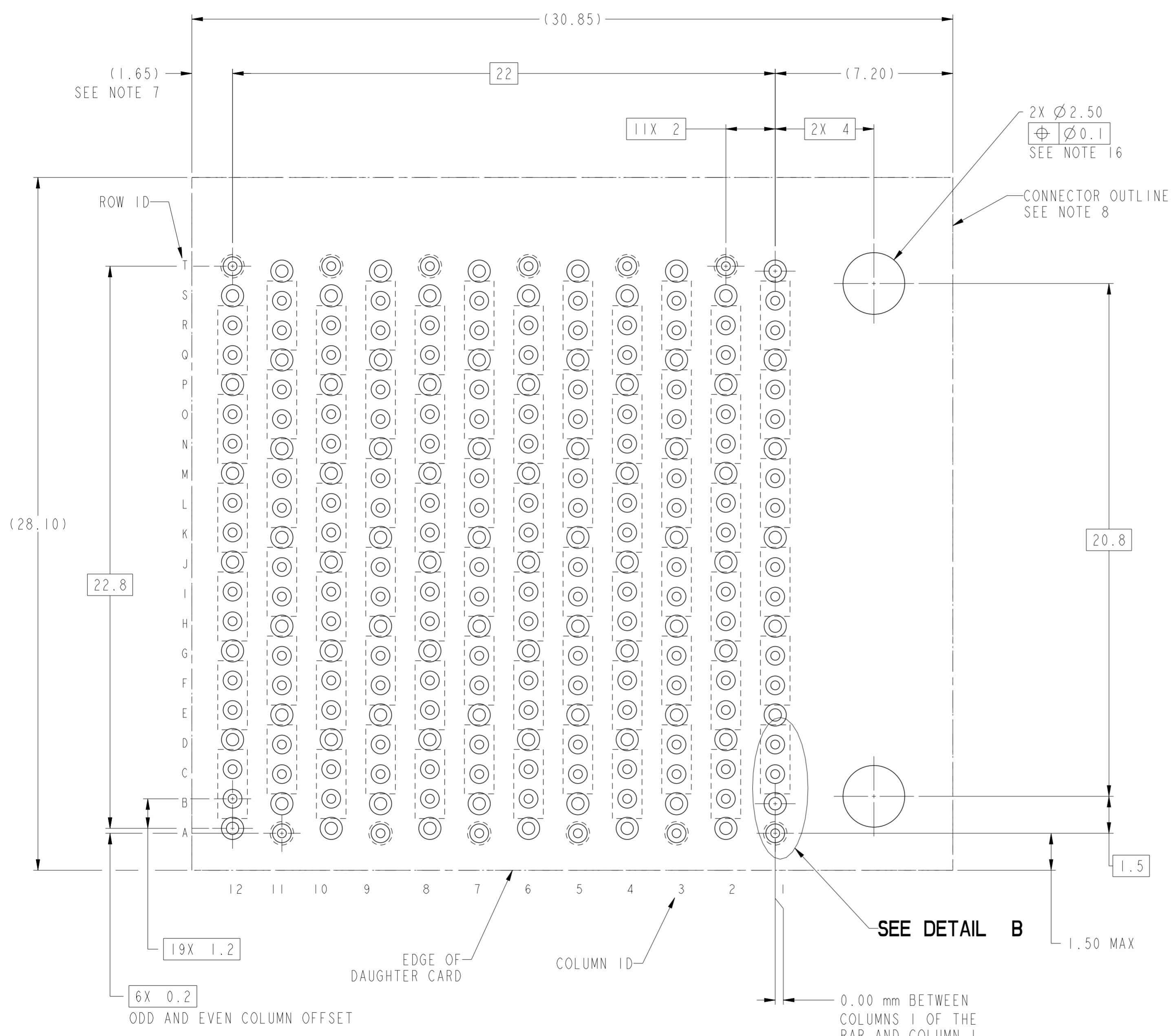
TOP SURFACE OF DAUGHTER CARD

10131766-X1ALF THRU 10131766-X1JLF  
 RIGHT GUIDANCE (SEE NOTE 17)  
 FOR ALL OTHER DIMENSIONS SEE 10131766-101LF ON SHEET 1  
 SCALE 6:1

