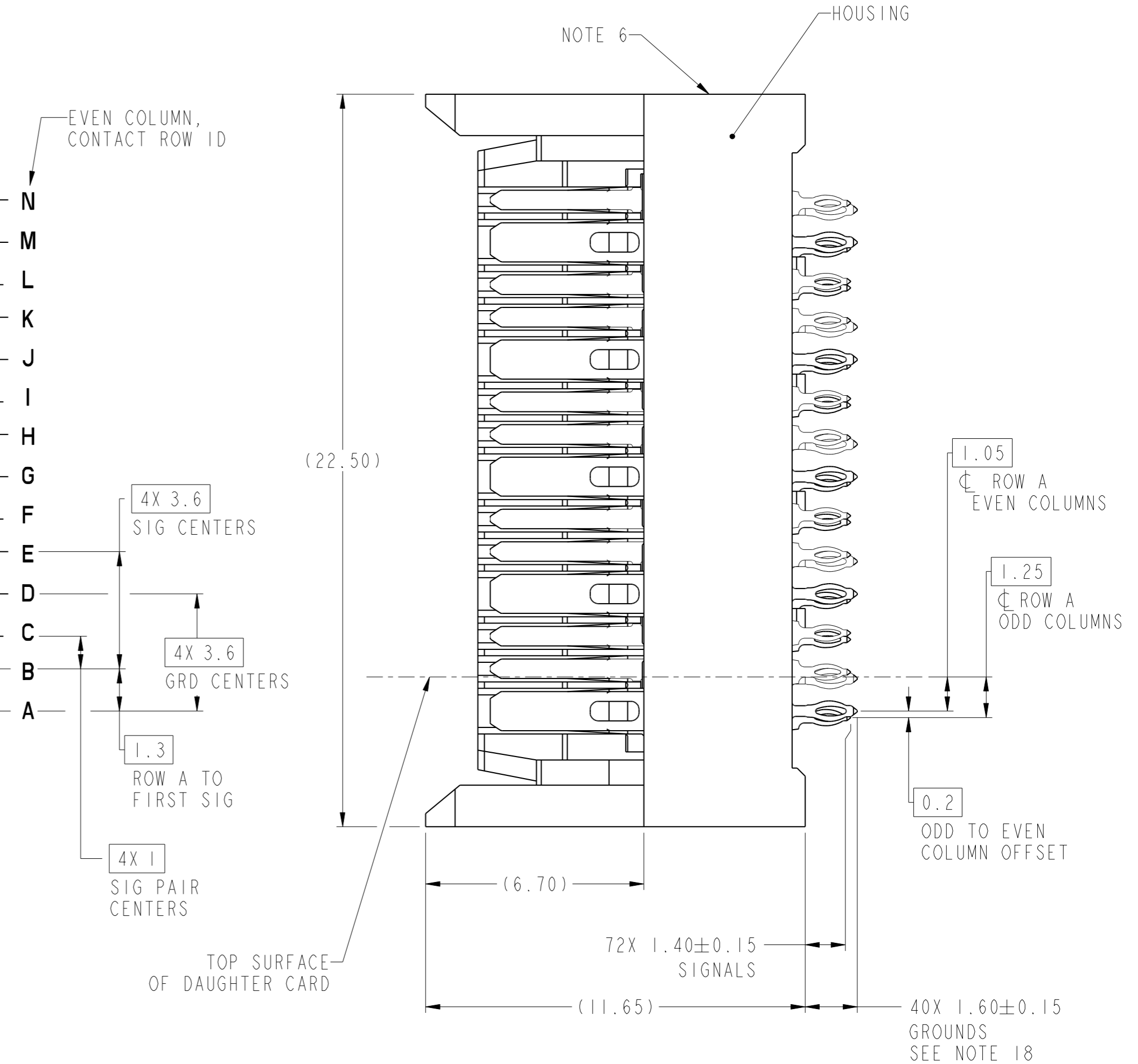
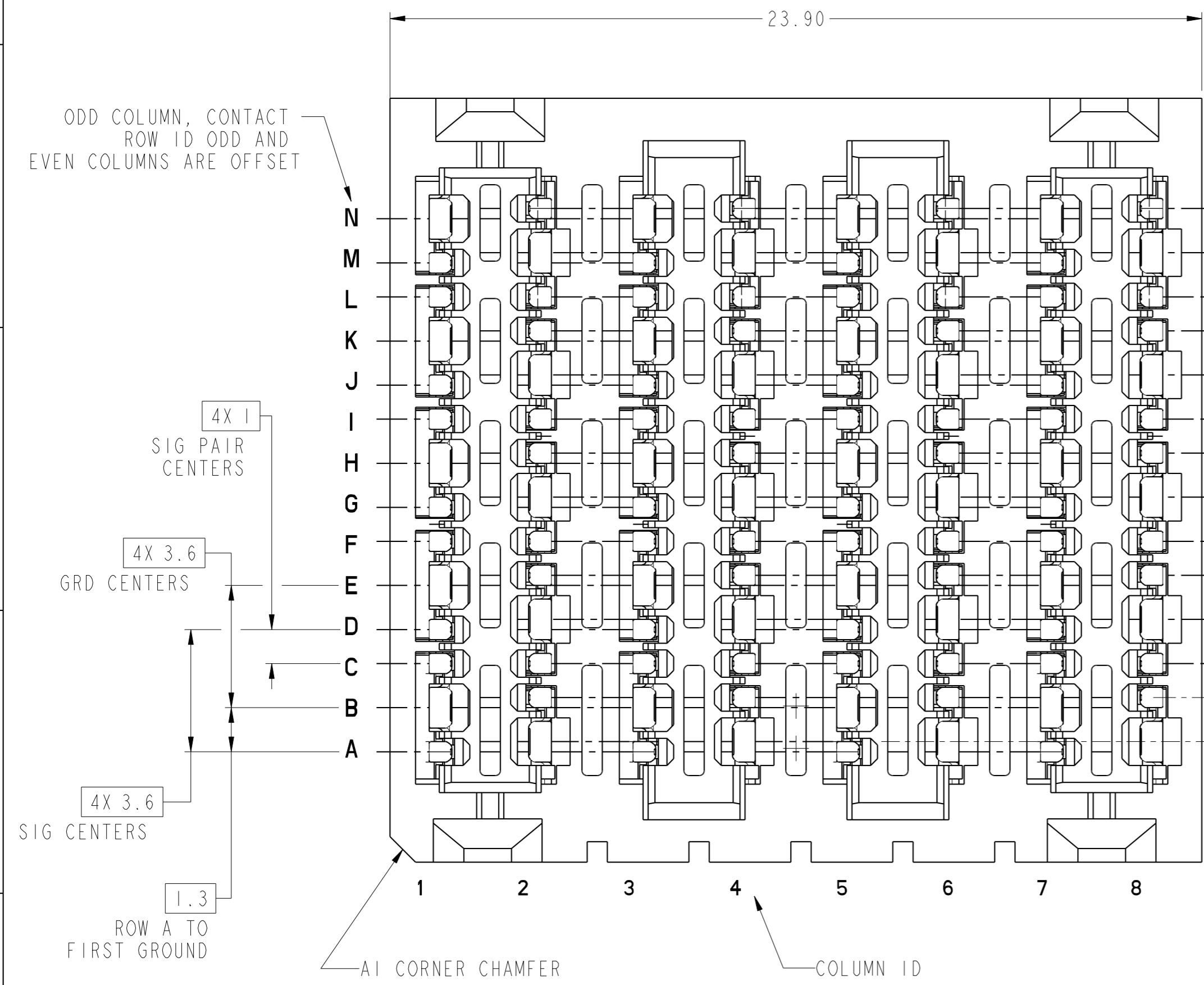


PRODUCT NUMBER
SEE SHEET 10



10123151-Y01LF
(10123151-101LF STANDARD MATE CONNECTOR SHOWN)

