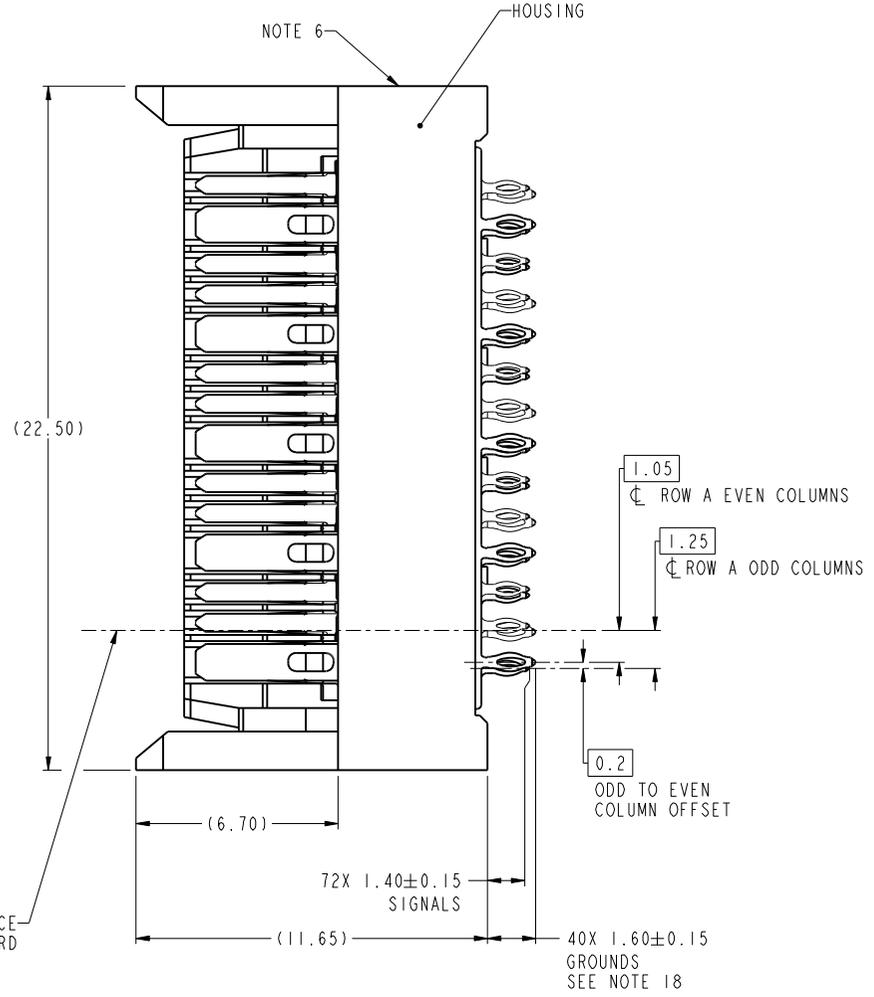
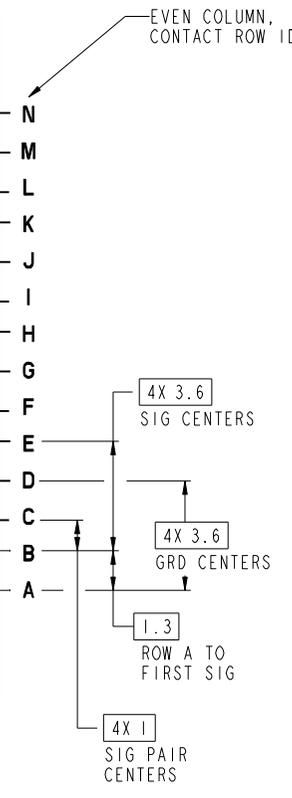
