

PRODUCT NUMBER  
SEE TABLE

EVEN COLUMN CONTACT ROW ID

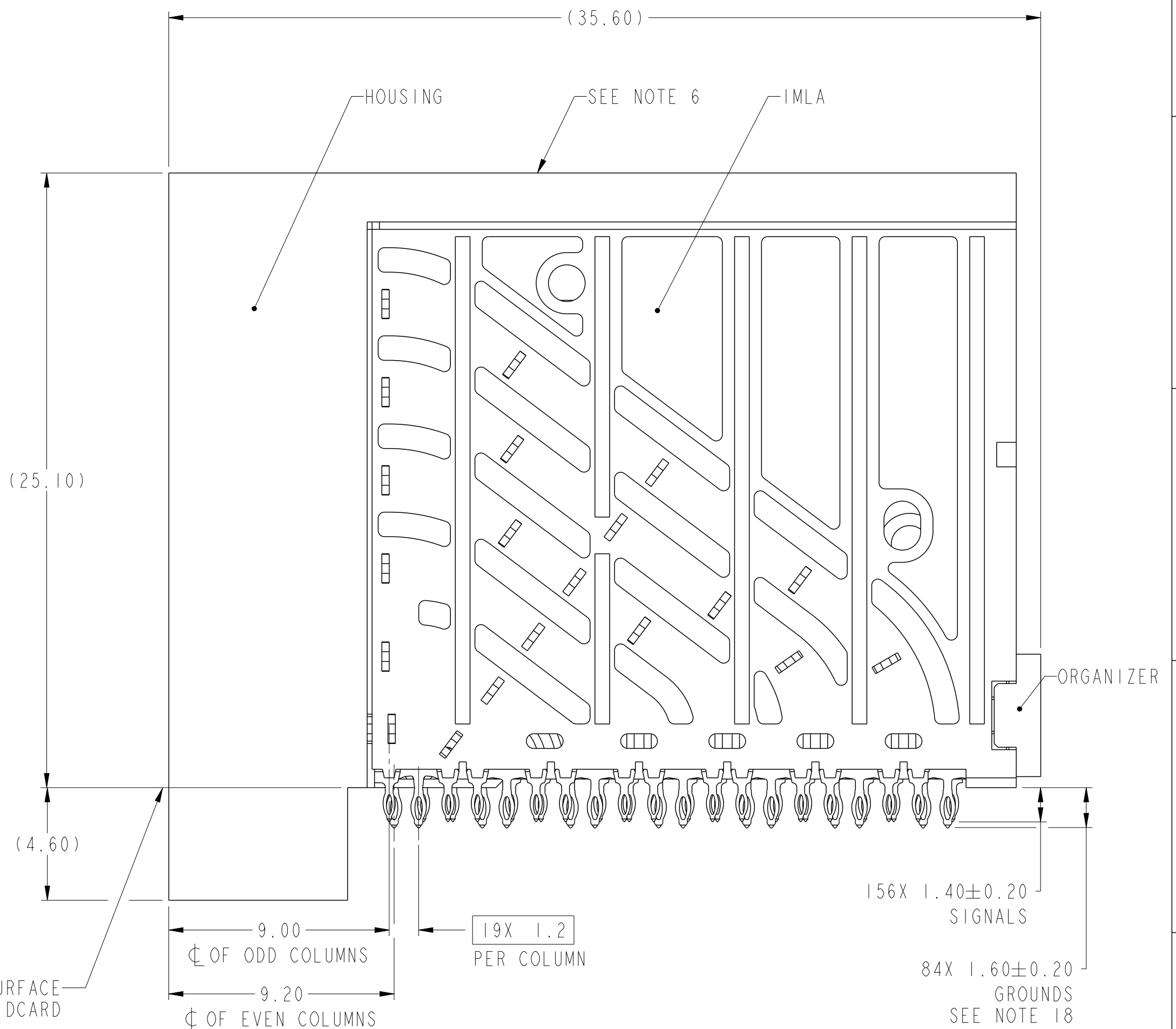
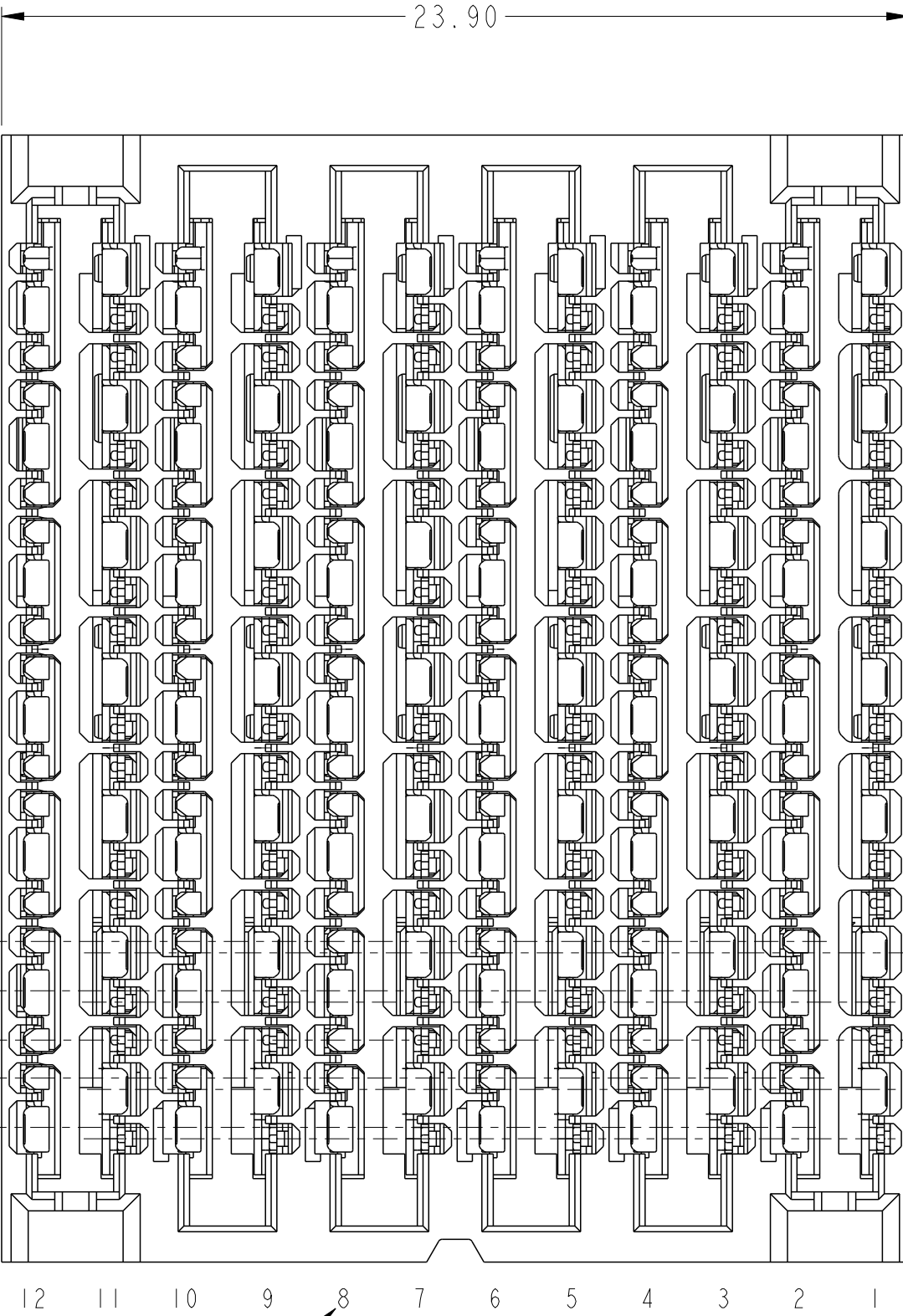
ODD COLUMN CONTACT ROW ID  
ODD & EVEN COLUMNS ARE OFFSET

HOUSING

SEE NOTE 6

IMLA

ORGANIZER



10123159-101LF  
STANDARD MATE RECEPTACLE  
SCALE 6:1

Amphenol FCI

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spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	6:1									
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released									
ASME Y14.5M		chr	Justin Chen	2017/11/29															
		appr	Heaven Cen	2017/11/30															
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>title</b> ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 24mm		<b>dwg no</b> 10123159	<b>rev</b> B
linear	0.X	±.3																	
	0.XX	±.10																	
	0.XXX	±.050																	
angular	0°	±°																	
		cat. no.	SEE TABLE	Product - Customer Drw	sheet 1 of 11														