Amphenol FCI

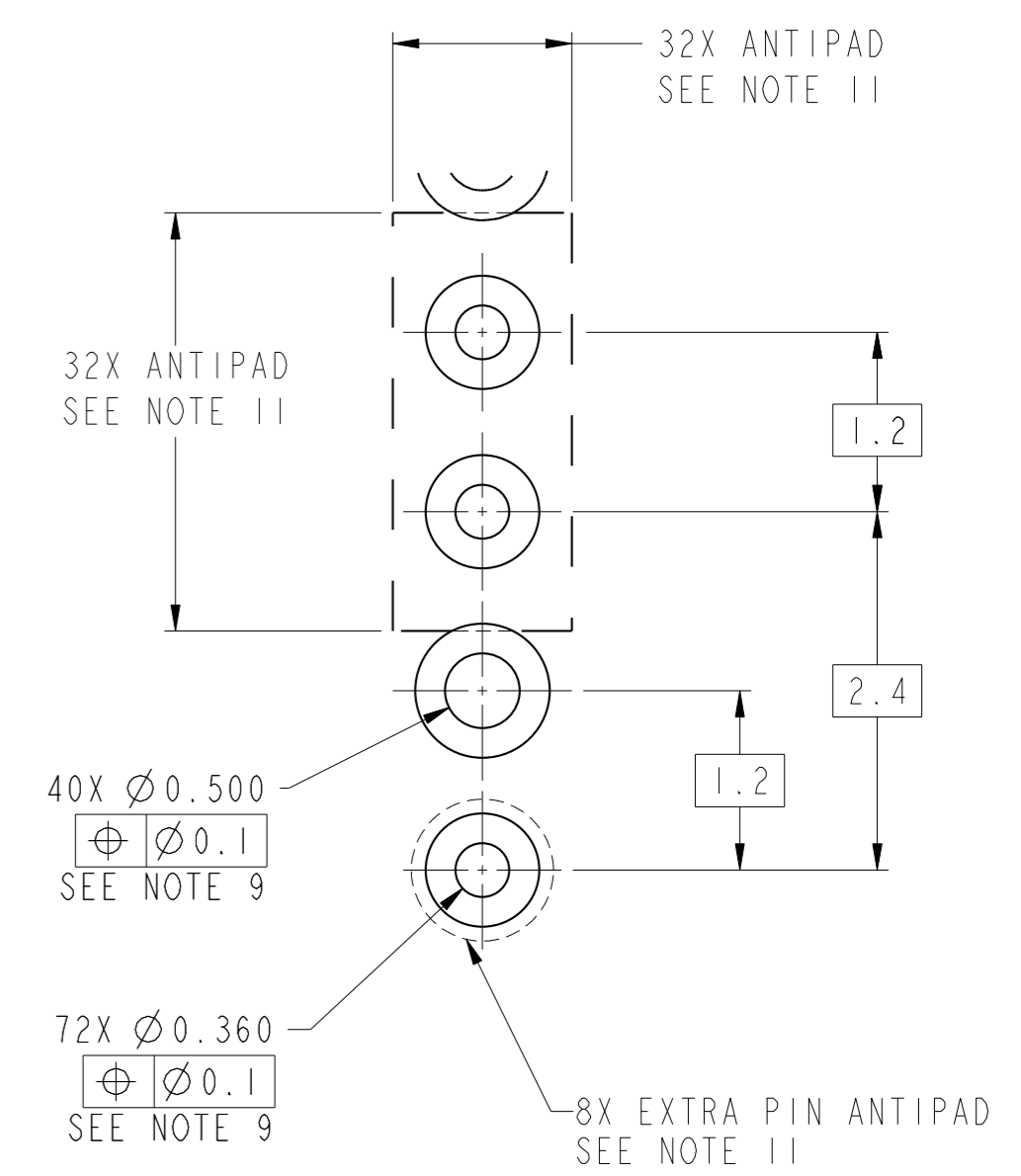
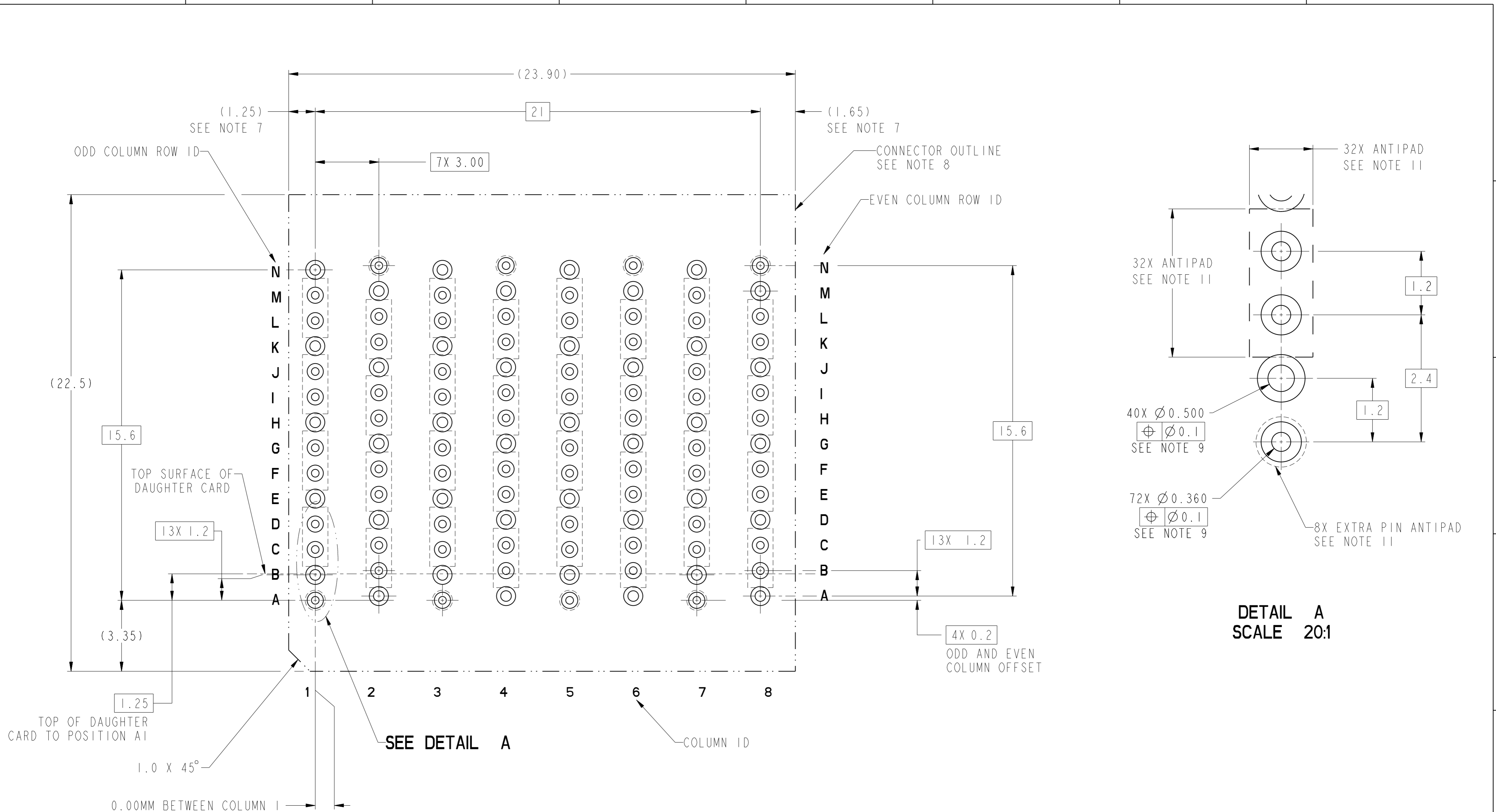
© 2016 AFCI

