

PRODUCT NUMBER  
SEE SHEET 10

A

This technical drawing illustrates the connector mating face and its housing organizer. The connector mating face is a detailed cross-sectional view of the connector's internal structure, showing signal contacts, ground centers, and signal pair centers. The housing organizer is a separate component shown on the right, featuring a central vertical stack of connector pins and a surrounding structure with various features and labels. Key dimensions and labels include:

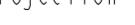
- CONNECTOR MATING FACE:** The main cross-sectional view on the left.
- ODD COLUMN, CONTACT ROW ID:** Labels for the odd columns.
- EVEN COLUMN, CONTACT ROW ID:** Labels for the even columns.
- ODD AND EVEN COLUMNS ARE OFFSET:** A note indicating the offset between odd and even columns.
- 15.90:** The total width of the connector mating face.
- 1.3:** The height of Row A to the first signal.
- 4X 3.6:** The height of four ground centers.
- 4X 1:** The height of four signal pair centers.
- 4X 3.6 SIGNAL CENTERS:** The height of four signal centers.
- 1.3 ROW A TO FIRST SIGNAL:** The height of Row A to the first signal.
- 4.1:** The height of four even columns.
- 3.9:** The height of three odd columns.
- 4.60:** The height of four columns.
- 17.90:** The total height of the connector mating face.
- 6.70:** The width of the connector mating face.
- (23.30):** The total width of the connector mating face and its housing organizer.
- NOTE 6:** A note pointing to the housing organizer.
- IMLA:** A label for a component in the housing organizer.
- HOUSING ORGANIZER:** The separate component shown on the right.
- 72X 1.40±0.20 SIGNALS:** The total number of signals.
- 40X 1.60±0.20 GROUNDS:** The total number of grounds.
- SEE NOTE 18:** A reference note.

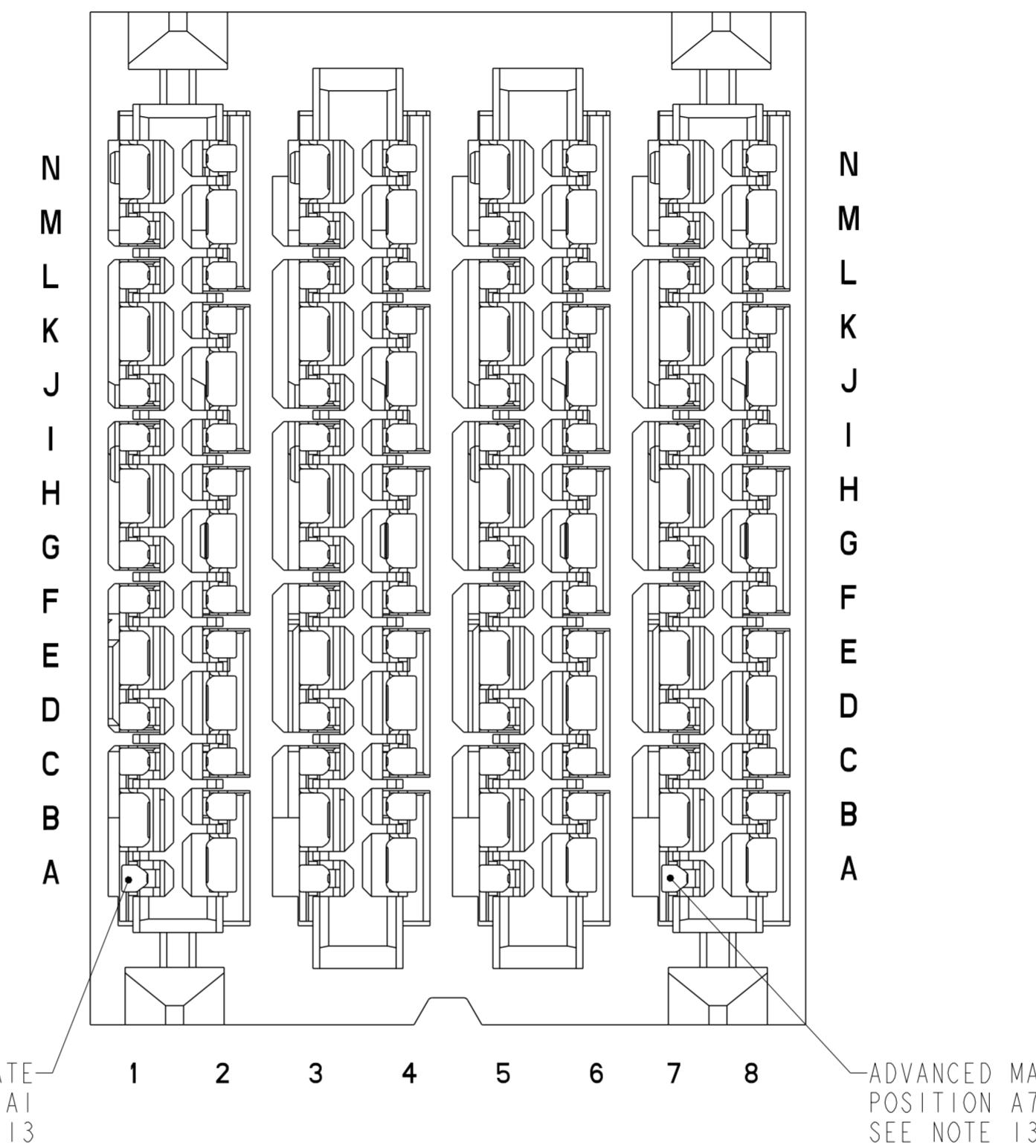
The drawing also includes labels for columns (1 through 8) and rows (A through N) to identify specific contact locations.