Amphenol  
FCi

© 2016 AFci

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	Preliminary
ISO 406 ISO 1101		chr	-	-			product family	ExaMAX		
surface	linear	0.X	±.3	<b>Amphenol FCi</b>	<b>title</b> ExaMAX R.A. RECEPTACLE ASSY		<b>dwg no</b> 10131766	<b>rev</b> 9	<b>cat. no.</b> SEE TABLE	
		0.XX	±.10		<b>6 PR, 12 IMLA, 240 POS, 25mm</b>				<b>Product - Customer Drw</b>	
ISO 1302	angular	0°	±°		<b>sheet 6 of 11</b>					



**DETAIL B**  
SCALE 20:1

**10131766-X1ALF THRU -X1JLF  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, 11 & 16  
SCALE 8:1**

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	1:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	Preliminary	
ISO 406 ISO 1101		chr	-	appr							-
surface	linear	Amphenol FCI			title		ExaMAX R.A. RECEPTACLE ASSY		dwg no	10131766	
ISO 1302	angular				6 PR, 12 IMLA, 240 POS, 25mm		cat. no.		Product - Customer Drw	rev	9
									sheet 7 of 11		

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

B

C

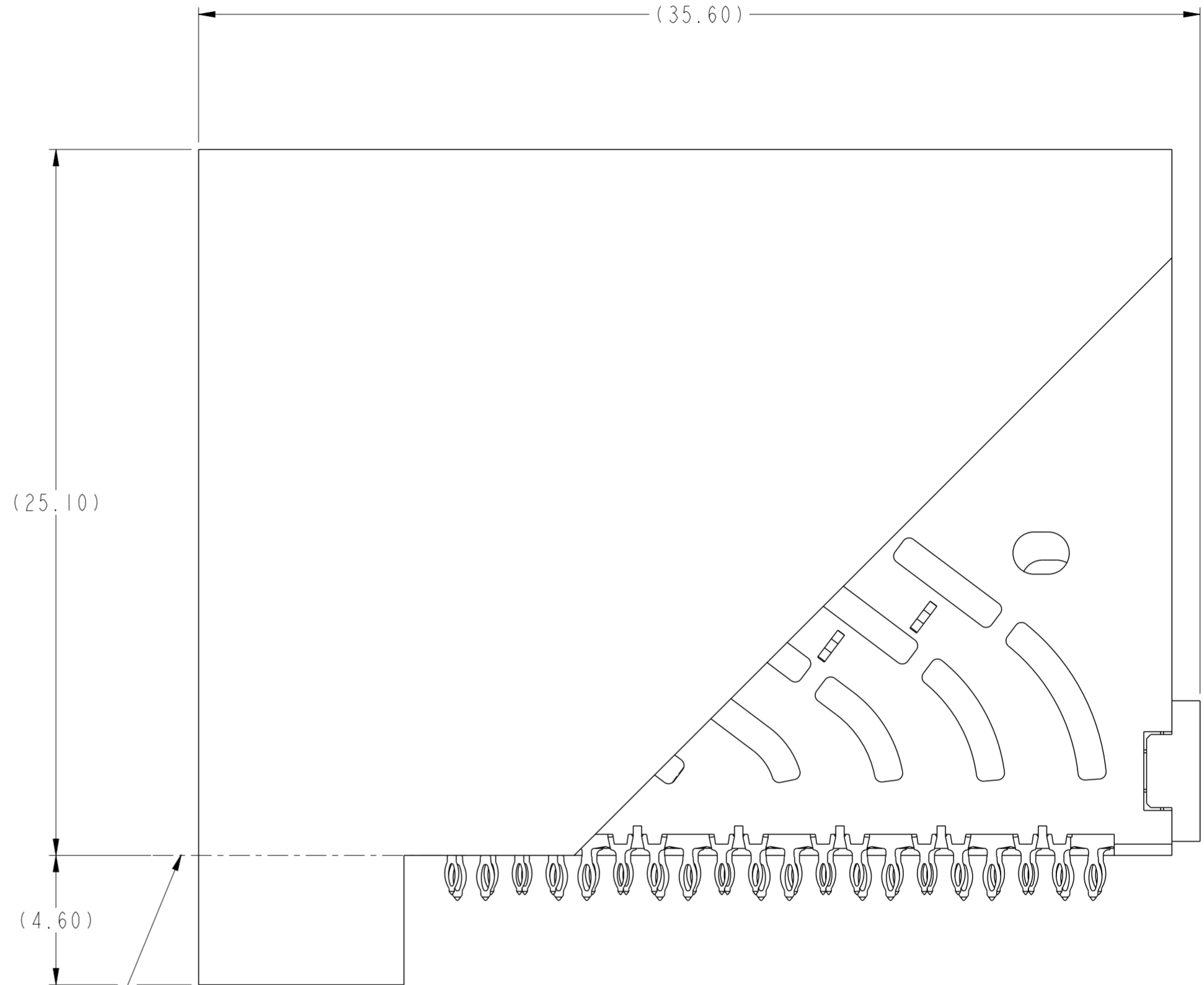
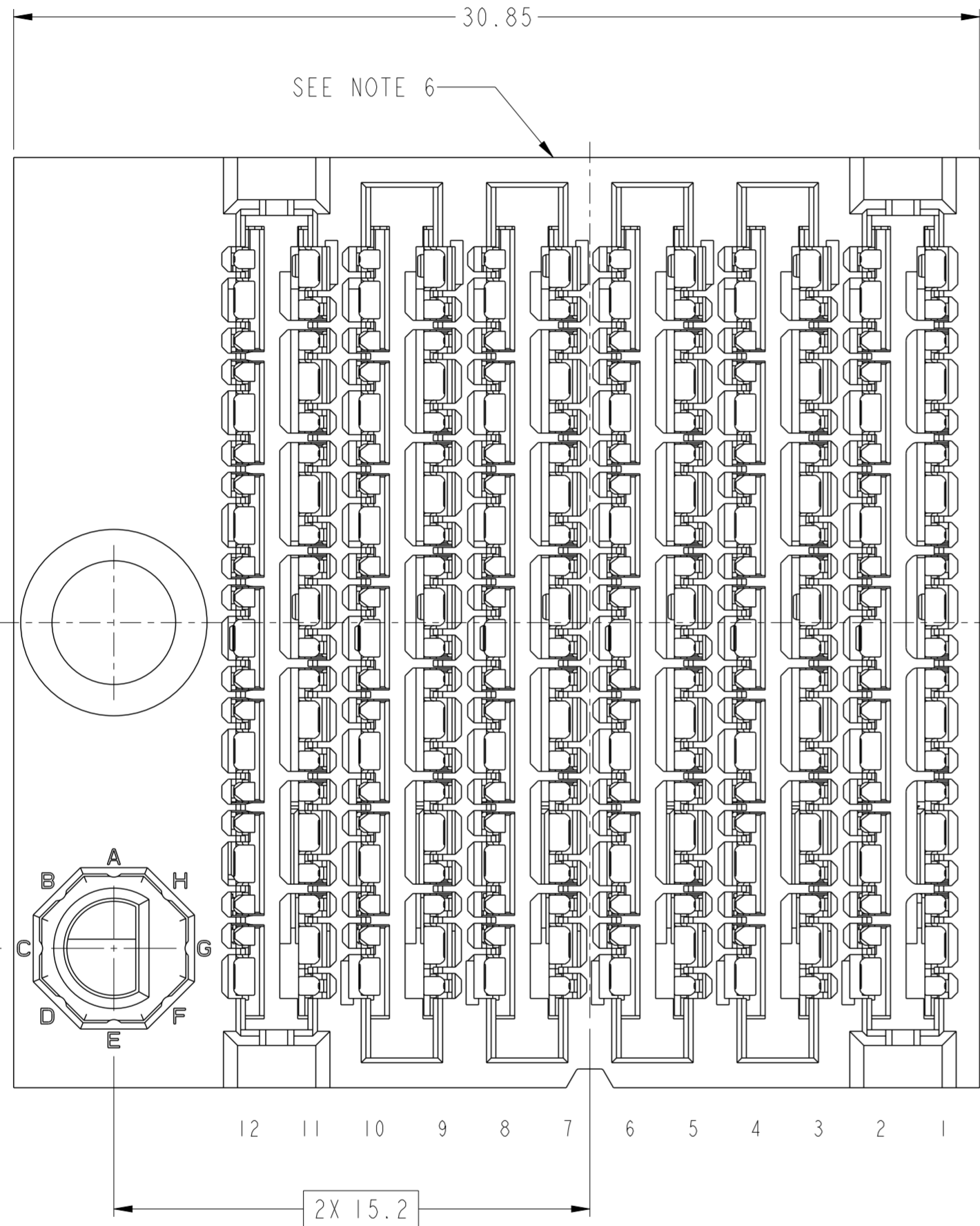
D