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1										
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released										
ASME Y14.5M		chr	-	2018/01/05																
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°	±°	appr	Heaven Cen	2018/01/05	product family	ExaMAX	rel level	Released
linear	0.X	±.3																		
	0.XX	±.10																		
	0.XXX	±.050																		
angular	0°	±°																		
<p>Amphenol FCI</p>		title	VERT HDR ASSY, 4 PR, 8 COL			dwg no	10123151		rev	A										
		cat. no.	SEE TABLE	Product - Customer Drw	sheet 1 of 11															

PDS: Rev :A

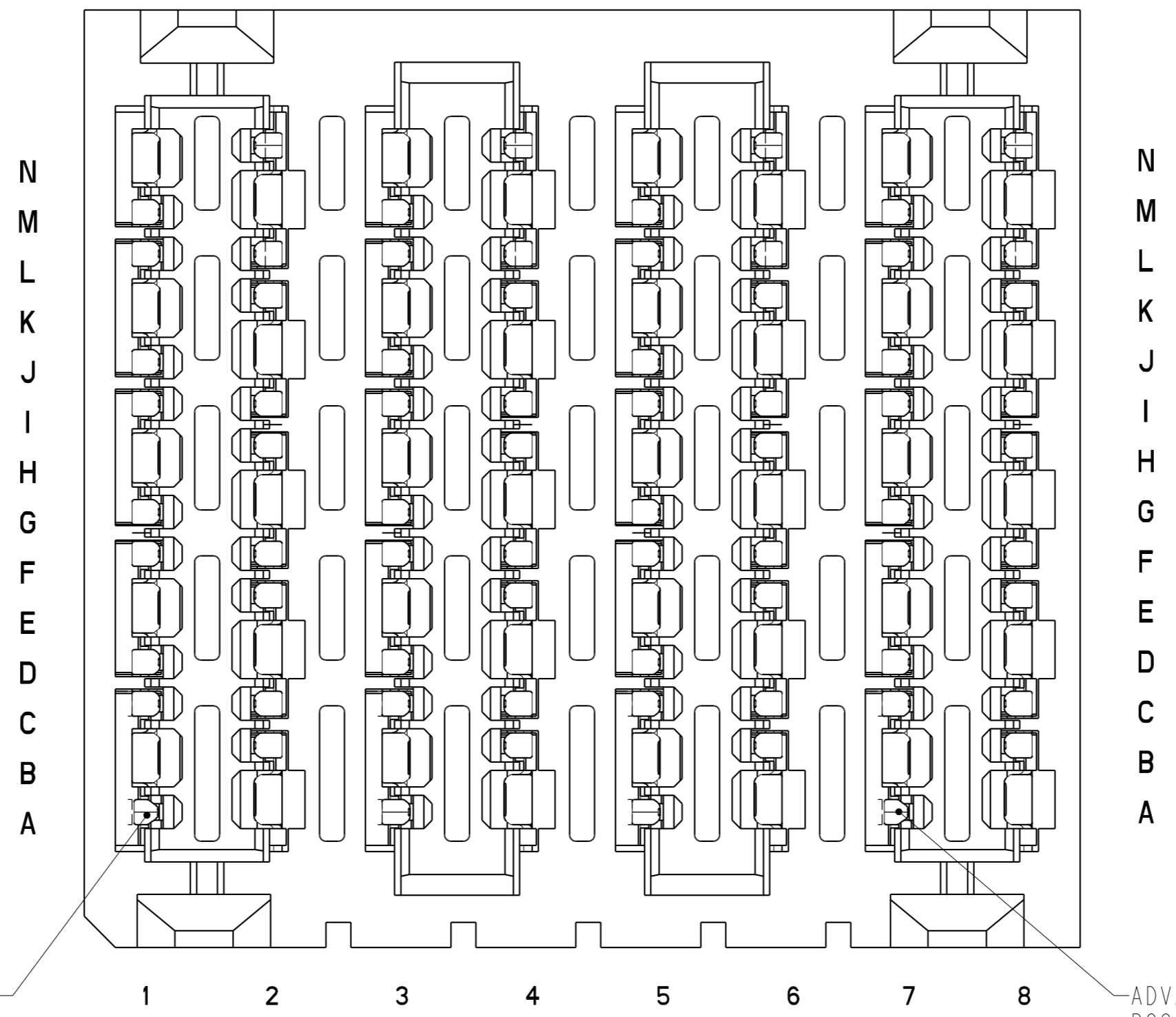
STATUS:Released

Printed: Jan 08, 2018



**RECOMMENDED PCB LAYOUT FOR
10123151-Y01LF COMPONENT SIDE
NOTES 7, 8, 9, & 11**

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1				
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released				
ASME Y14.5M		chr	-	apppr							Heaven Cen	2018/01/05	product family	ExaMAX
surface	linear	0.X	±.3	0.XX							±.10	0.XXX	±.050	angular
					VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM		cat. no.	SEE TABLE	Product - Customer Drw	sheet 2 of 11				



ADVANCED MATE POSITION A1
SEE NOTE 13

ADVANCED MATE POSITION A7
SEE NOTE 13

10123151-201LF
ADVANCED MATE CONNECTOR
 ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A7 ONLY
 FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

Amphenol FCI

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spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1
tolerance std	ASME Y14.5M	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	cat. no.			SEE TABLE	Product - Customer Drw		
surface	- ✓	linear	0.X	±.3	Amphenol FCI	title VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM	dwg no 10123151	rev A	SEE TABLE	
			0.XX	±.10						
			0.XXX	±.050						
		angular	0°	±°						