PDS: Rev :B

STATUS:Released

Printed: Dec 01, 2017

1 2 3 4 5 6 7 8

A

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A

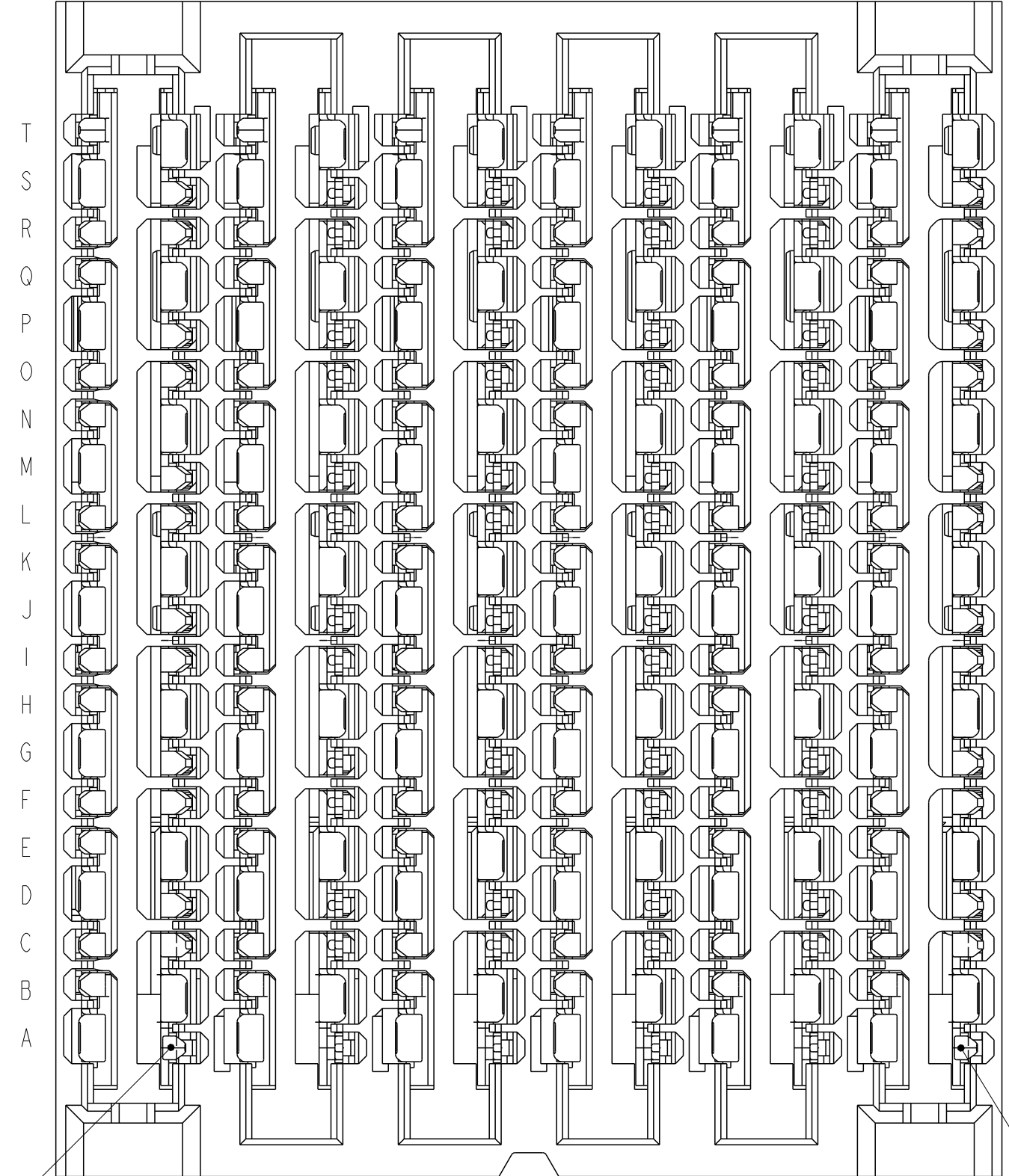
B

C

D

E

F



ADVANCED MATE  
POSITION A11  
SEE NOTE 13

ADVANCED MATE  
POSITION A1  
SEE NOTE 13

**10123159-201LF**  
**ADVANCED MATE RECEPTACLE**  
 ADVANCED MATE POSITIONS ARE A1 AND A11 ONLY  
 FOR ALL DIMENSIONS SEE 10123159-101LF ON SHEET 1  
 SCALE 7:1

**Amphenol  
FCi**

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spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	7:1																	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1																			
ASME Y14.5M		chr	Justin Chen	2017/11/29			rel level	Released																			
surface	<table border="1"> <tr> <td rowspan="3">-</td> <td rowspan="3">linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td></td> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	-	linear	0.X	±.3	0.XX	±.10	0.XXX	±.050		angular	0°	±°		<table border="1"> <tr> <td>title</td> <td>ExaMAX R.A. RECEPTACLE ASSY</td> <td>dwg no</td> <td>10123159</td> <td>rev</td> <td>B</td> </tr> <tr> <td>cat. no.</td> <td>SEE TABLE</td> <td>Product - Customer Drw</td> <td colspan="3">sheet 2 of 11</td> </tr> </table>	title	ExaMAX R.A. RECEPTACLE ASSY	dwg no	10123159	rev	B	cat. no.	SEE TABLE	Product - Customer Drw	sheet 2 of 11		
-	linear			0.X	±.3																						
				0.XX	±.10																						
		0.XXX	±.050																								
	angular	0°	±°																								
title	ExaMAX R.A. RECEPTACLE ASSY	dwg no	10123159	rev	B																						
cat. no.	SEE TABLE	Product - Customer Drw	sheet 2 of 11																								

PDS: Rev :B

STATUS:Released

Printed: Dec 01, 2017

1 2 3 4 5 6 7 8

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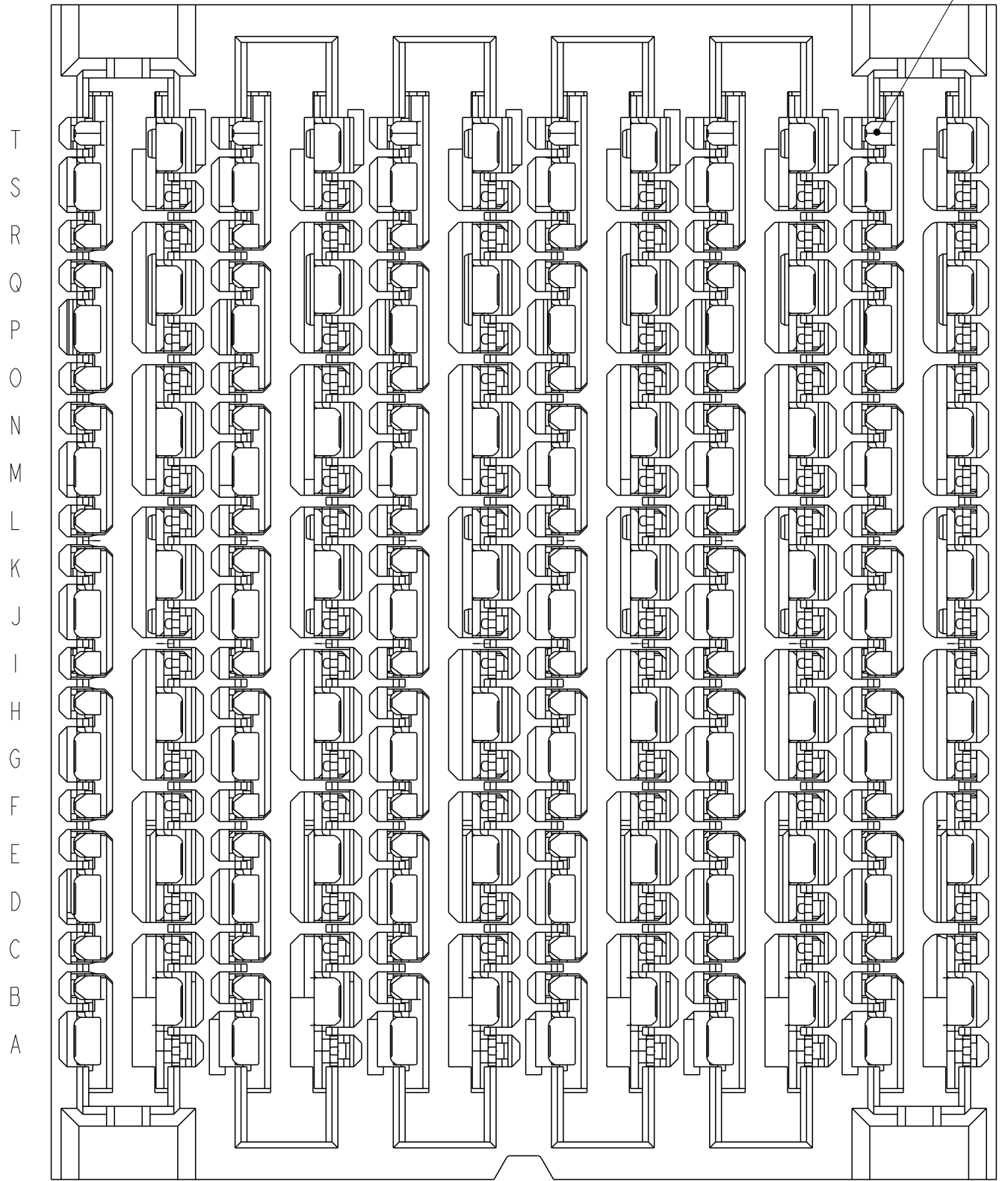
C