10128419-Y01YLF  
(10128419-101YLF STANDARD MATE CONNECTOR SHOWN)

Ampheno  
FCi

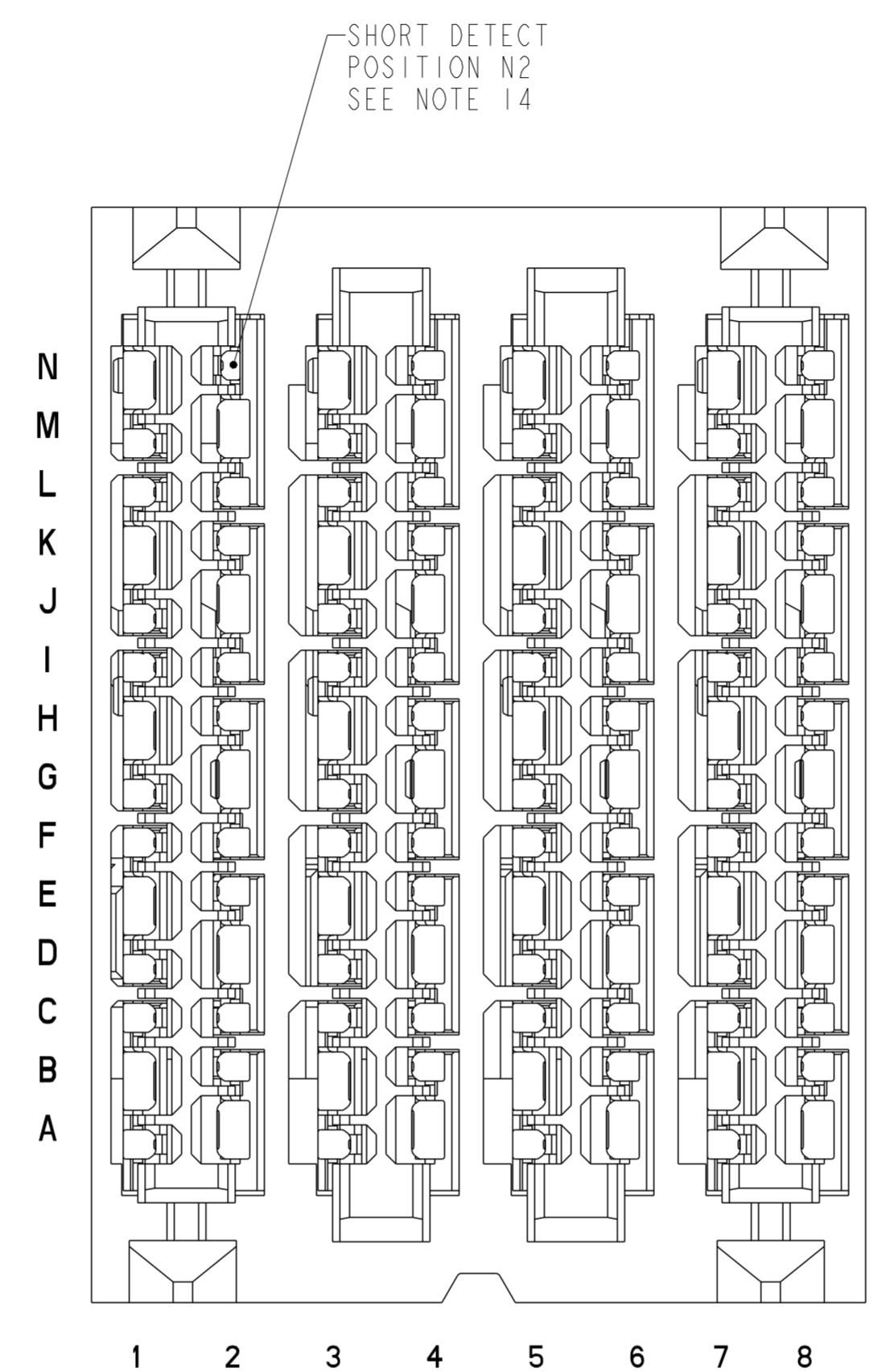
2016 AFCI

spec ref	SEE NOTES	dr	Stu Stoner	2014/02/19			size	A2	scale			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED ASME Y14.5M	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1				
chr		-	-	-			rel level	Released				
appr		Heaven Cen	2020/04/22	product family			rev	10128419				
surface		0.X	±.3	 ExaMAX RIGHT-ANGLE HDR ASSY		dwg	C					
-	linear	0.XX	±.10	4 PR, 112 POS, 8 IMLA		cat. no. SEE TABLE	Product - Customer Drw		sheet 1 of 1			
		0.XXX	±.050									
		angular	0°									