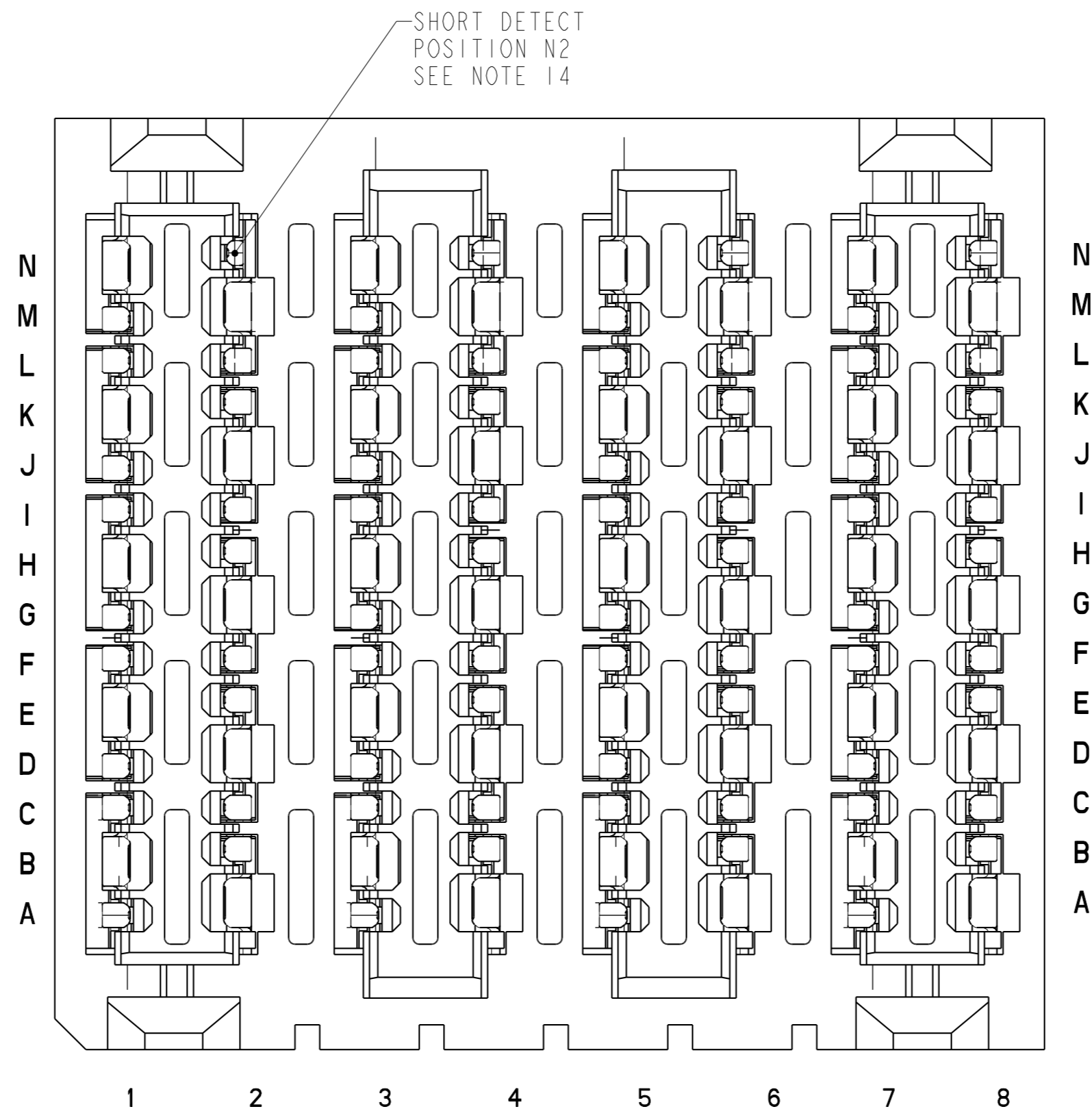
PDS: Rev :A

STATUS:Released

Printed: Jan 08, 2018

1 2 3 4 5 6 7 8

A
B
C
D
E
F



10123151-301LF
 SHORT DETECT CONNECTOR
 SHORT DETECT POSITION IS N2 ONLY
 FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

Amphenol
FCi

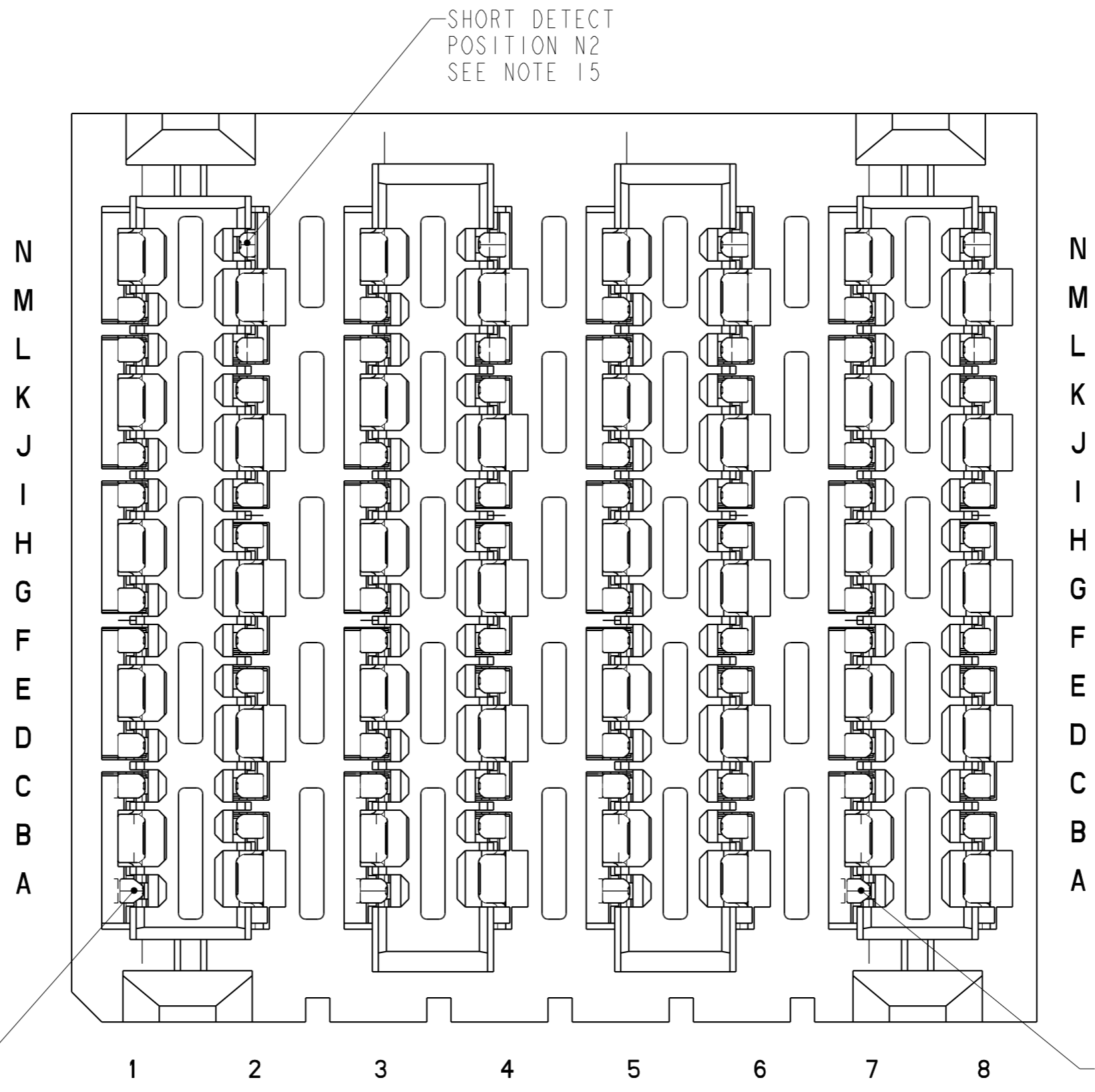
© 2016 AFci

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1								
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level									
ASME Y14.5M		chr	-					Released										
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°	±°	appr	Heaven Cen	2018/01/05	product family	ExaMAX	rel level	Released
linear	0.X		±.3															
	0.XX		±.10															
	0.XXX	±.050																
angular	0°	±°																
				title VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM		dwg no 10123151	rev A											
		cat. no.		SEE TABLE	Product - Customer Drw		sheet 4 of 11											

PDS: Rev :A

STATUS:Released

Printed: Jan 08, 2018



ADVANCED MATE
POSITION A1
SEE NOTE 15

SHORT DETECT
POSITION N2
SEE NOTE 15

ADVANCED MATE
POSITION A7
SEE NOTE 15

10123151-401LF
ADVANCED MATE/SHORT DETECT CONNECTOR
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A7 ONLY
SHORT DETECT POSITION IS N2 ONLY
FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