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E

F

SHORT DETECT  
POSITION T2  
SEE NOTE 14



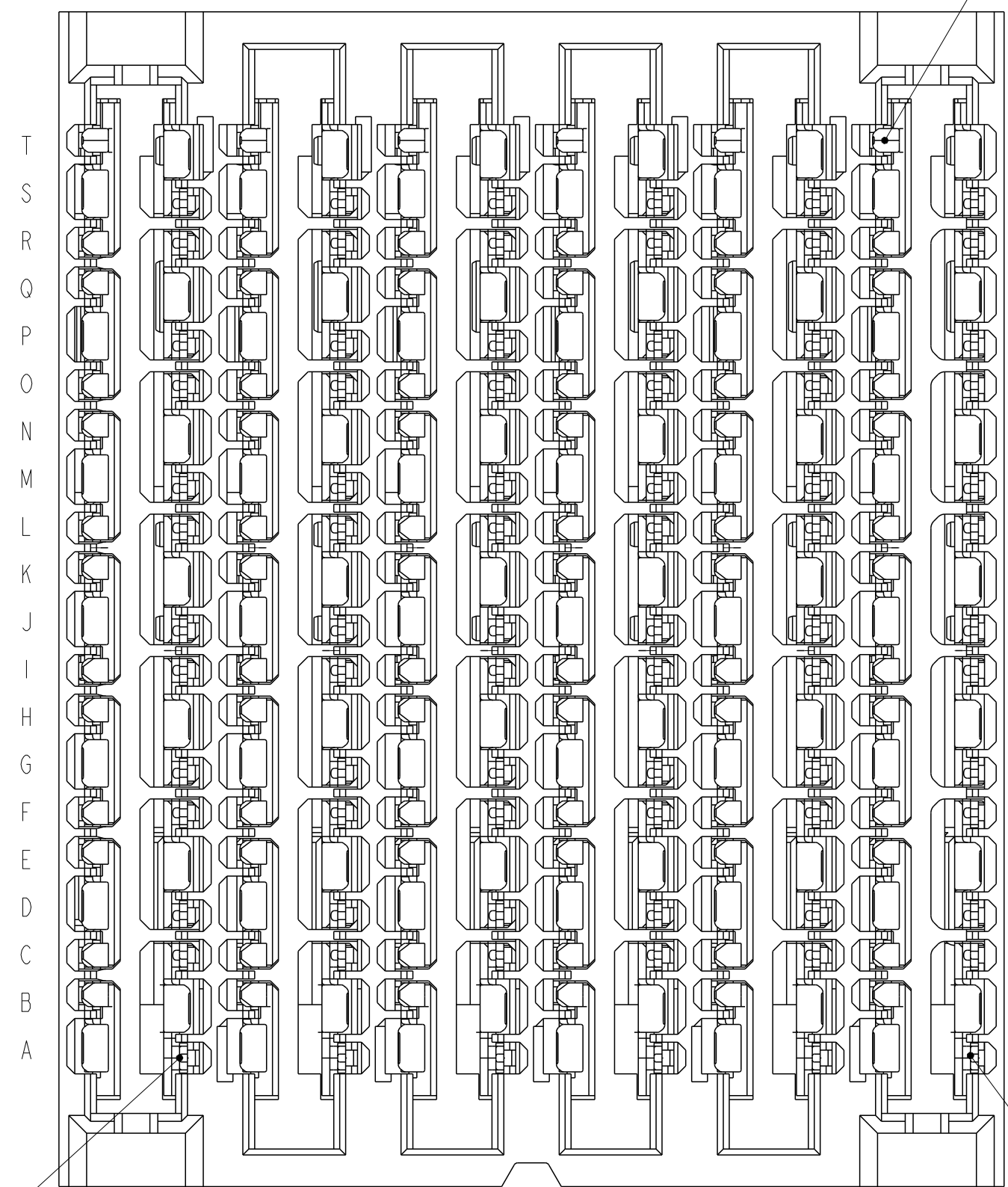
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**10123159-301LF**  
**SHORT DETECT RECEPTACLE**  
**SHORT DETECT POSITION IS T2**  
**FOR ALL DIMENSIONS SEE 10123159-101LF ON SHEET 1**  
**SCALE 7:1**

**Amphenol  
FCi**

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spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1		
ASME Y14.5M		chr	Justin Chen	2017/11/29			rel level	Released		
surface		appr	Heaven Cen	2017/11/30	product family	ExaMAX		rel level	Released	
linear		0.X	±.3	<b>Amphenol FCi</b>	title		ExaMAX R.A. RECEPTACLE ASSY	dwg no	10123159	
		0.XX	±.10		6 PR, 12 IMLA, 240 POS, 24mm		rev	B		
angular	0°	±°	cat. no.		SEE TABLE	Product - Customer Drw	sheet 3 of 11			



SHORT DETECT  
POSITION T2  
SEE NOTE 15

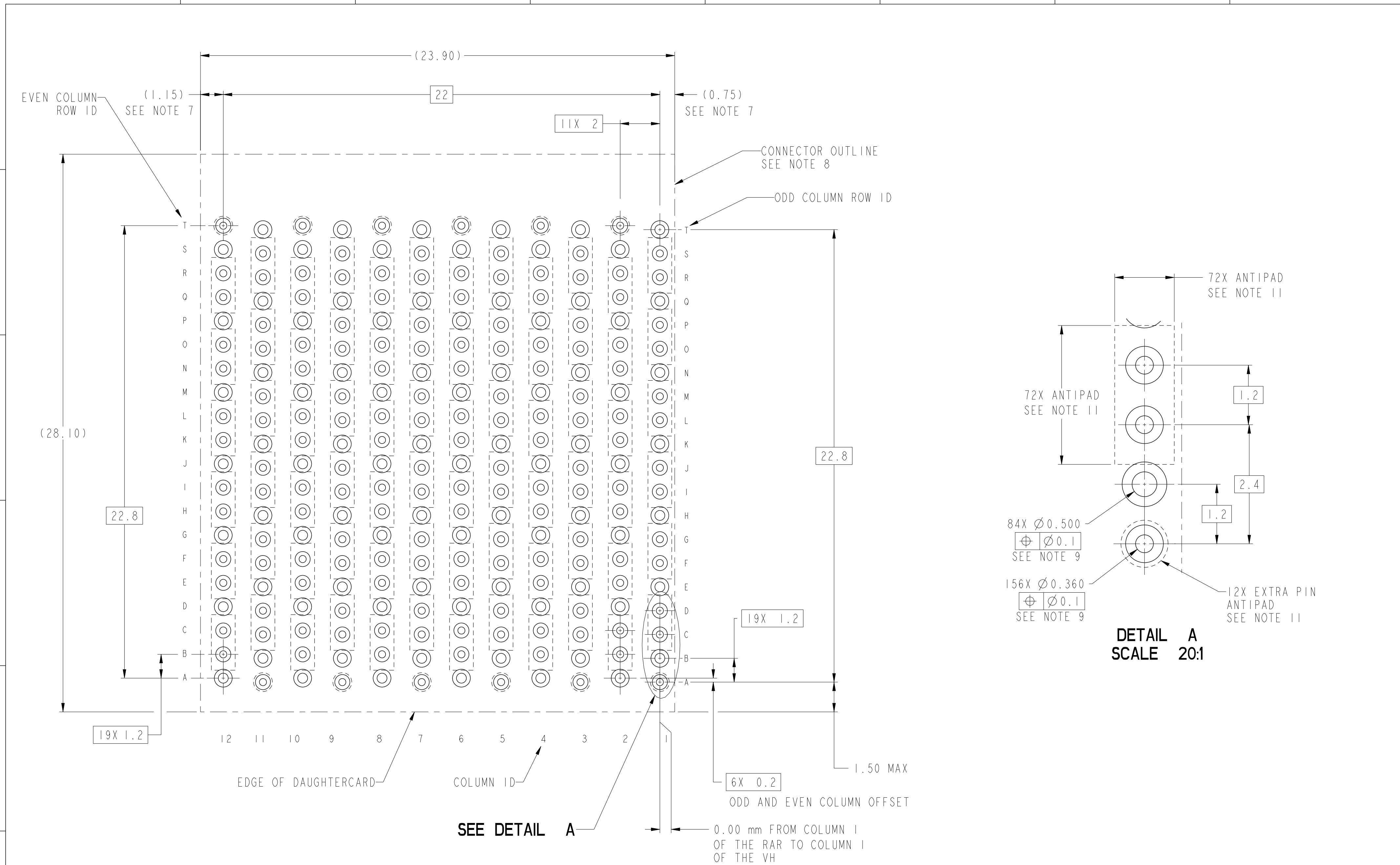
ADVANCED MATE  
POSITION A11  
SEE NOTE 15