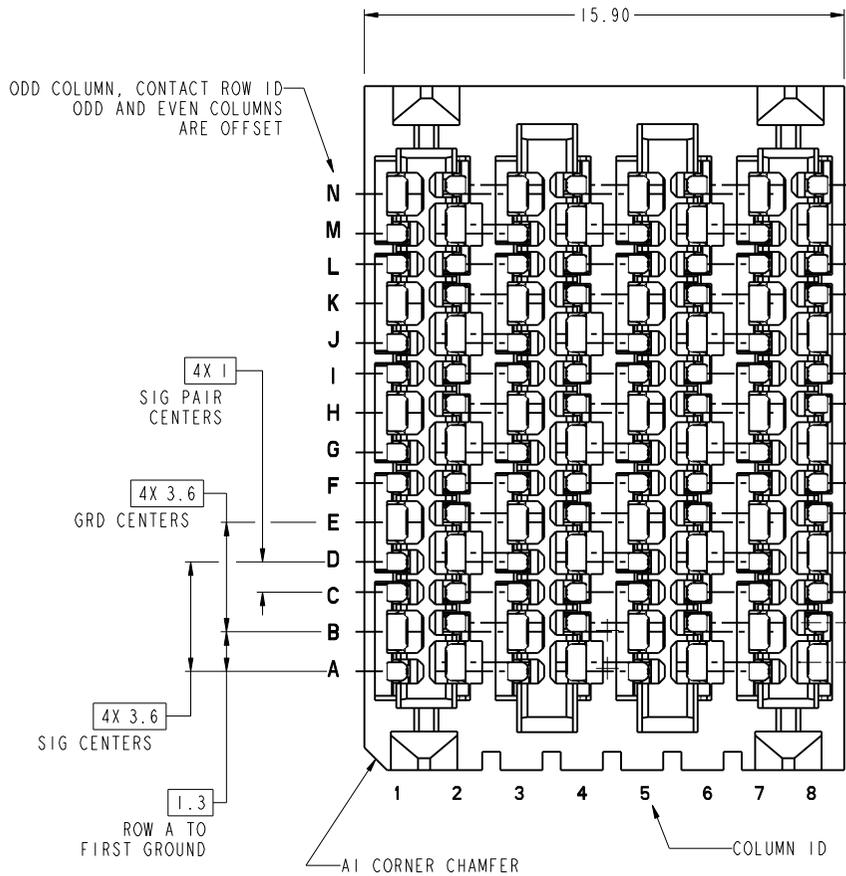