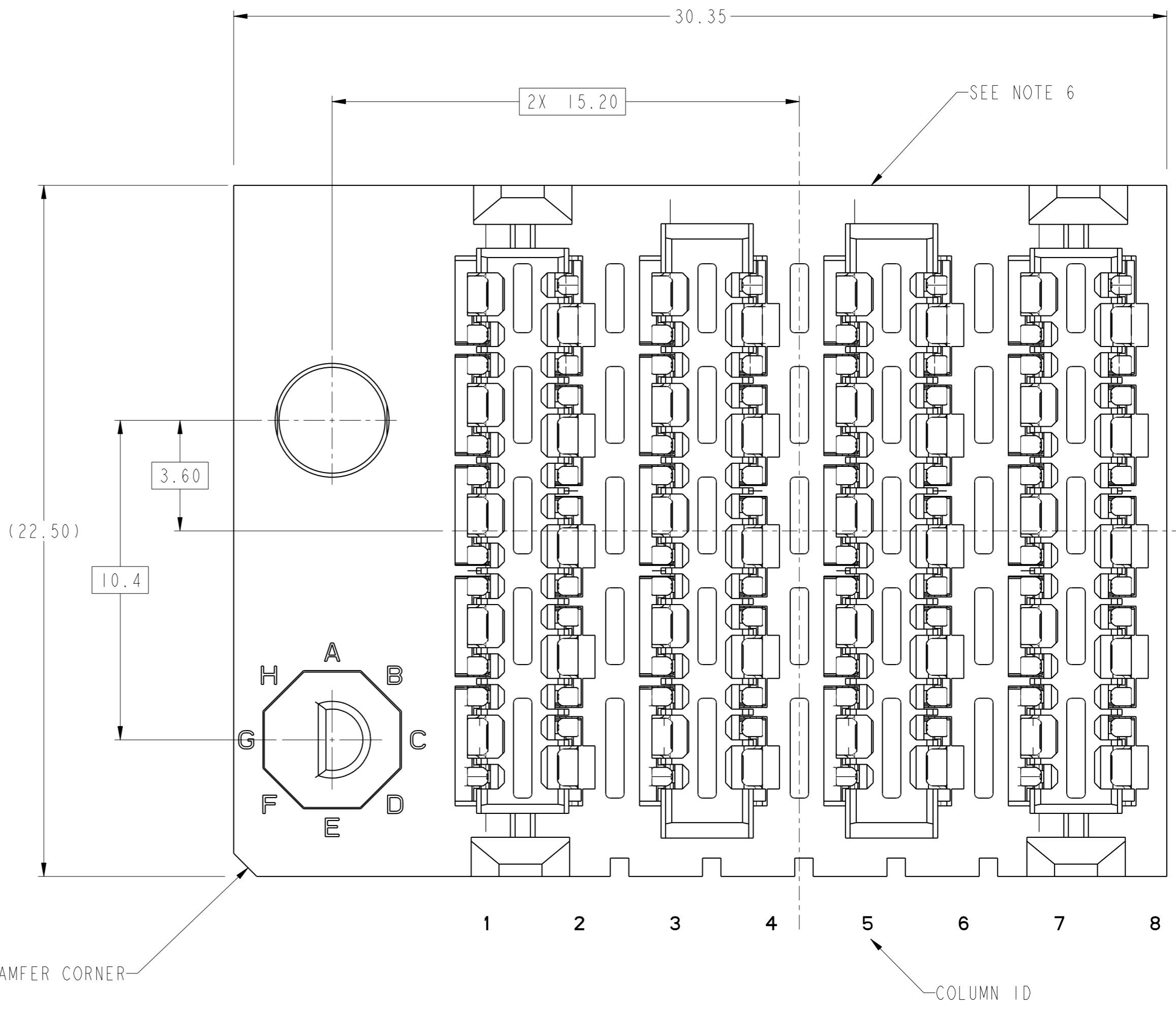
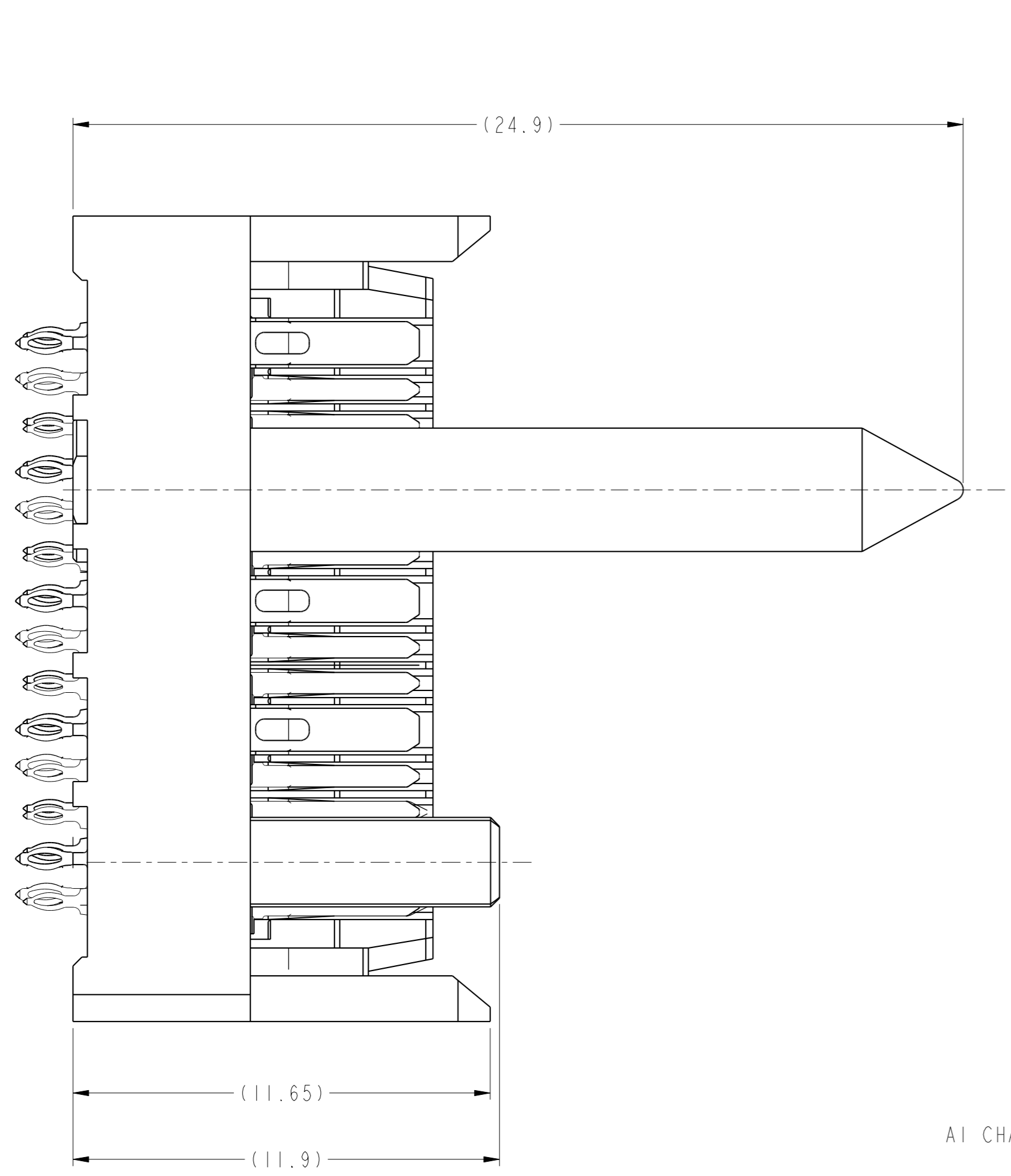
**Amphenol
FCi**

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spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1			
tolerance std	ASME Y14.5M	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level		Released		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	apppr			Heaven Cen	2018/01/05	product family	ExaMAX	rel level	Released	
surface	-	linear	0.X	±.3		Amphenol FCi	VERT HDR ASSY, 4 PR, 8 COL		cat. no. SEE TABLE	Product - Customer Drw	sheet 5 of 11		
			0.XX	±.10			112 POS, 0.36 SIG FH PCB, 3.0MM	10123151				rev	A
		angular	0°	±°									