Amphenol  
FCi

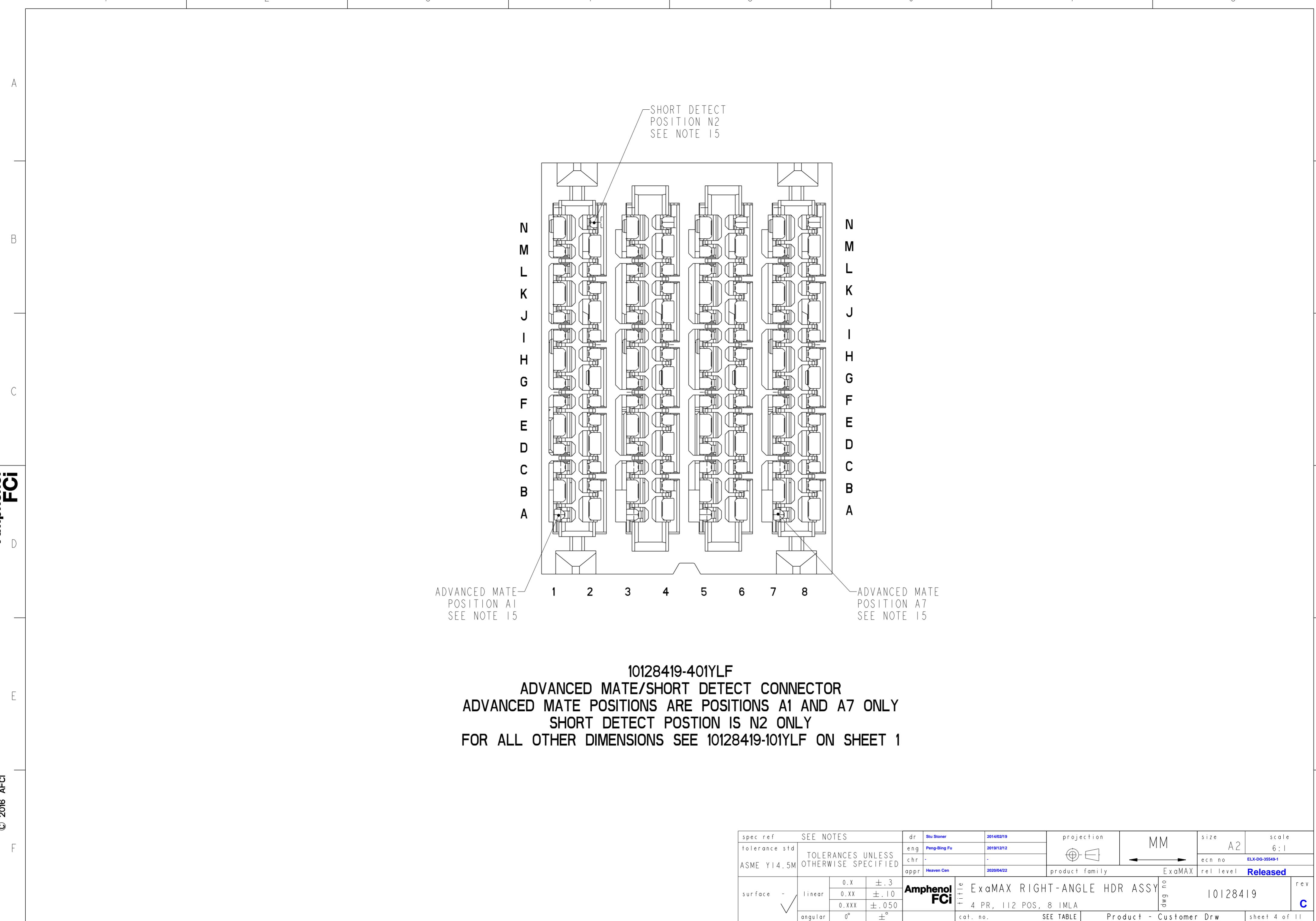
10128419-201YLF  
ADVANCED MATE CONNECTOR  
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A7 ONLY  
FOR ALL OTHER DIMENSIONS SEE 10128419-101YLF ON SHEET 1

spec ref	SEE NOTES			dr	Stu Stoner	2014/02/19	projection	MM	size	scale	
tolerance std	TOLERANCES UNLESS			eng	Peng-Bing Fu	2019/12/12			A2	3:1	
ASME Y14.5M	OTHERWISE SPECIFIED			chr	-	-					
				oppn	Heaven Cen	2020/04/22			ExoMAX	rel level	
surface	-	linear	✓	0.X	±.3		Amphenol FCi			Released	
				0.XX	±.10		ExoMAX RIGHT-ANGLE HDR ASSY				
				0.XXX	±.050		4 PR, 112 POS, 8 IMLA				
		angular		0°	±°		cat. no.	SEE TABLE	Product	Customer Drw	
									10128419	rev C	



10128419-301YLF  
SHORT DETECT CONNECTOR  
SHORT DETECT POSITION IS N2 ONLY  
FOR ALL OTHER DIMENSIONS SEE 10128419-101YLF ON SHEET 1

spec ref	SEE NOTES			dr	Stu Stoner	2014/02/19	projection	MM	size	A2	scale	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12	product family	ExoMAX	ecn no	ELX-DG-35549-1	rev	
ASME Y14.5M				chr	-	-			rel level	Released		
				oppn	Heaven Cen	2020/04/22						
surface		linear	0.X	± .3	Amphenol FCi			ExoMAX RIGHT-ANGLE HDR ASSY 4 PR, 112 POS, 8 IMLA				
-		✓	0.XX	± .10								
			0.XXX	± .050								
		angular	0°	± °				cat. no. SEE TABLE Product - Customer Drw sheet 3 of 11				