ADVANCED MATE  
POSITION A1  
SEE NOTE 15

**10123159-401LF**  
**ADVANCED MATE/SHORT DETECT RECEPTACLE**  
**ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A11 ONLY**  
**SHORT DETECT POSITION IS T2**  
**FOR ALL DIMENSIONS SEE 10123159-101LF ON SHEET 1**  
**SCALE 7:1**

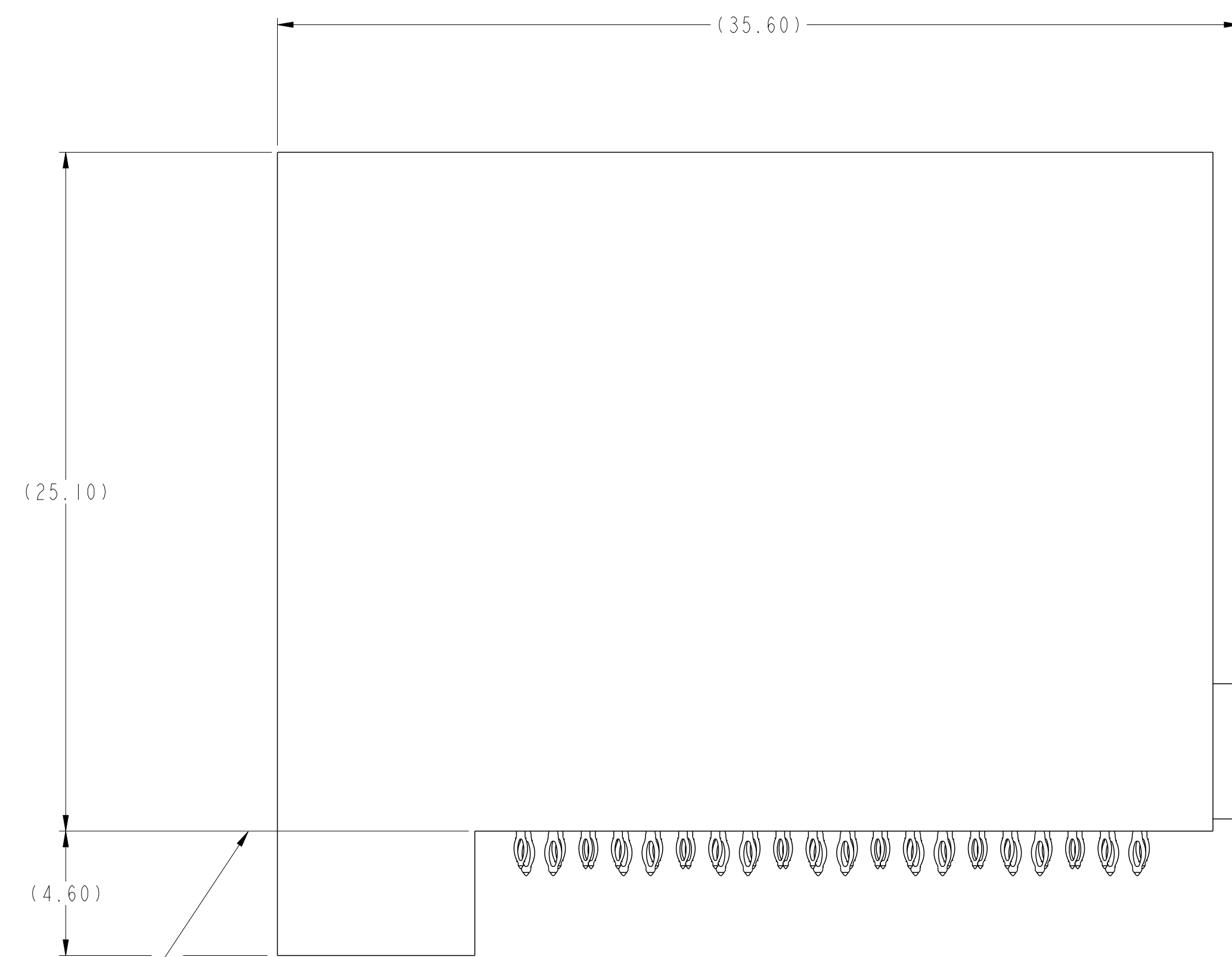
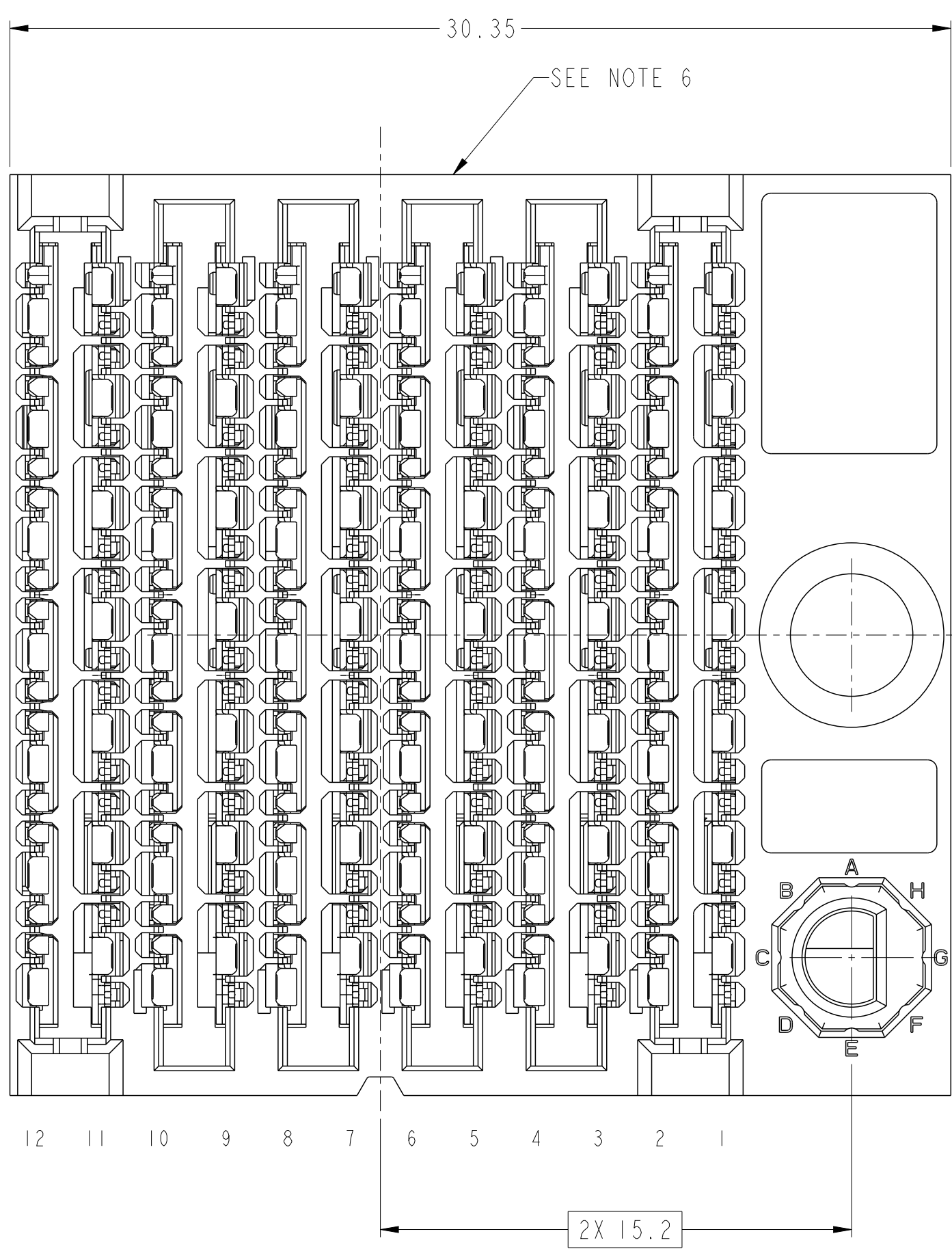
spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	7:1								
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1										
ASME Y14.5M		chr	Justin Chen	2017/11/29			product family	ExaMAX	rel level	Released								
		appr	Heaven Cen	2017/11/30			title	ExaMAX R.A. RECEPTACLE ASSY	dwg no	10123159	rev	B						
surface	<table border="1"> <tr> <td rowspan="3">-</td> <td rowspan="3">linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td>0.XX</td> <td>±.10</td> </tr> <tr> <td>0.XXX</td> <td>±.050</td> </tr> <tr> <td></td> <td>angular</td> <td>0°</td> <td>±°</td> </tr> </table>	-	linear	0.X	±.3	0.XX	±.10	0.XXX	±.050		angular	0°	±°	Amphenol FCi	cat. no.	SEE TABLE	Product - Customer Drw	sheet 4 of 11
-	linear			0.X	±.3													
				0.XX	±.10													
		0.XXX	±.050															
	angular	0°	±°															