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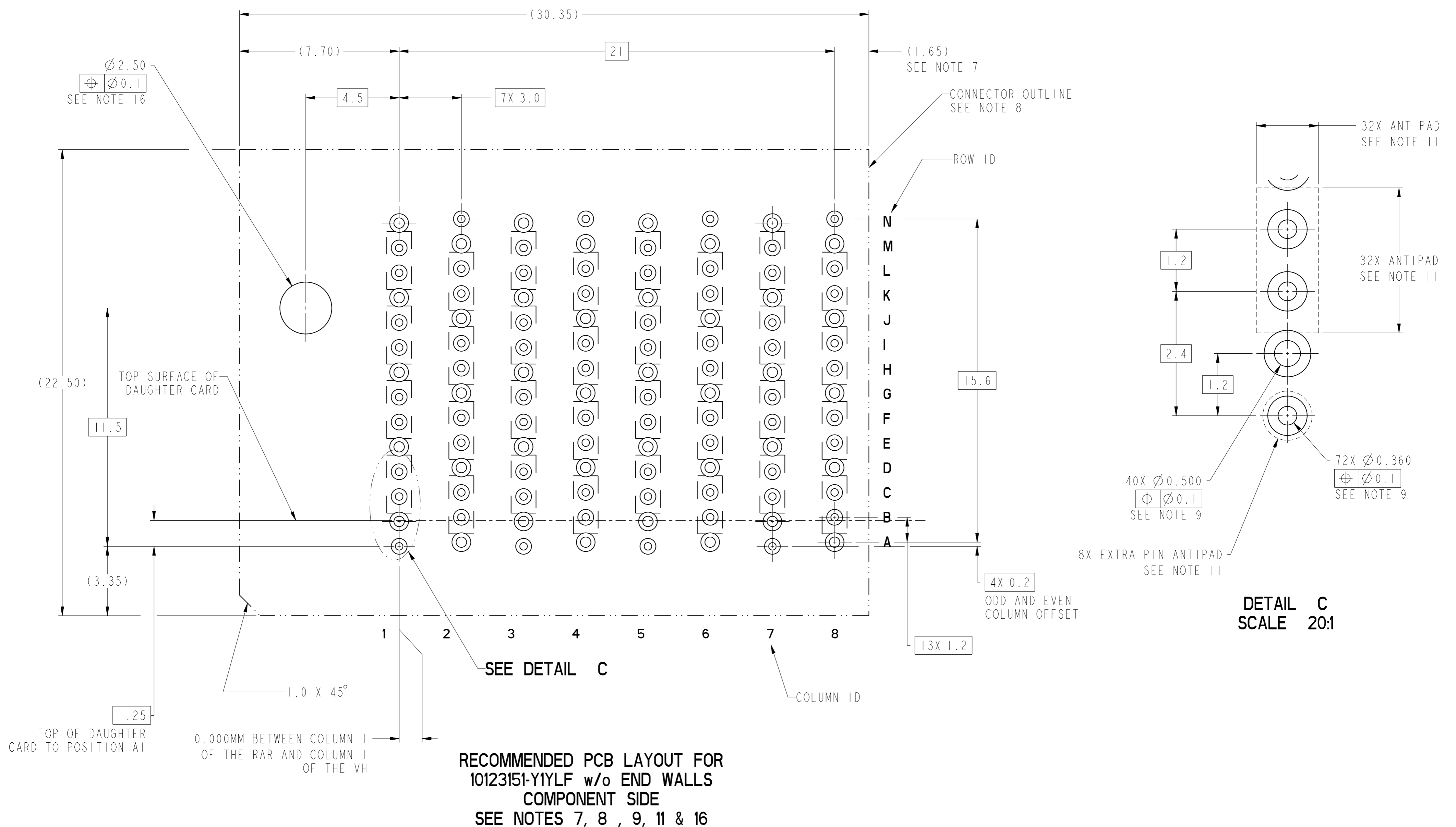
10123151-Y1ALF THRU -Y1JLF
RIGHT GUIDANCE CONNECTOR (SEE NOTE 17)
FOR ALL OTHER DIMENSIONS SEE SHEET 1

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1													
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released													
ASME Y14.5M		chr	-	2018/01/05			product family	ExaMAX															
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°	±°	appr	Heaven Cen	2018/01/05	Amphenol FCi	title	VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM	cat. no.	SEE TABLE	Product - Customer Drw	sheet 6 of 11
linear	0.X	±.3																					
	0.XX	±.10																					
	0.XXX	±.050																					
angular	0°	±°																					

PDS: Rev :A

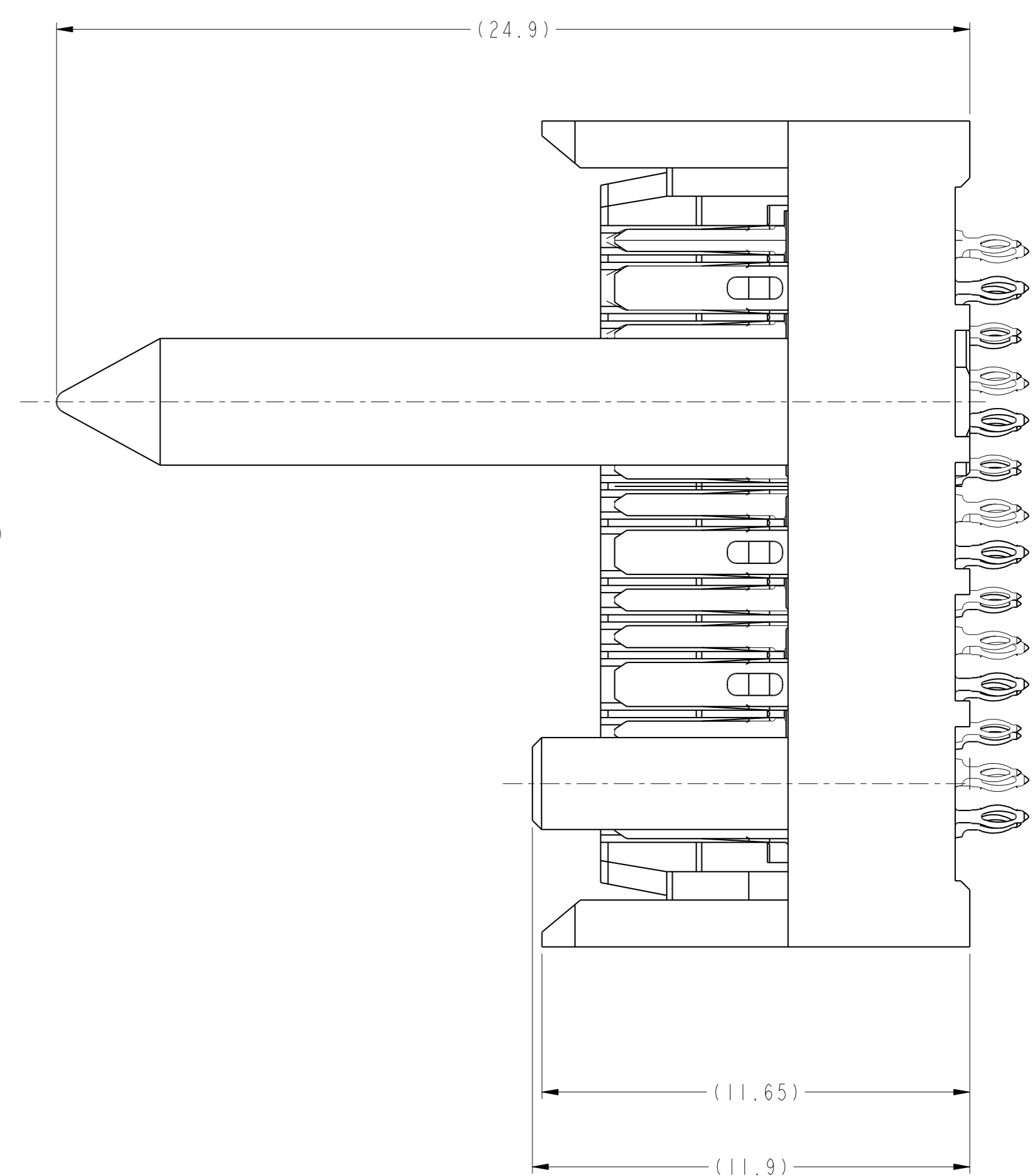
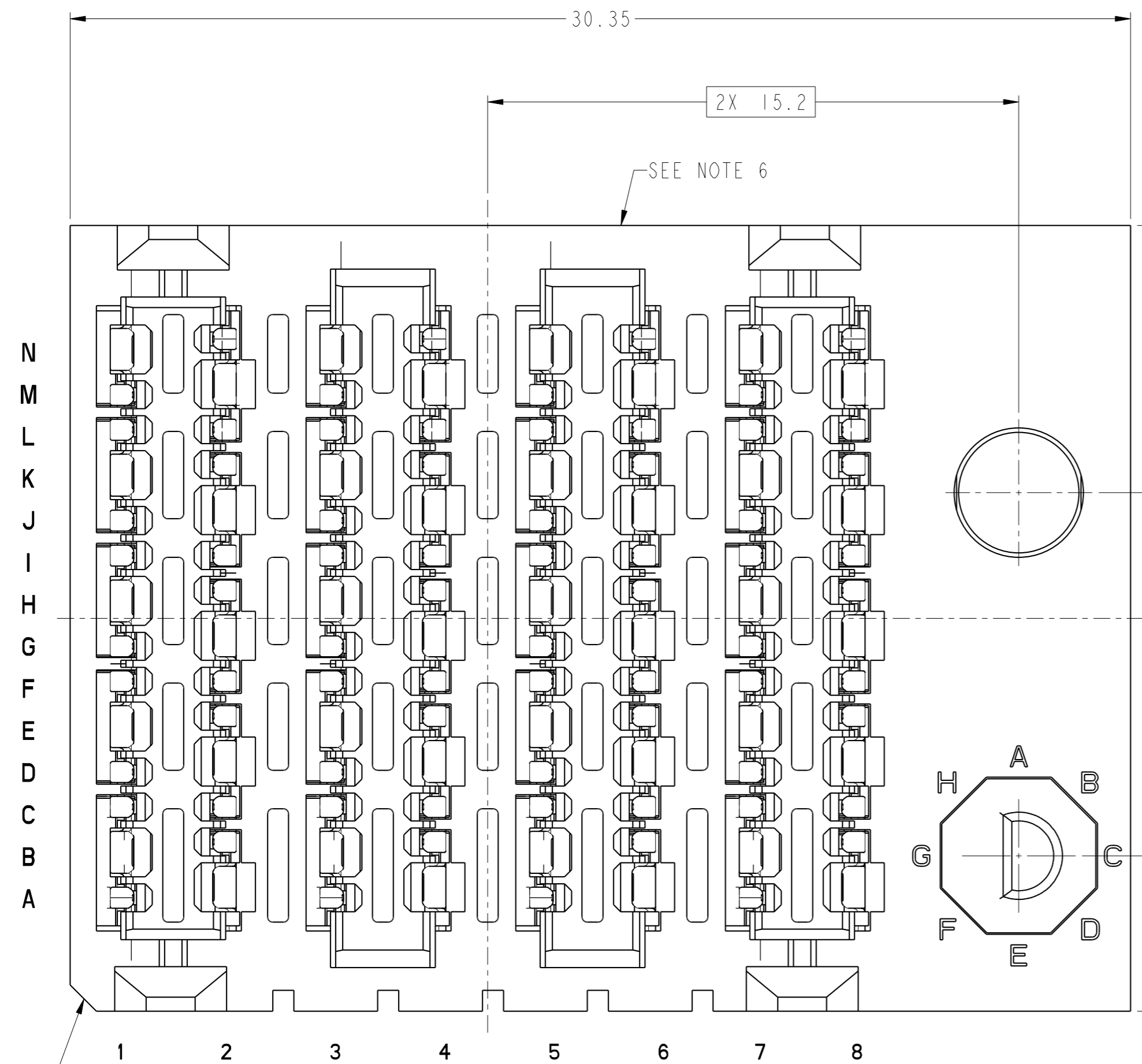
STATUS:Released