A

B

C

1

— 5 —

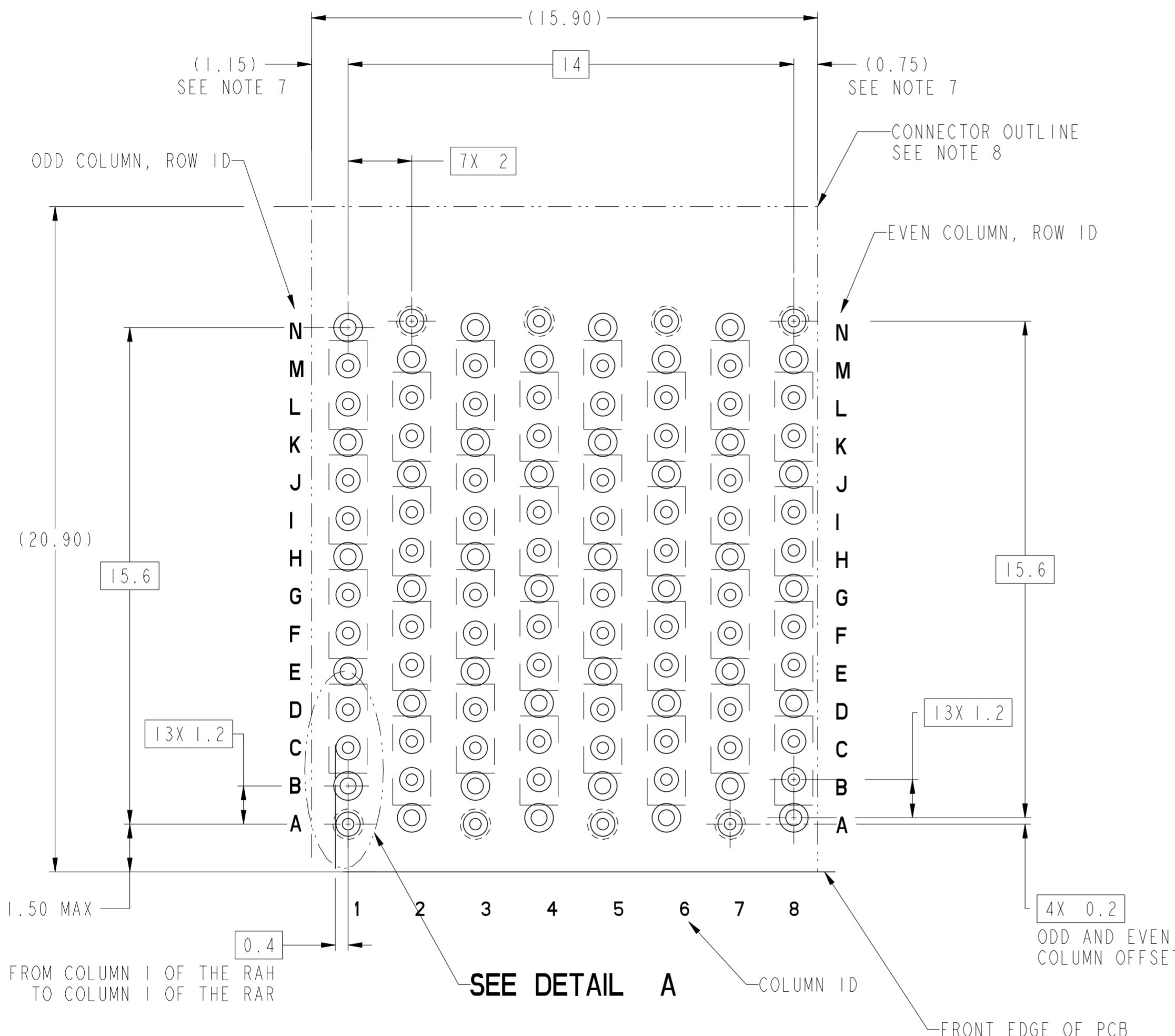
A

B

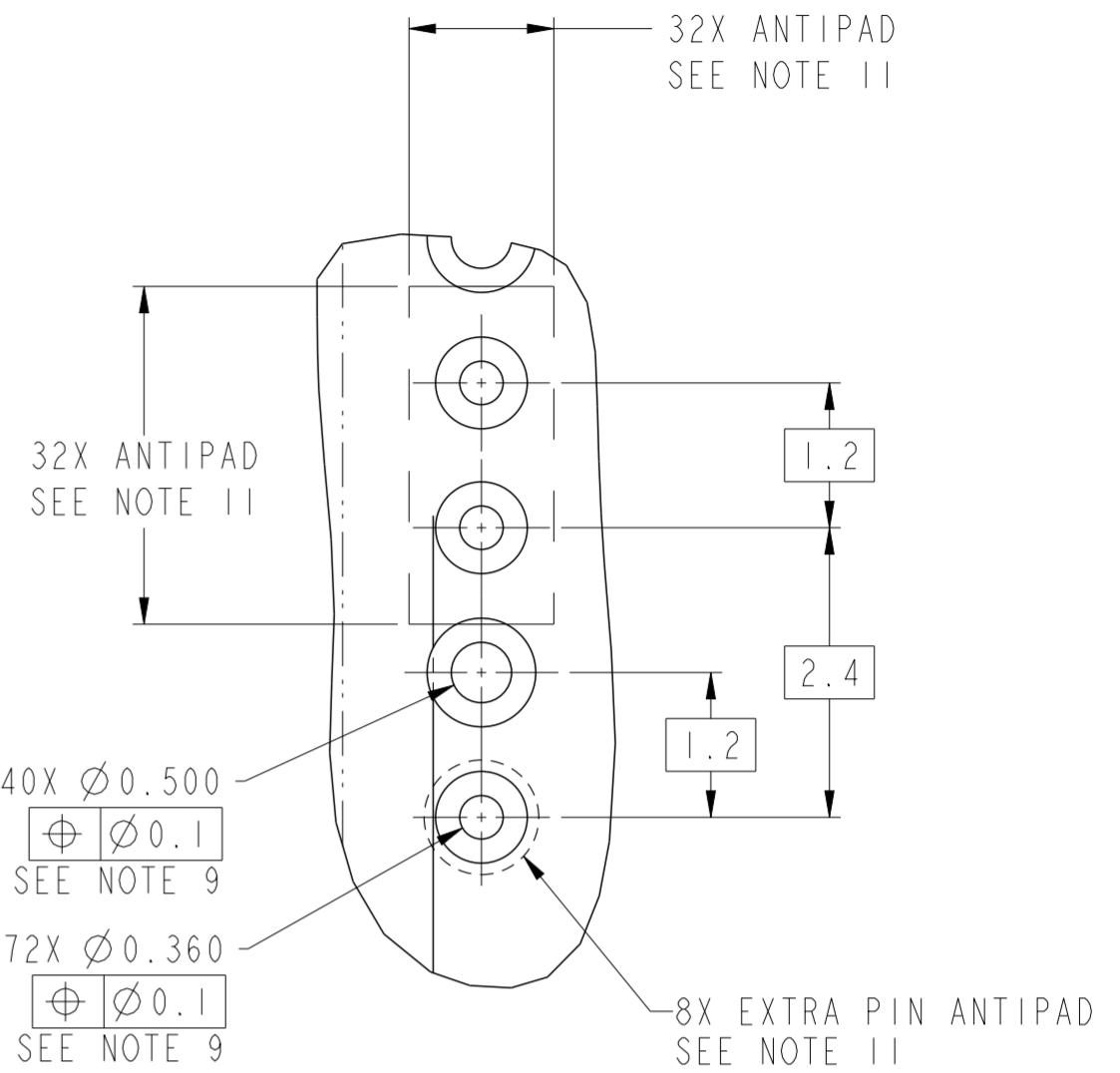