E

F

Amphenol  
FCi

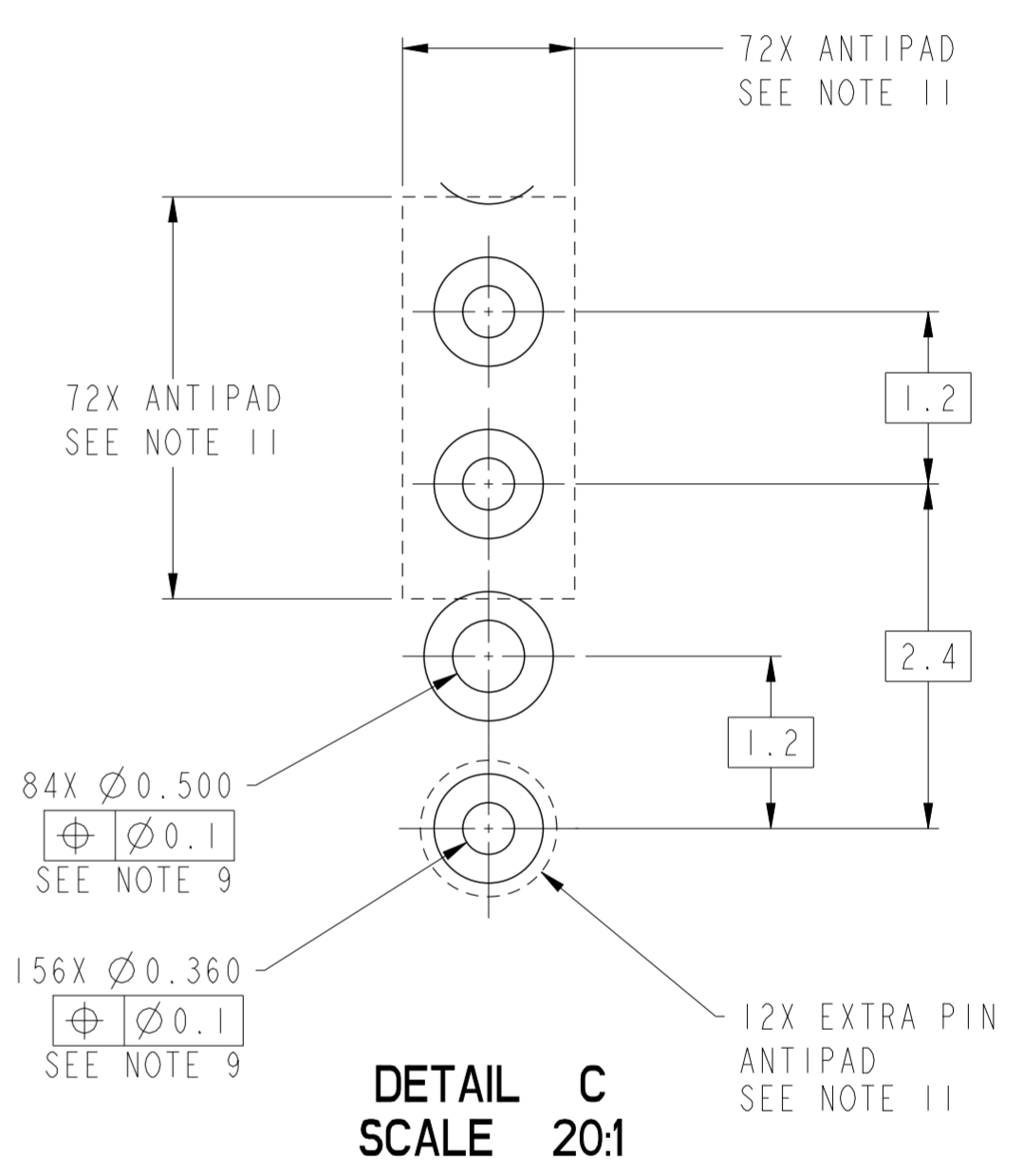
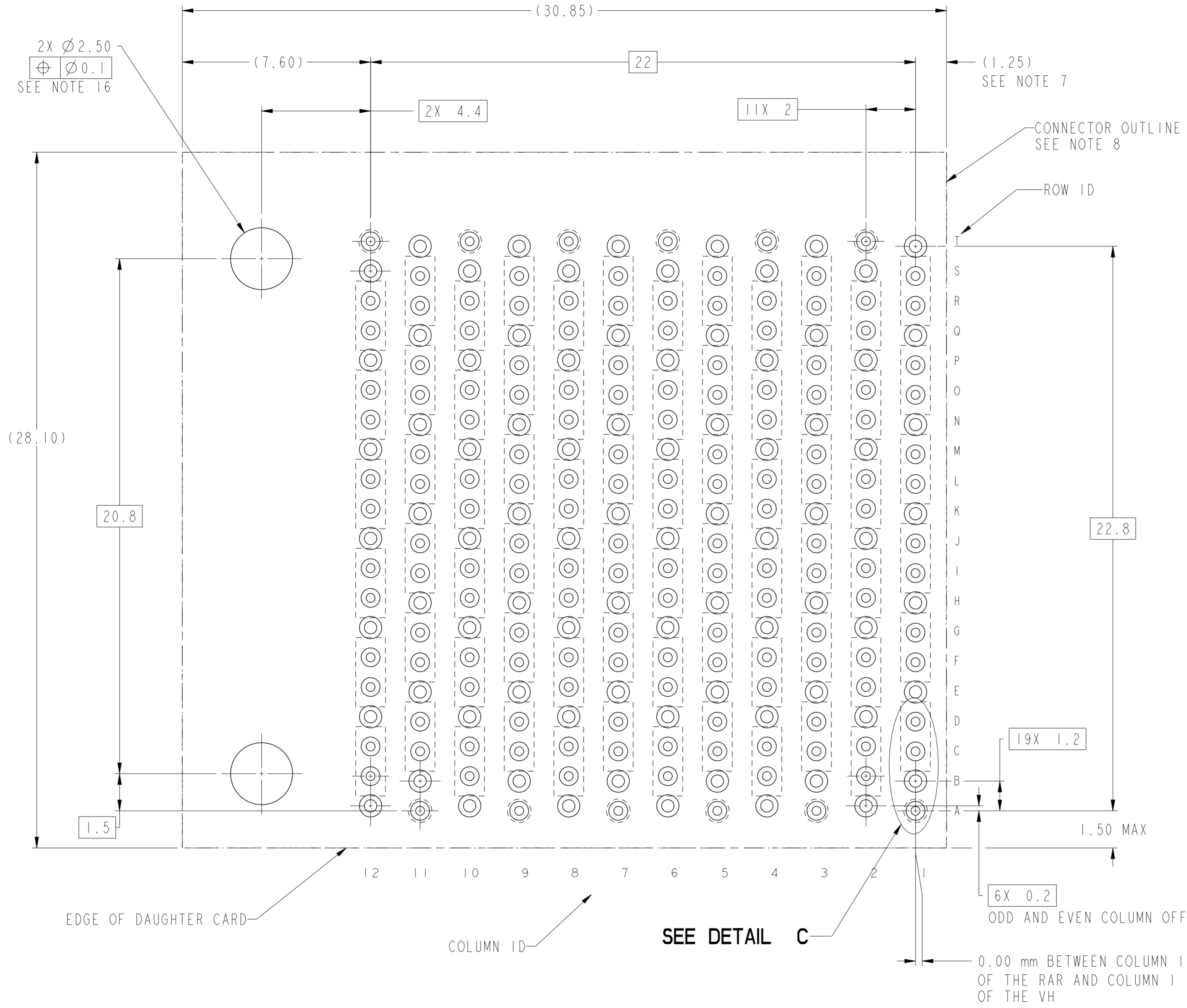
© 2016 AFci



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	Greg Hull	2014/09/22	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	Preliminary
ISO 406 ISO 1101		chr	-	product family			ExaMAX			
surface	linear	0.X	±.3	<b>Amphenol FCi</b>	title ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 25mm		dwg no	10131766	rev	9
		0.XX	±.10		cat. no.	SEE TABLE	Product - Customer Drw	sheet 8 of 11		
ISO 1302	angular	0°	±°							