Printed: Jan 08, 2018



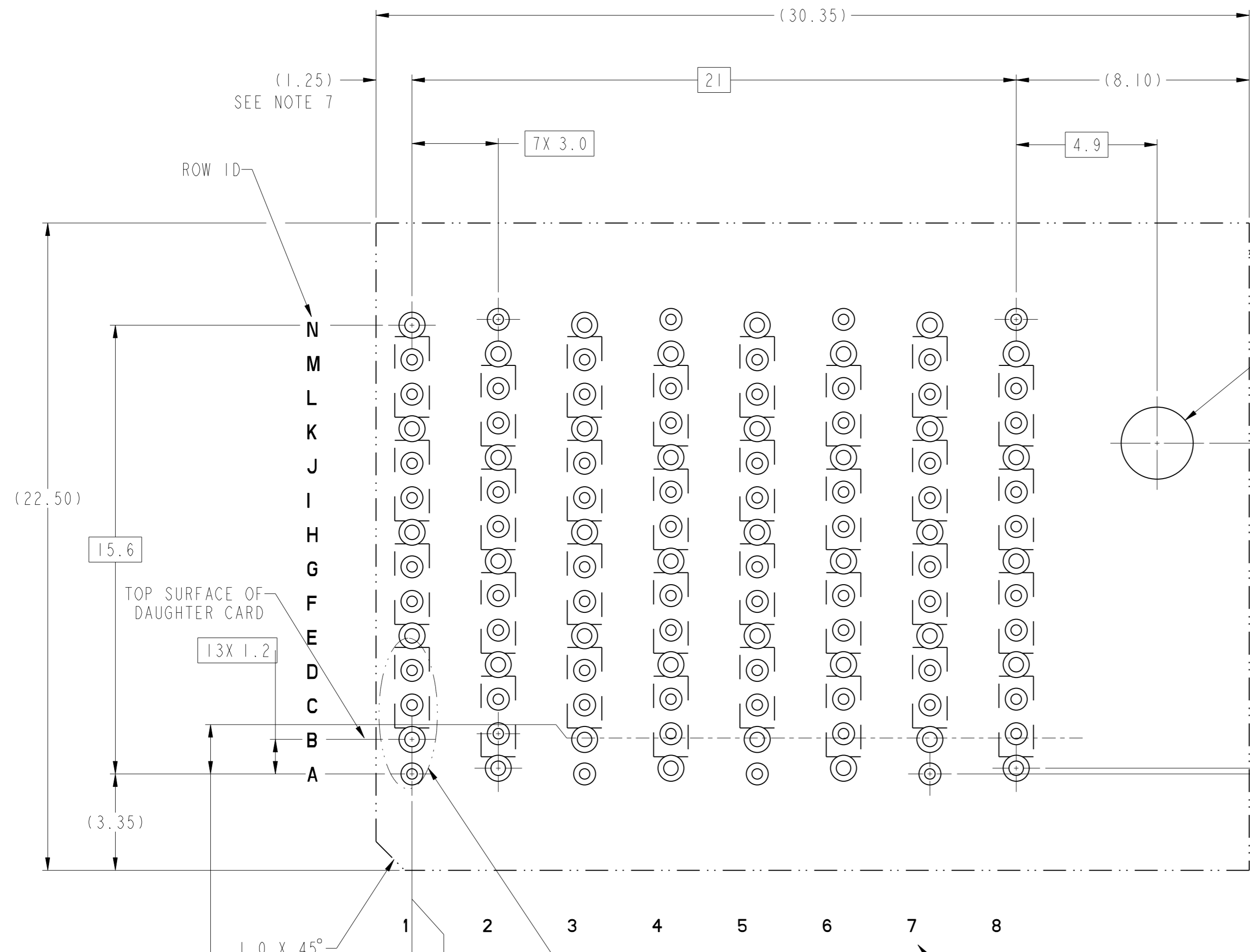
**RECOMMENDED PCB LAYOUT FOR
10123151-Y1YLF w/o END WALLS
COMPONENT SIDE
SEE NOTES 7, 8, 9, 11 & 16**

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released	
ASME Y14.5M		chr	-	product family							ExaMAX
		appr	Heaven Cen	2018/01/05							
surface	linear	0.X	±.3		VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM	dwg no 10123151	rev A				
		0.XX	±.10					cat. no.	SEE TABLE	Product - Customer Drw	sheet 7 of 11
	angular	0°	±°								