C

1

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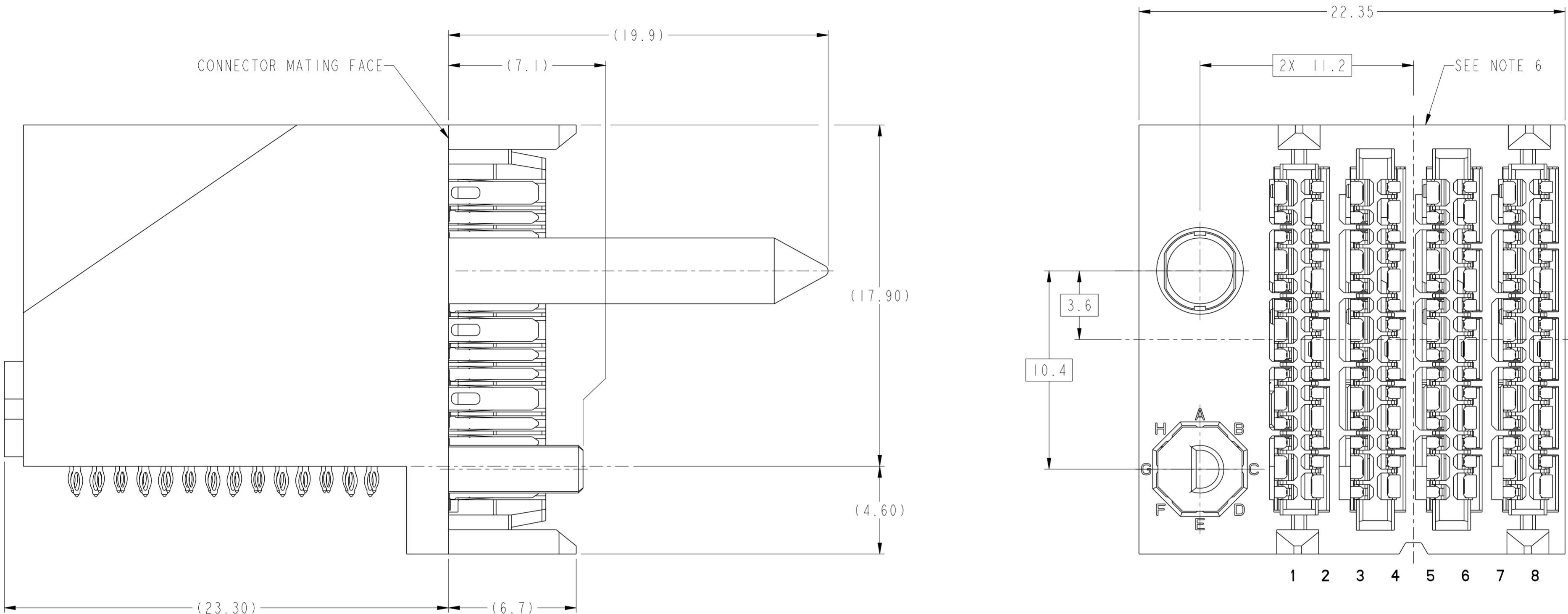