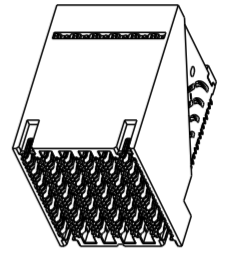
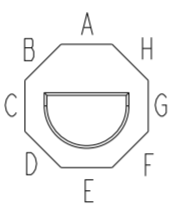

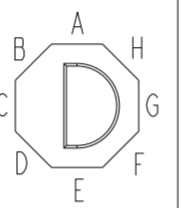
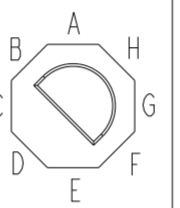
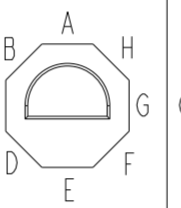
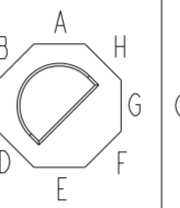
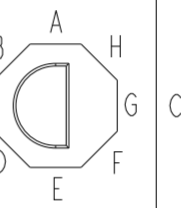
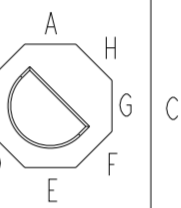

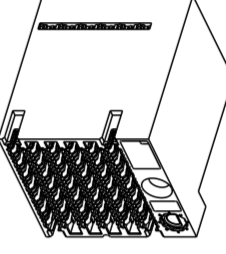
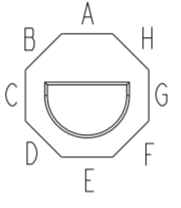
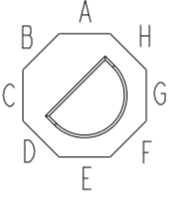
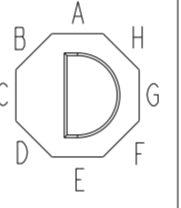
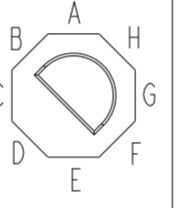
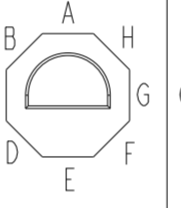
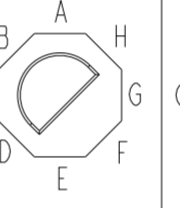
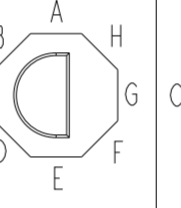
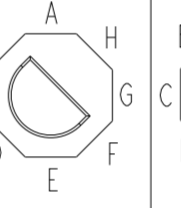
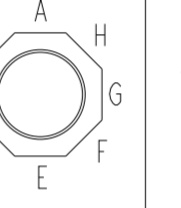


**10131766-X2ALF THRU -X2JLF  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, 11 & 16  
SCALE 8:1**

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	8:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	Preliminary
ISO 406		chr	-							
ISO 1101		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 9	cat. no. - Product - Customer Drw sheet 9 of 11	
		0.XX	±.10							
		0.XXX	±.050							
	angular	0°	±°							

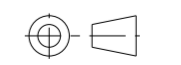
10131766 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION
10131766-1YYLF	STANDARD MATE
10131766-2YYLF	ADVANCED MATE
10131766-3YYLF	SHORT DETECT
10131766-4YYLF	ADVANCED MATE & SHORT DETECT