10123151-Y2ALF THRU -Y2JLF
LEFT GUIDANCE CONNECTOR (SEE NOTE 17)
FOR ALL OTHER DIMENSIONS SEE SHEET 1

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1										
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released										
ASME Y14.5M		chr	-	apppr							Heaven Cen	2018/01/05	product family	ExaMAX						
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°	±°			VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM		cat. no. SEE TABLE	Product - Customer Drw	sheet 8 of 11
linear	0.X	±.3																		
	0.XX	±.10																		
	0.XXX	±.050																		
angular	0°	±°																		



CONNECTOR OUTLINE
SEE NOTE 8

$\varnothing 2.50$
 $\varnothing \pm 0.1$
SEE NOTE 16

$40 \times \varnothing 0.500$
 $\varnothing \pm 0.1$
SEE NOTE 9

8X EXTRA PIN ANTIPAD
SEE NOTE 11

32X ANTIPAD
SEE NOTE 11

32X ANTIPAD
SEE NOTE 11

$72 \times \varnothing 0.360$
 $\varnothing \pm 0.1$
SEE NOTE 9

DETAIL E
SCALE 20:1

4X 0.2
ODD AND EVEN
COLUMN OFFSET

1.25
TOP OF DAUGHTER
CARD TO POSITION A1

0.00MM BETWEEN COLUMN 1
OF THE RAR AND COLUMN 1
OF THE VH

1.0 X 45°

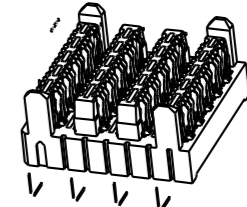
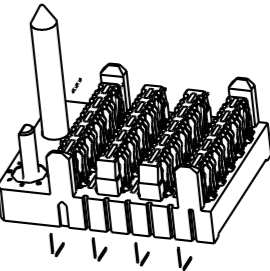
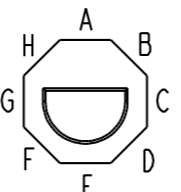
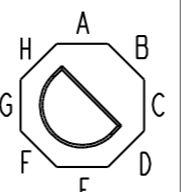
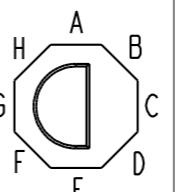
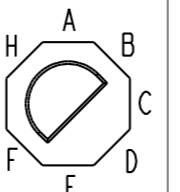
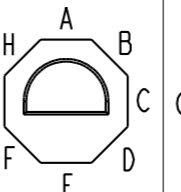
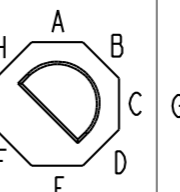
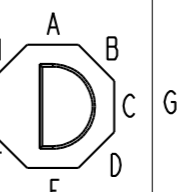
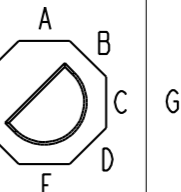
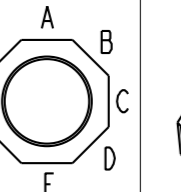
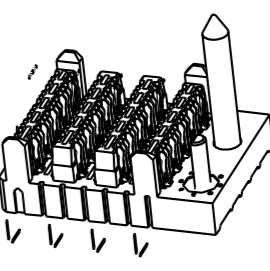
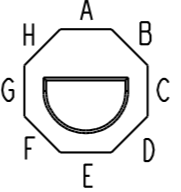
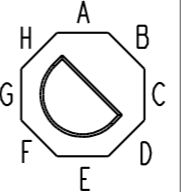
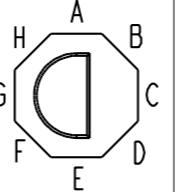
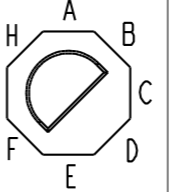
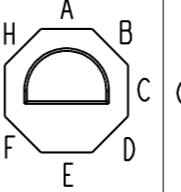
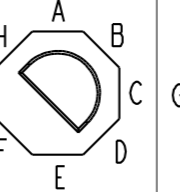
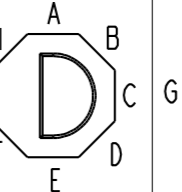
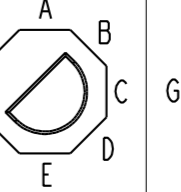
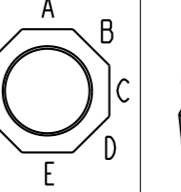
**RECOMMENDED PCB LAYOUT FOR
10123151-Y2YLF w/o END WALLS
COMPONENT SIDE
SEE NOTES 7, 8, 9, 11 & 16**

SEE DETAIL E

COLUMN ID

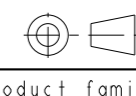
spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1									
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released									
ASME Y14.5M		chr	-	apppr							Heaven Cen	2018/01/05	product family	ExaMAX					
surface	<table border="1"> <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°	±°			VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM		dwg no 10123151	rev A
linear	0.X	±.3																	
	0.XX	±.10																	
	0.XXX	±.050																	
angular	0°	±°																	
		cat. no.	SEE TABLE	Product - Customer Drw	sheet 9 of 11														

10123151 - Y Y Y L F

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	DESCRIPTION
10123151-1YYLF	STANDARD MATE
10123151-2YYLF	ADVANCED MATE
10123151-3YYLF	SHORT DETECT
10123151-4YYLF	ADVANCED MATE & SHORT DETECT

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spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1	
tolerance std	ASME Y14.5M	eng	Peng-Bing Fu	2018/01/05		← →	ecn no	-	rel level	Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	-	appr							Heaven Cen
surface	✓	linear	0.X	±.3	Amphenol FCi		VERT HDR ASSY, 4 PR, 8 COL	112 POS, 0.36 SIG FH PCB, 3.0MM	10123151	rev	A
			0.XX	±.10	cat. no.	SEE TABLE	Product - Customer Drw	sheet 10 of 11			
		angular	0°	±°							

PDS: Rev :A

STATUS:Released

Printed: Jan 08, 2018

NOTES

- ①- CONNECTOR MATERIALS:
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
CONTACT: COPPER ALLOY
GUIDE PIN AND KEY PIN: ZINC ALLOY
- 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 WILL BE 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, 10123151-2YYLF, 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, 10123151-3YYLF, 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, 10123151-4YYLF, 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 CONNECTORS WITH EITHER A RIGHT OR LEFT GUIDE MODULE, ONE PHILLIPS PAN HEAD M2 HOLD DOWN SCREW MUST BE USED TO SECURE GUIDE PIN/CONNECTOR TO THE PCB. THE SCREW LENGTH SHALL BE 2.0 - 6.0mm PLUS THE THICKNESS OF THE BOARD. SCREW IS 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 ANGEL RECEPTACLE. THE LEFT / RIGHT DESIGNATION OF THE MATING HEADER IS DEFINED BY THE RIGHT ANGEL RECEPTACLE THAT IT MATES WITH (i. e. A RIGHT GUIDE VERTICAL HEADER MATES A RIGHT GUIDE RIGHT ANGEL RECEPTACLE.)
- ⑱- ALL GROUND CONTACTS WITHIN A COLUMN ARE COMMONED.

spec ref	SEE NOTES	dr	Justin Chen	2014/09/10	projection	MM	size	A2	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	
ASME Y14.5M		chr	-				Released			
surface	<input checked="" type="checkbox"/> linear <input type="checkbox"/> angular	0.X	±.3	Amphenol FCI	title VERT HDR ASSY, 4 PR, 8 COL 112 POS, 0.36 SIG FH PCB, 3.0MM	cat. no. SEE TABLE	product family ExaMAX	rel level Released	sheet 11 of 11	
		0.XX	±.10							
		0.XXX	±.050							
		0°	±°							