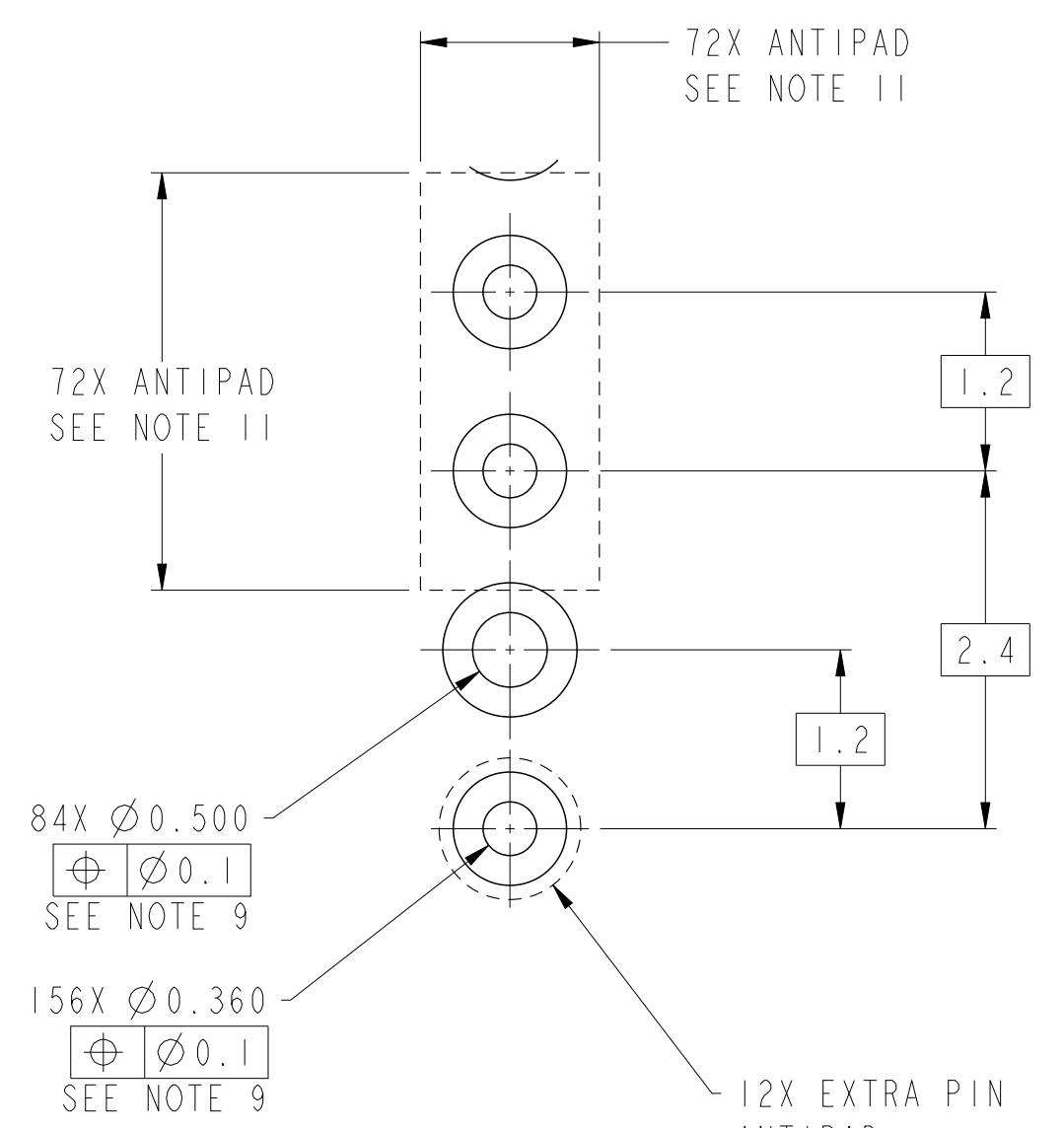
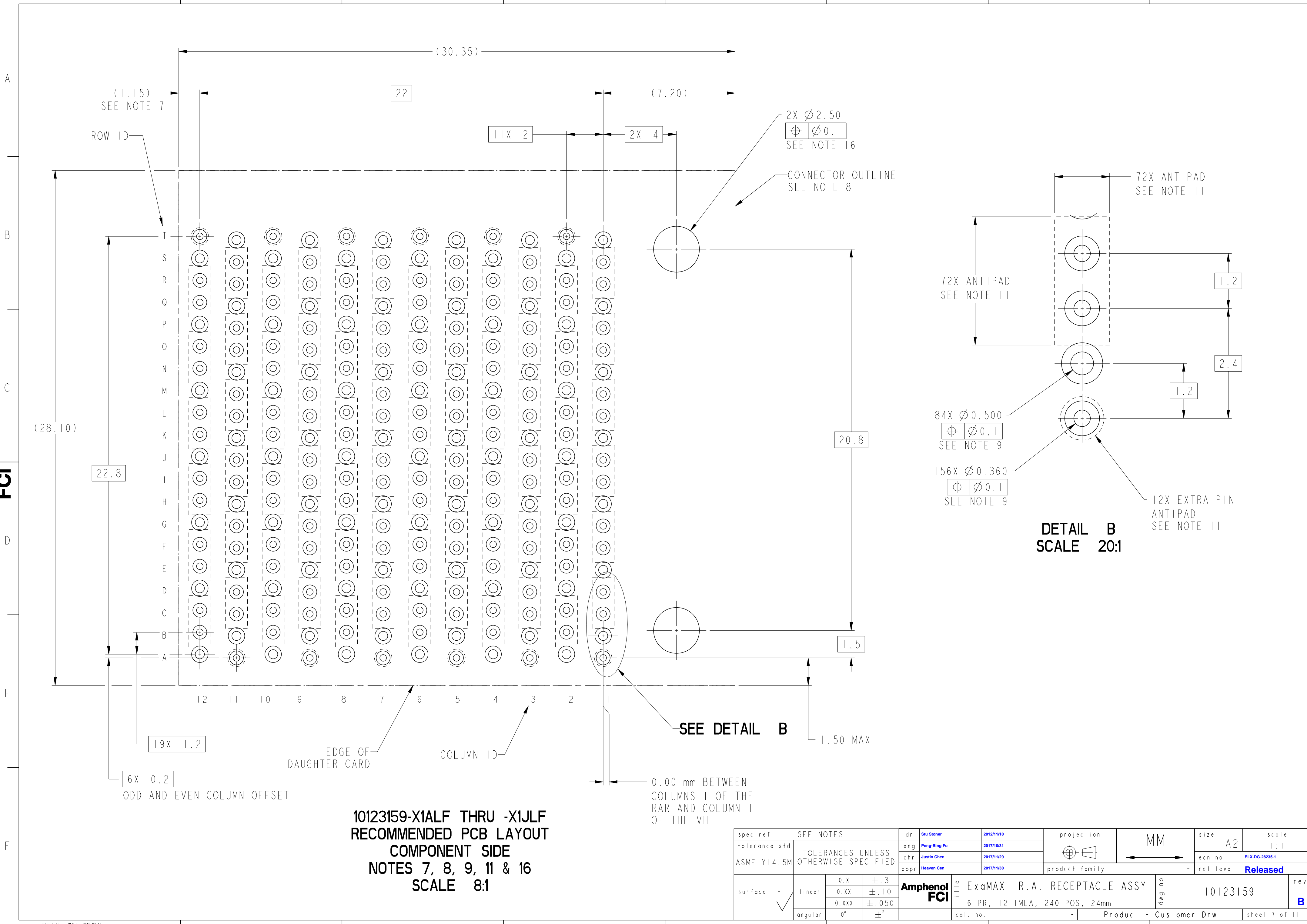
10123159-X01  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, & 11  
SCALE 8:1

spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	8:1			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released			
ASME Y14.5M		chr	Justin Chen	2017/11/29									
		appr	Heaven Cen	2017/11/30									
surface	linear	0.X	±.3		product family		-	-	-	-			
		0.XX	±.10		title						ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 24mm	drwg no 10123159	rev B
		0.XXX	±.050		cat. no.								
	angular	0°	±°	PDS: Rev :B		STATUS:Released		Printed: Dec 01, 2017					



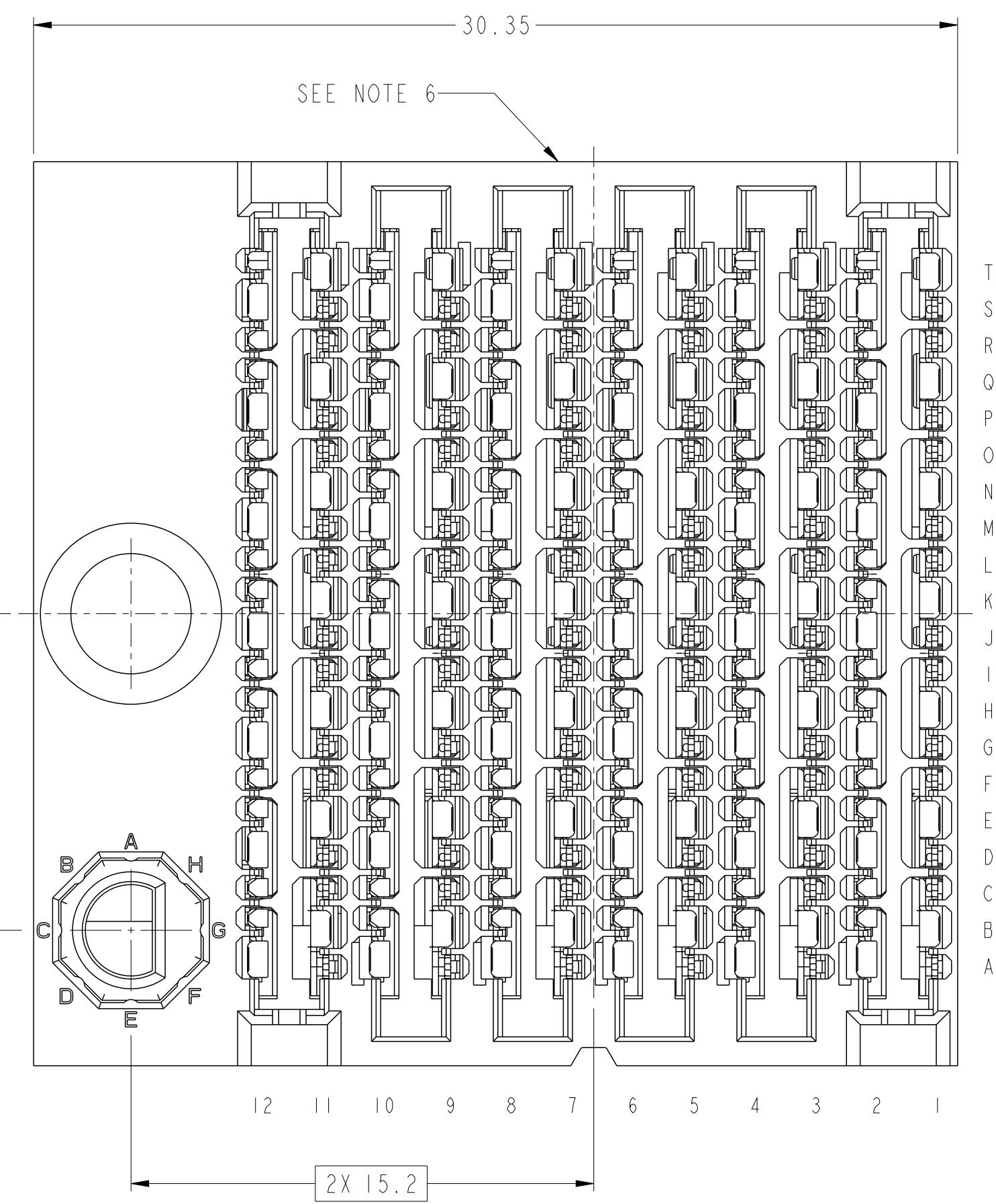
10123159-X1ALF THRU 10123159-X1JLF  
 RIGHT GUIDANCE (SEE NOTE 17)  
 FOR ALL OTHER DIMENSIONS SEE 10123159-101LF ON SHEET 1  
 SCALE 6:1

spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	6:1									
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released									
ASME Y14.5M		chr	Justin Chen	2017/11/29			product family	ExaMAX		rel level	Released								
		appr	Heaven Cen	2017/11/30			title	ExaMAX R.A. RECEPTACLE ASSY		dwg no	10123159	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°	±°	Amphenol FCi	cat. no.		SEE TABLE	Product - Customer Drw	sheet 6 of 11
linear	0.X	±.3																	
	0.XX	±.10																	
	0.XXX	±.050																	
angular	0°	±°																	



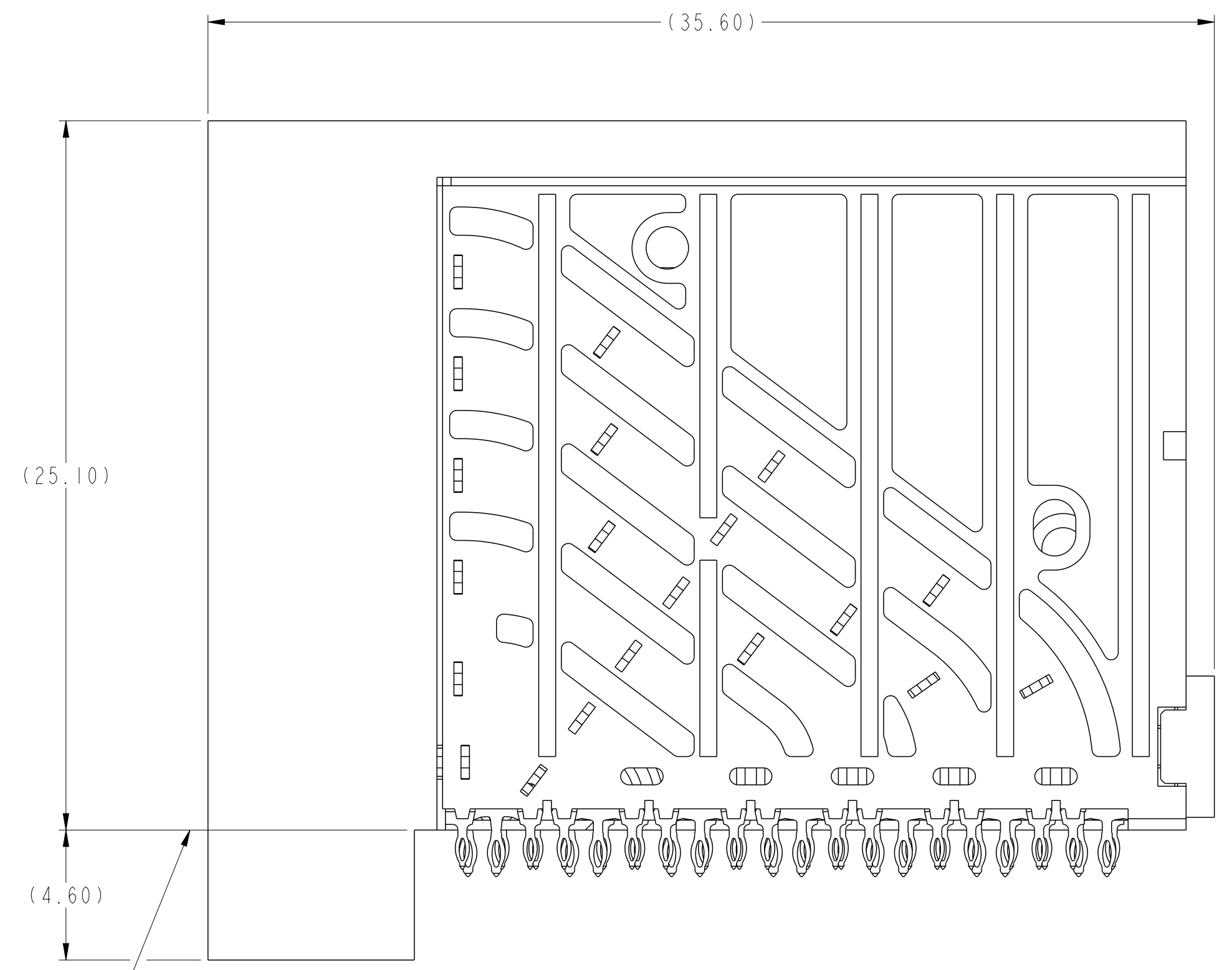
**10123159-X1ALF THRU -X1JLF  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, 11 & 16  
SCALE 8:1**

spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released
ASME Y14.5M		chr	Justin Chen	2017/11/29						
		appr	Heaven Cen	2017/11/30						
surface	linear	0.X	±.3		product family		-	title ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 24mm cat. no.	dwg no 10123159	rev B
		0.XX	±.10		Product - Customer Drw		sheet 7 of 11			
		0.XXX	±.050		STATUS:Released		Printed: Dec 01, 2017			
	angular	0°	±°	PDS: Rev :B						



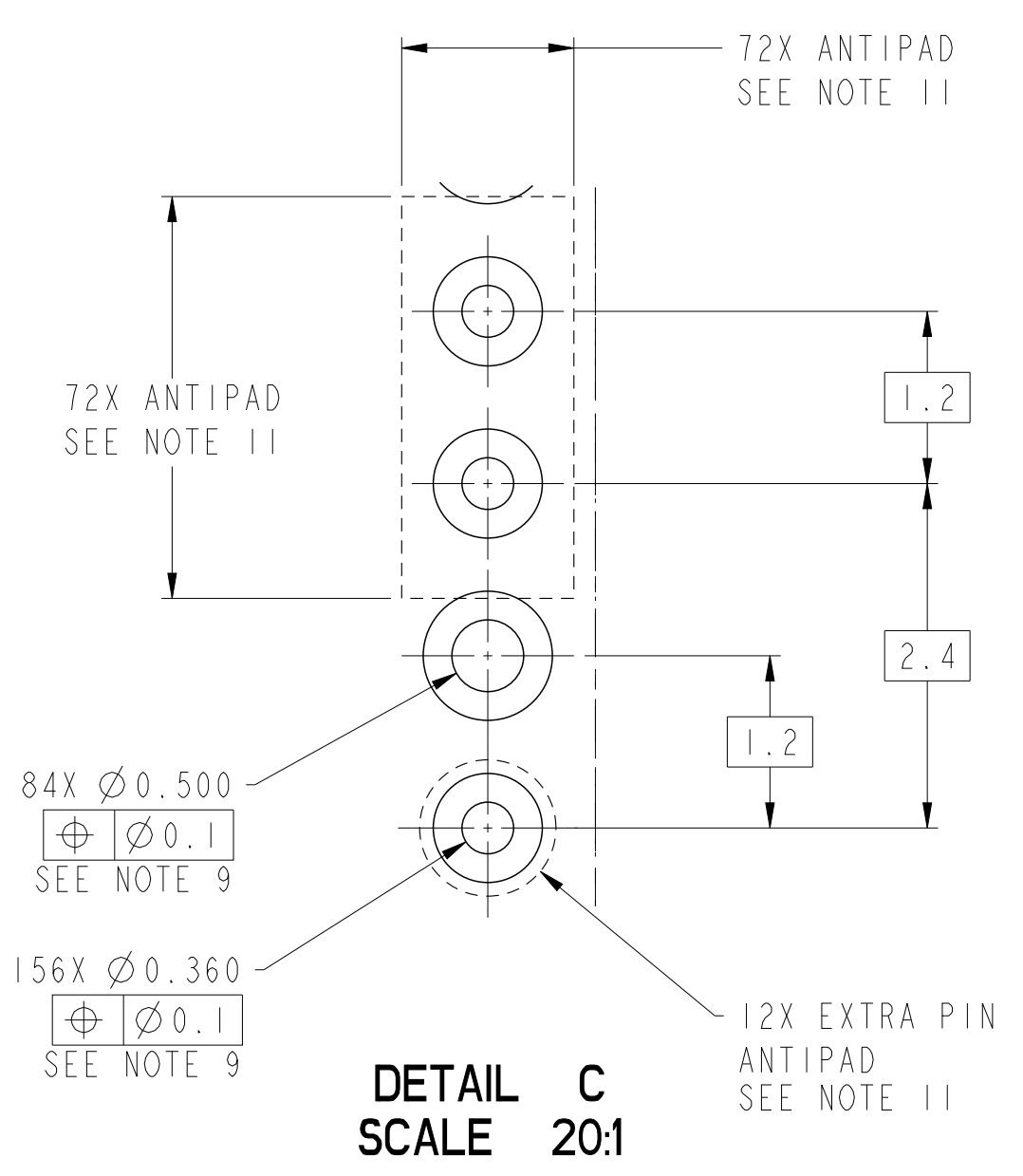
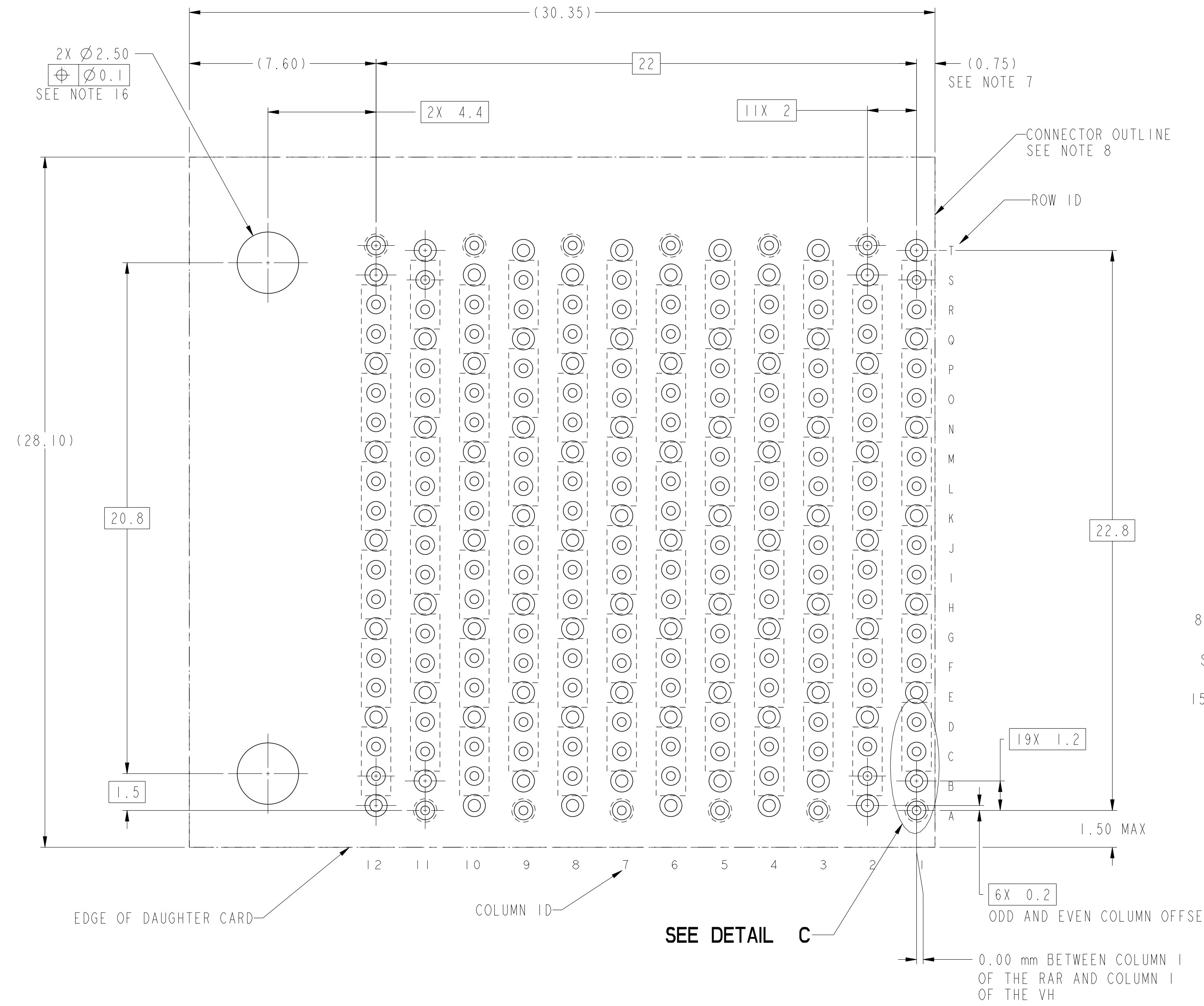
10123159-X2ALF THRU 10123159-X2JLF  
LEFT GUIDANCE (SEE NOTE 17)  
FOR ALL OTHER DIMENSIONS SEE 10123159-101LF ON SHEET 1  
SCALE 6:1