PRODUCT NUMBER  
SEE SHEET 16



10135222-Y01LF  
(10135222-101LF STANDARD MATE CONNECTOR SHOWN)

Greg Hull 2015/06/04  
Peng-Bing Fu 2016/04/06

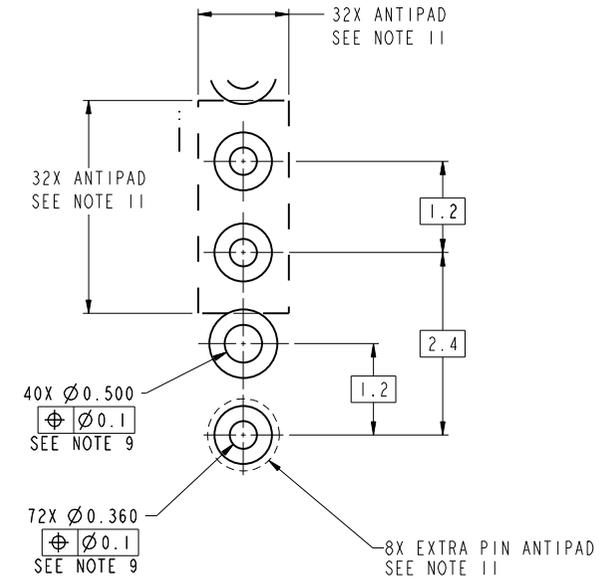
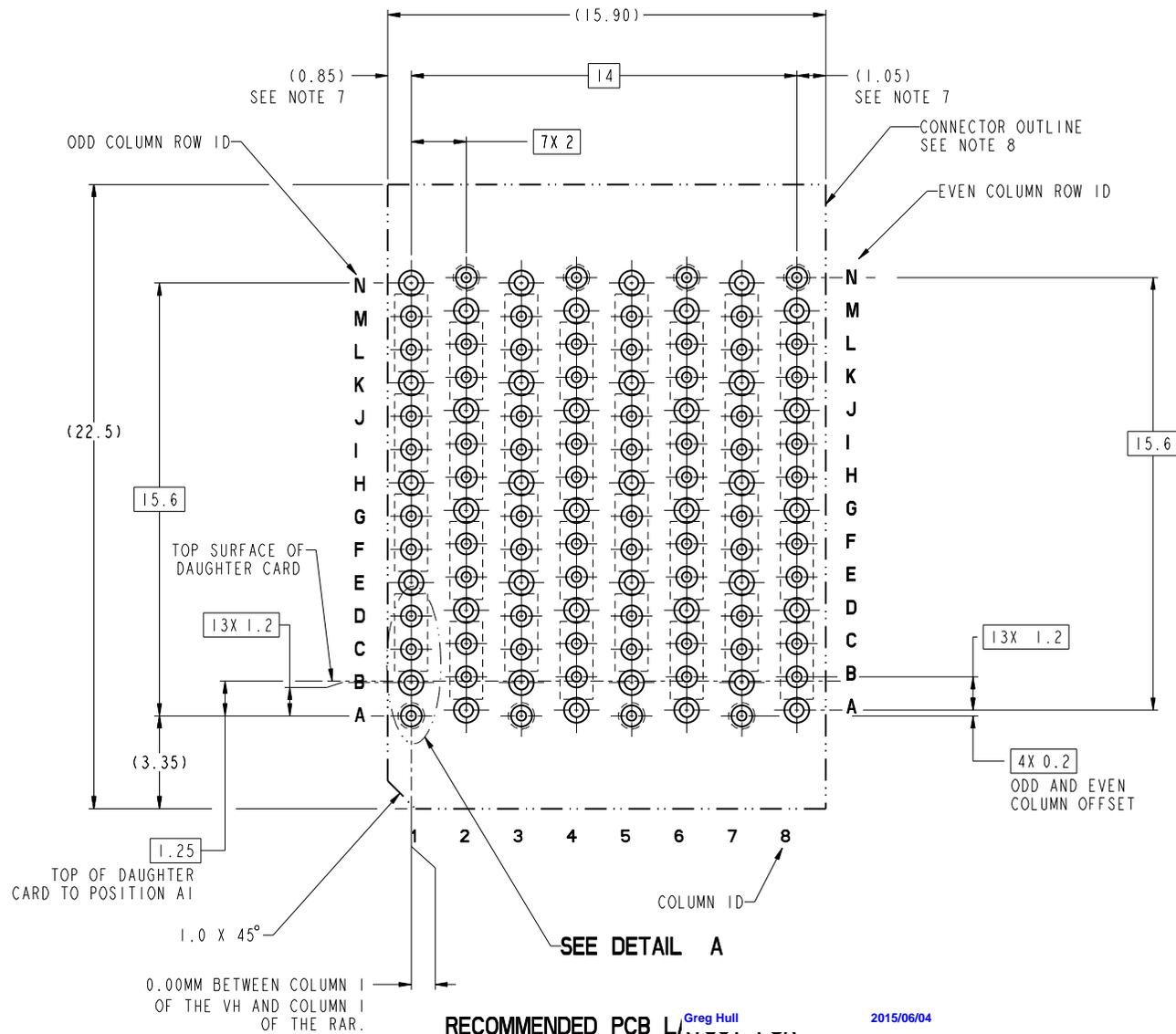
Preliminary

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	0.X	±.3		<b>ExaMAX VERTICAL HEADER ASSY</b>		ang no	10135222
		0.XX	±.10		4 PR, 85 Ohm, 112 POS, 8 IMLA		rev	2
		0.XXX	±.050		col. no.	SEE TABLE	Product - Customer Draw	sheet 1 of 11
ISO 1302	angular	0°	±°					