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

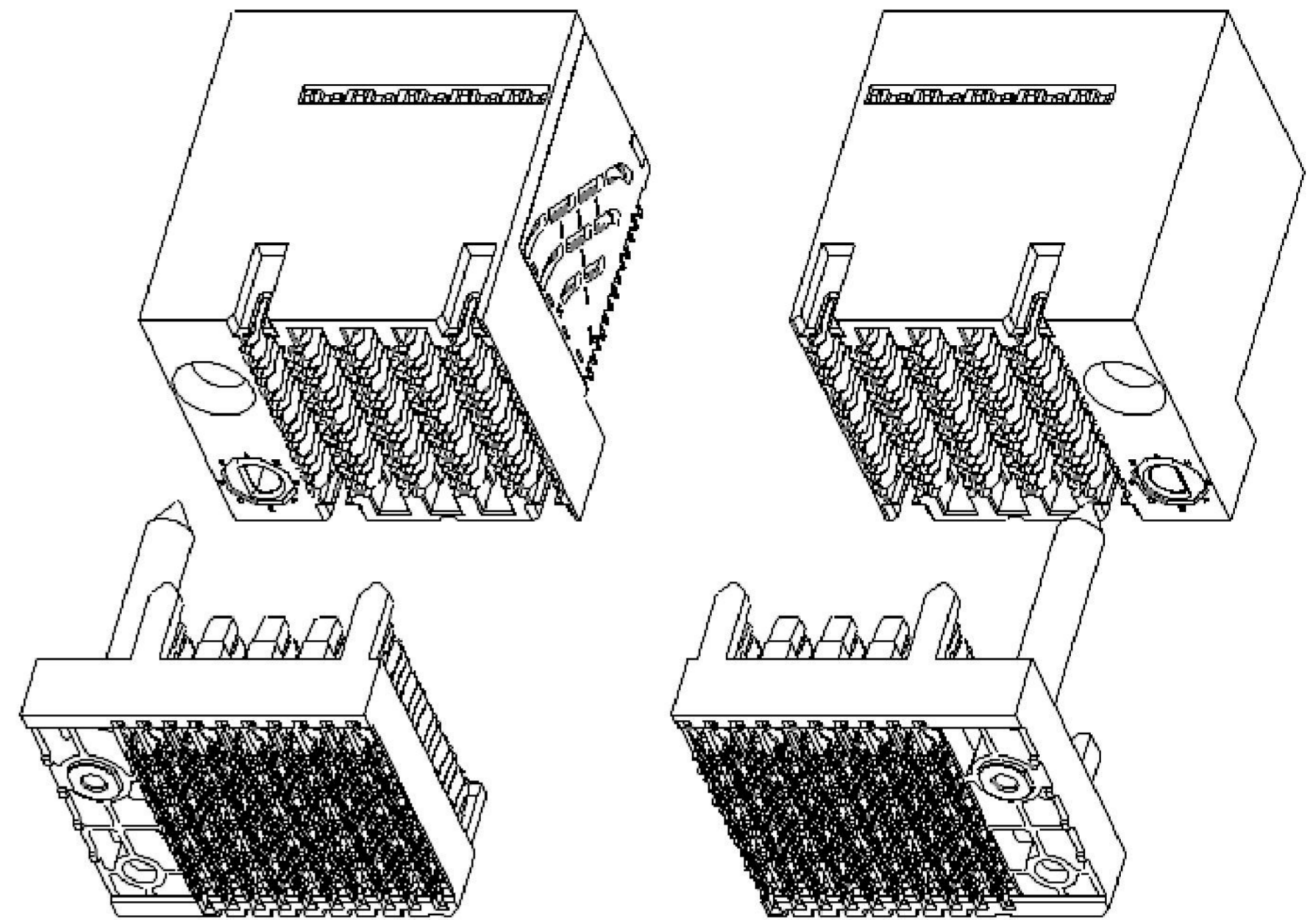
Amphenol FCI

© 2016 AFCI

spec ref	SEE NOTES	dr	Greg Hull	2014/09/22	projection	MM	size	A2	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31		←→	ecn no	-	rel level	Preliminary
ISO 406		chr	-	-						
ISO 1101		appr	-	-						
surface	linear	0.X	±.3	Amphenol FCI	title	ExaMAX R.A. RECEPTACLE ASSY	dwg no	10131766	rev	9
ISO 1302		0.XX	±.10							
	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:  
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, (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, 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 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	2014/09/22	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/03/31			ecn no	-	rel level	Preliminary
ISO 406		chr	-	product family			ExaMAX			
ISO 1101		appr	-	title	ExaMAX R.A. RECEPTACLE ASSY	dwg no	10131766	rev	9	
surface	linear	0.X	±.3	cat. no.	SEE TABLE	Product - Customer Drw	sheet 11 of 11			
		0.XX	±.10							
		0.XXX	±.050							
ISO 1302	angular	0°	±°							

Amphenol FCI

© 2016 AFCI

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[FCI / Amphenol:](#)

[10131766-301LF](#)