TOP SURFACE  
OF DAUGHTER CARD



spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released
ASME Y14.5M		chr	Justin Chen	2017/11/29			product family	ExaMAX		
		appr	Heaven Cen	2017/11/30			title	ExaMAX R.A. RECEPTACLE ASSY		dwg no
surface	linear	0.X	±.3		6 PR, 12 IMLA, 240 POS, 24mm		cat. no.	SEE TABLE	Product - Customer Drw	sheet 8 of 11
		0.XX	±.10							
		0.XXX	±.050							
	angular	0°	±°							





10123159-X2ALF THRU -X2JLF  
RECOMMENDED PCB LAYOUT  
COMPONENT SIDE  
NOTES 7, 8, 9, 11 & 16  
SCALE 8:1

spec ref	SEE NOTES	dr	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	8:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released
ASME Y14.5M		chr	Justin Chen	2017/11/29						
		appr	Heaven Cen	2017/11/30						
surface	linear	0.X	±.3		title ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 24mm	dwg no 10123159	rev B	cat. no. -	Product - Customer Drw	sheet 9 of 11
		0.XX	±.10							
		0.XXX	±.050							
	angular	0°	±°							

1 0 | 2 3 | 5 9 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION
10123159-1YYLF	STANDARD MATE
10123159-2YYLF	ADVANCED MATE
10123159-3YYLF	SHORT DETECT
10123159-4YYLF	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)										

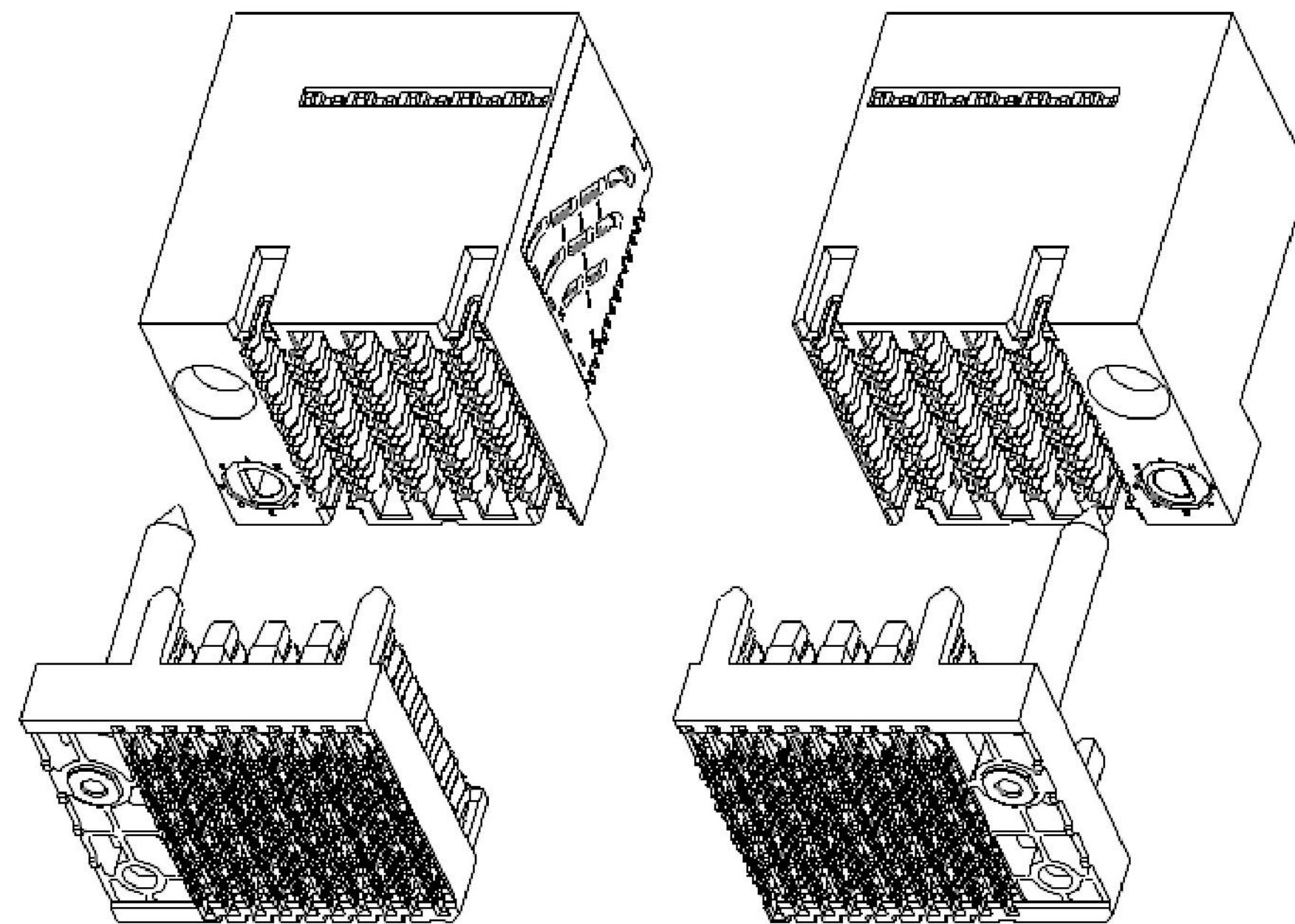
Amphenol FCI

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tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31		←→	ecn no	ELX-DG-28235-1	rel level	Released
ASME Y14.5M		chr	Justin Chen	2017/11/29						
		appr	Heaven Cen	2017/11/30						
surface	linear	0.X	±.3	Amphenol FCI	title	EXaMAX R.A. RECEPTACLE ASSY	dwg no	10123159	rev	B
		0.XX	±.10							
		0.XXX	±.050							
	angular	0°	±°	cat. no.		Product - Customer Drw	sheet 10 of 11			

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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, 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 2.0 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, 10123159-2XXLF, 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, 10123159-3XXLF, 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, 10123159-4XXLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75 mm 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 WITHIN A COLUMN ARE COMMONED.



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	Stu Stoner	2012/11/10	projection	MM	size	A2	scale	6:1						
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2017/10/31			ecn no	ELX-DG-28235-1	rel level	Released						
ASME Y14.5M		chr	Justin Chen	2017/11/29							product family	ExaMAX				
surface	<table border="1"> <tr> <td rowspan="3">linear</td> <td>0.X</td> <td>±.3</td> </tr> <tr> <td>0.XX</td> <td>±.10</td> </tr> <tr> <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°	±°		title ExaMAX R.A. RECEPTACLE ASSY 6 PR, 12 IMLA, 240 POS, 24mm	cat. no. SEE TABLE	Product - Customer Drw	sheet 11 of 11
linear	0.X		±.3													
	0.XX		±.10													
	0.XXX	±.050														
angular	0°	±°														
		appr	Heaven Cen	2017/11/30	dwg no	10123159	rev	B								





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Факс:** 8 (812) 320-02-42

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