**RECOMMENDED PCB LAYOUT FOR  
10128419-Y01YLF COMPONENT SIDE  
SEE NOTES 7, 8, 9, & 11**



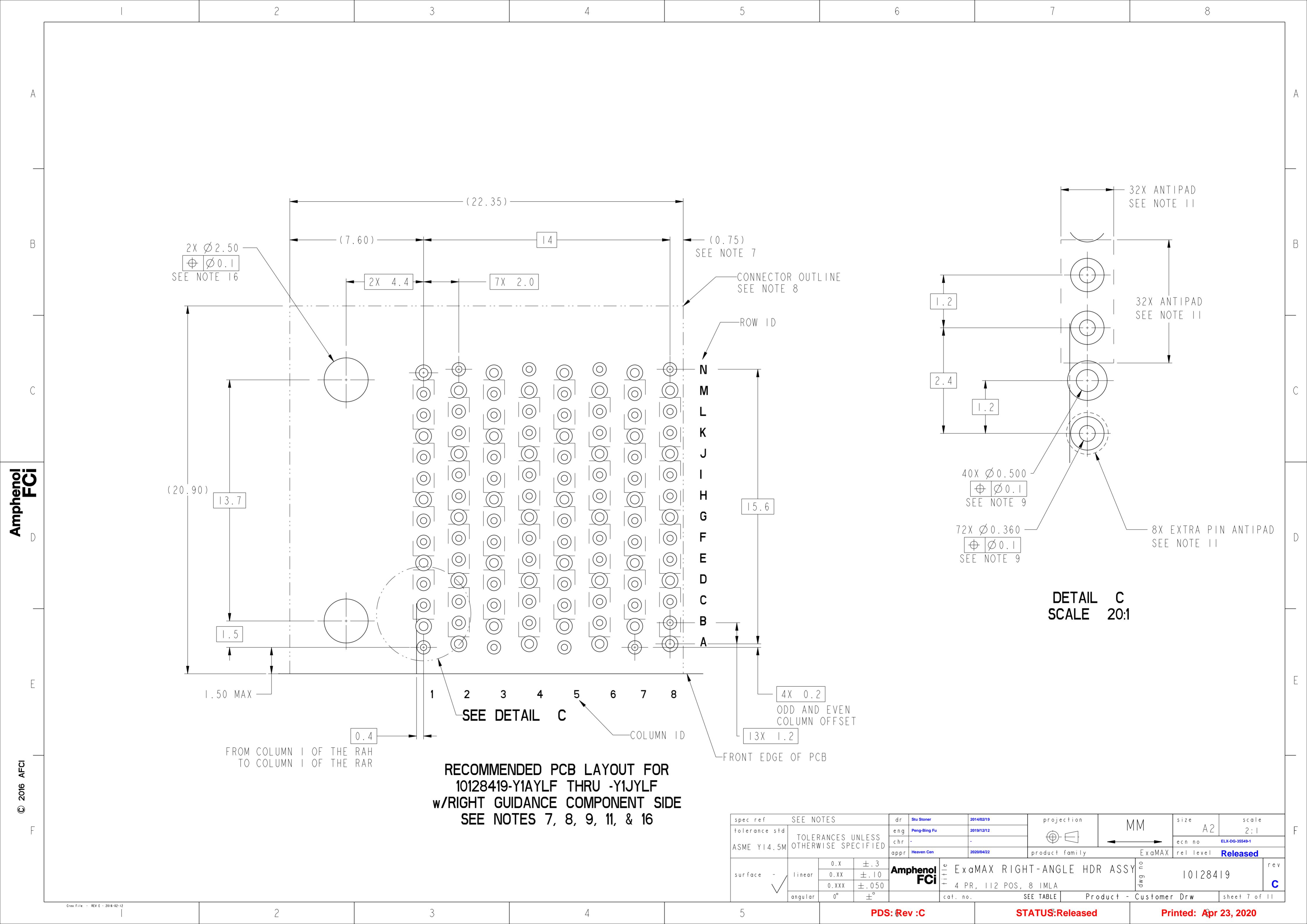
**DETAIL A**

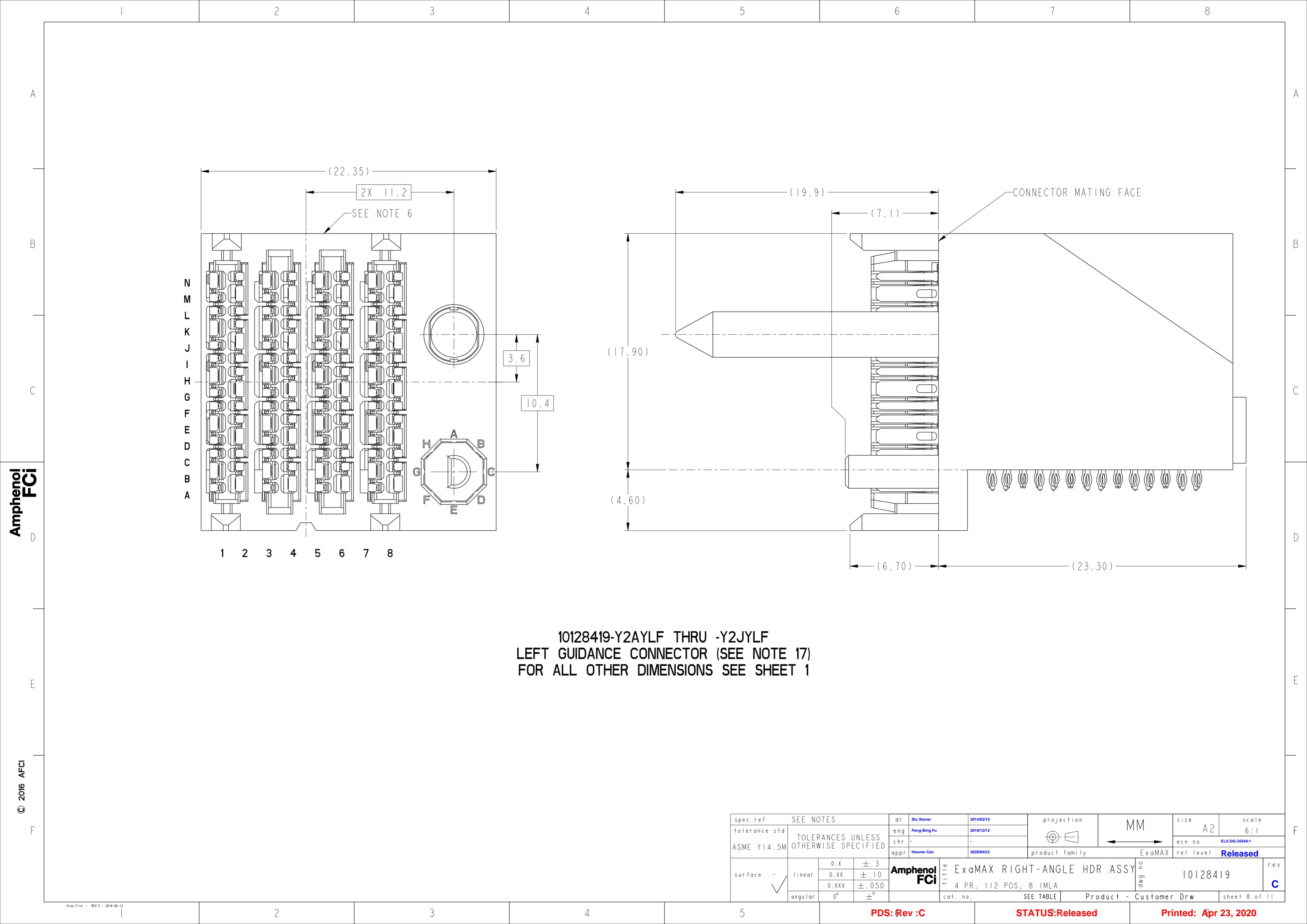
spec ref	SEE NOTES	dr	Stu Stoner	2014/02/19	projection 	MM	size	scale	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED ASME Y14.5M	eng	Peng-Bing Fu	2019/12/12			ecn no	A2	1:1
chr		-	-						
appr		Heaven Cen	2020/04/22	product family			ExaMAX	rel level	Released
surface - 	linear	0.X	±.3	Amphenol <b>FCI</b>	ExaMAX RIGHT-ANGLE HDR ASSY 4 PR, 112 POS, 8 IMLA	dwg no	10128419	rev	
		0.XX	±.10						
		0.XXX	±.050						
	angular	0°	±°		cat. no. SEE TABLE	Product -	Customer Drw	sheet 5 of 11	

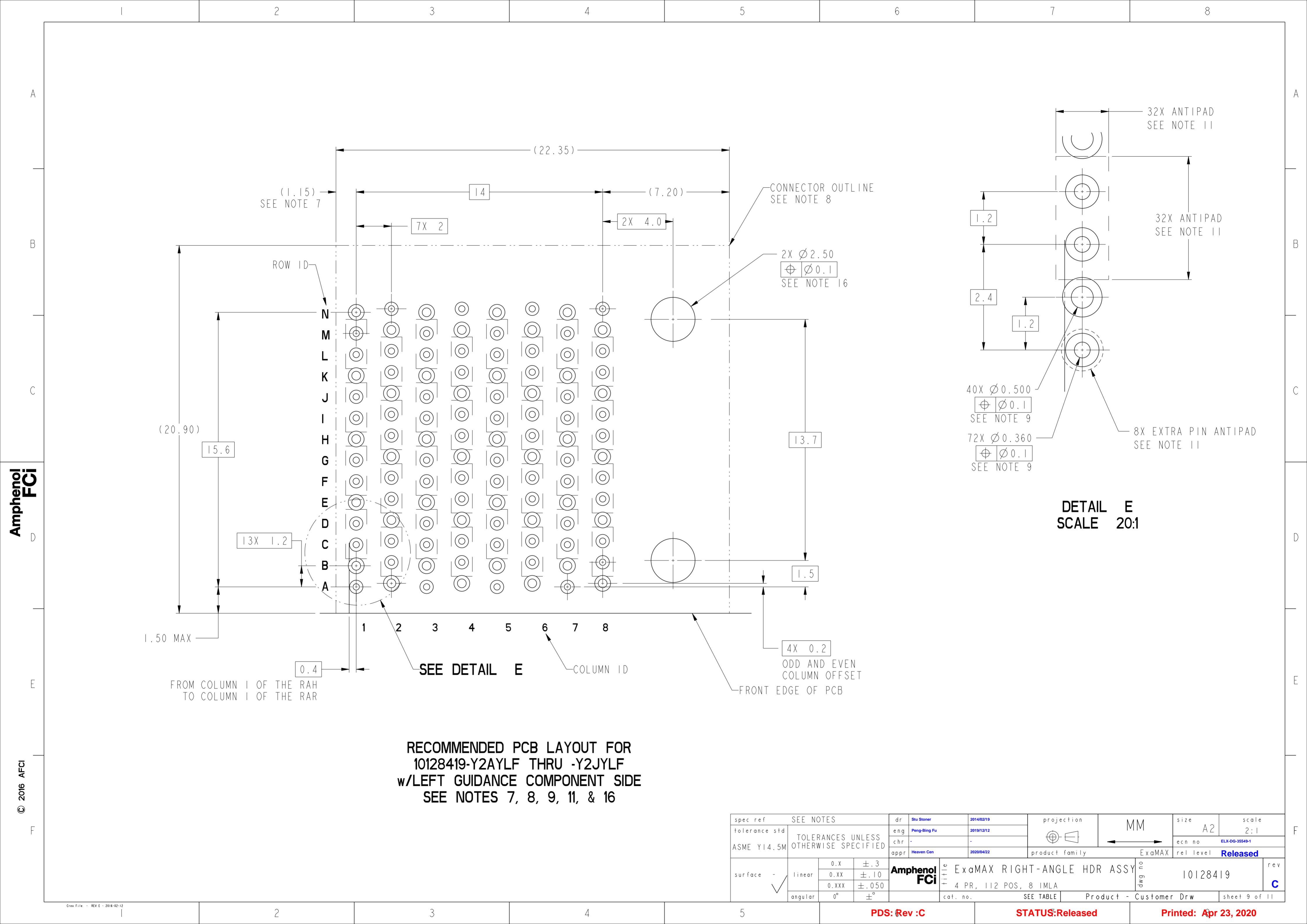


10128419-Y1AYLF THRU -Y1JYLF  
RIGHT GUIDANCE CONNECTOR (SEE NOTE 17)  
FOR ALL OTHER DIMENSIONS SEE SHEET 1

spec ref	SEE NOTES			dr	Stu Stoner	2014/02/19	projection	MM	size	scale
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED			eng	Peng-Bing Fu	2019/12/12	product family	ExoMAX	rel level	ecn no
ASME Y14.5M	surface	linear	angular	chr	-	-	Heaven Cen	2020/04/22		
		0.X	±.3							
		0.XX	±.10							
		0.XXX	±.050							
				oppn	Amphenol FCi	ExoMAX RIGHT-ANGLE HDR ASSY 4 PR, 112 POS, 8 IMLA				
						cat. no.	SEE TABLE	Product	Customer Drw	rev

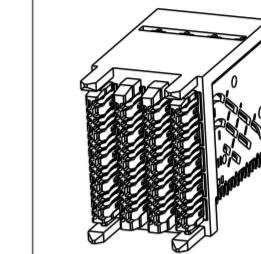
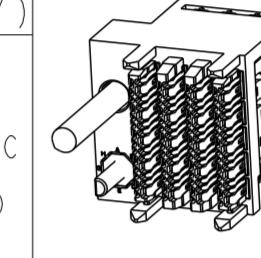
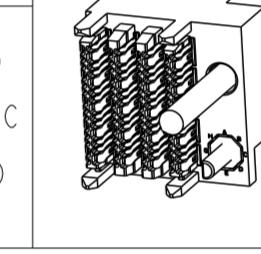
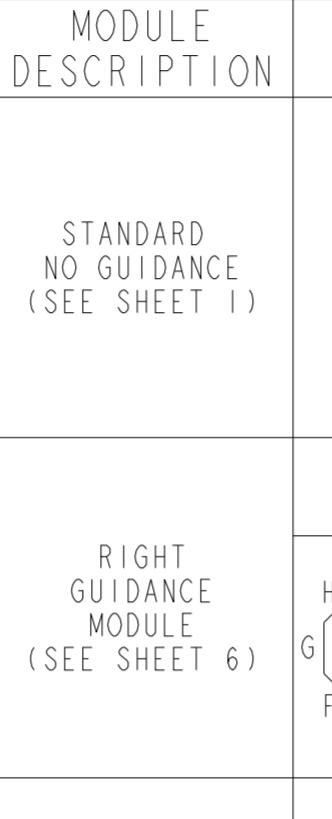
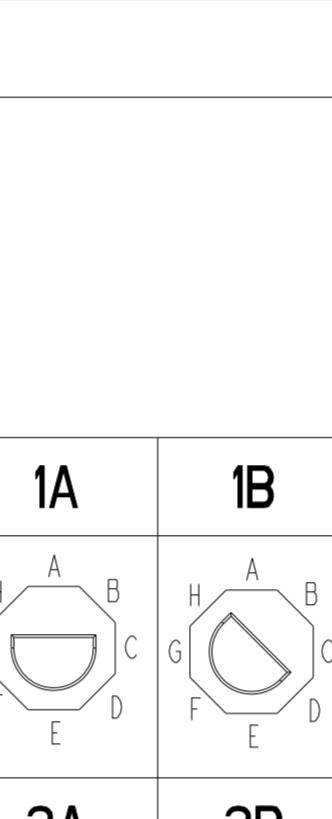
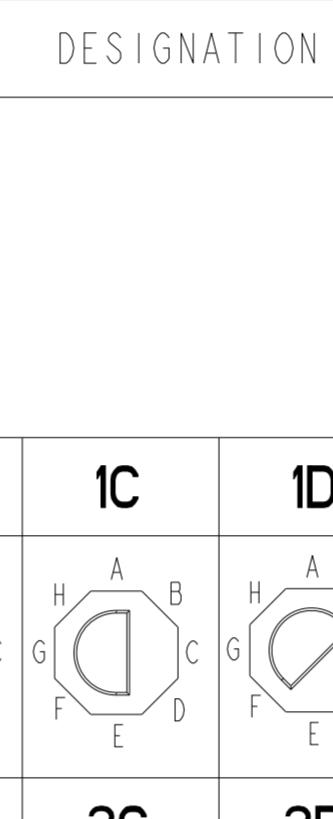


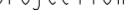




A sequence of 10 geometric shapes followed by a minus sign and 4 more shapes, then a final shape. The shapes are: 1. A vertical line segment with a horizontal oval at its top. 2. A vertical line segment with a horizontal '2' at its top. 3. Two overlapping horizontal ovals, one on top of the other. 4. A vertical line segment with a horizontal '4' at its top. 5. A vertical line segment with a horizontal '9' at its top. 6. A minus sign. 7. A vertical line segment with a horizontal 'Y' at its top. 8. A vertical line segment with a horizontal 'Y' at its top. 9. A vertical line segment with a horizontal 'Y' at its top. 10. A vertical line segment with a horizontal 'Y' at its top. 11. A vertical line segment with a horizontal 'F' at its top.

PLATING  
SEE NOTE 2

MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER									BASE MODULE
STANDARD NO GUIDANCE (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)	
ASSEMBLY PART NUMBER	10128419-1YYYLF									
DESCRIPTION	STANDARD MATE									
10128419-2YYYLF	ADVANCED MATE									
10128419-3YYYLF	SHORT DETECT									
10128419-4YYYLF	ADVANCED MATE & SHORT DETECT									

spec ref	SEE NOTES	dr	Stu Stoner	2014/02/19			size	A2	scale	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED ASME Y14.5M	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1		
chr		-	-	-			rel level	Released		
appr		Heaven Cen	2020/04/22	product family			rev	10128419		
surface		0.X	±.3	 ExaMAX RIGHT-ANGLE HDR ASSY		dwg	C			
-	linear	0.XX	±.10	4 PR, 112 POS, 8 IMLA		cat. no. SEE TABLE	Product - Customer Drw		sheet 10 of 11	
		0.XXX	±.050							
		angular	0°	±°						

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:
    - YYYLF: 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
    - YYY2LF: GXT+ OVER NICKEL
    - YYY9LF: GXT OVER NICKEL
  - 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 WILL BE 2.0 mm OR 3.0 mm AS DEFINED BY NOTE 7 ON THE MATING RECEPTACLE CUSTOMER DRAWING. 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 HEADER, 10128419-2YYYL, WHEN MATED WITH AN ADVANCED MATE RECEPTACLE WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

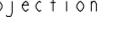
(14) THE SHORT DETECT HEADER, 10128419-3YYLF, WHEN MATED WITH A STANDARD MATE RECEPTACLE, WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.

15- THE ADVANCED MATE/SHORT DETECT HEADER, 10128419-4YYLF, WHEN MATED WITH AN ADVANCED MATE RECEPTACLE 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 CONNECTOR 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 PCB 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 RIGHT ANGLE HEADER MATES WITH A RIGHT ANGLE RECEPTACLE).

(18) - ALL GROUND CONTACTS ARE COMMONED WITHIN A COLUMN

spec ref	SEE NOTES	dr	Stu Stoner	2014/02/19	projection 	MM	size	A2	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED ASME Y14.5M	eng	Peng-Bing Fu	2019/12/12			ecn no	ELX-DG-35549-1		
chr		-	-	-			rel level	Released		
appr		Heaven Cen	2020/04/22	product family			ExaMAX			
surface	-	linear	0.X	± .3	Amphenol FCI	ExaMAX RIGHT-ANGLE HDR ASSY 4 PR, 112 POS, 8 IMLA	dwg no	10128419		
			0.XX	± .10			cat. no.	SEE TABLE	Product - Customer Drw	sheet 11 of 11
			0.XXX	± .050						
		angular	0°	± °						