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Amphenol FCI

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DETAIL A  
SCALE 20:1

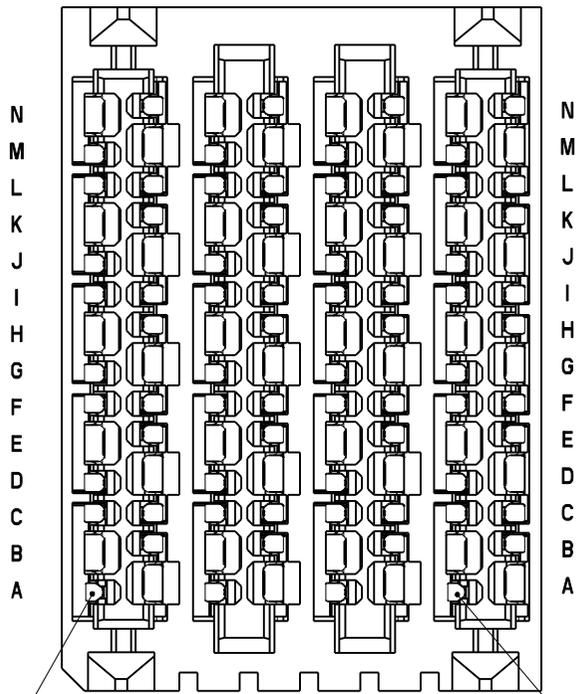
RECOMMENDED PCB LAYER STACKUP  
 10135222-Y01LF COMPO  
 NOTES 7, 8, 9, 10  
 Greg Hull 2015/06/04  
 Peng-Bing Fu 2016/04/06

Preliminary

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			echn no <b>2</b>	rel level ---
ISO 406 ISO 1101		chr	G. HULL	2015-07-08				
ISO 1302		appr			product family	ExaMAX		
surface	linear 0.X ±.3 0.XX ±.10 0.XXX ±.050 angular 0° ±°	<b>Amphenol FCI</b>		ExaMAX VERTICAL HEADER ASSY 4 PR, 85 Ohm, 112 POS, 8 IMLA		eng no 10135222	rev 2	
		col. no.	SEE TABLE		Product - Customer	Draw	sheet 2 of 11	

1 2 3 4 5 6 7 8

A  
B  
C  
D  
E  
F



ADVANCED MATE POSITION A1  
SEE NOTE 13

ADVANCED MATE POSITION A7  
SEE NOTE 13

10135222-201LF

OR  
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A7 ONLY  
FCI SHEETS 1 & 2

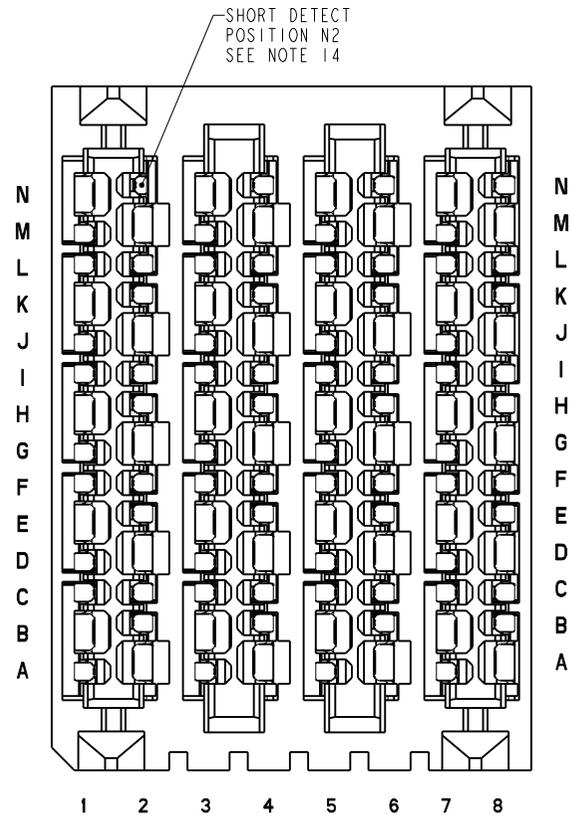
Greg Hull 2015/06/04  
Peng-Bing Fu 2016/04/06

Preliminary

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	linear	0.X	±.3	<b>Amphenol FCI</b> ExaMAX VERTICAL HEADER ASSY 4 PR, 85 Ohm, 112 POS, 8 IMLA	ang no 10135222	rev 2	
			0.XX	±.10				
			0.XXX	±.050				
ISO 1302	angular	angular	0°	±°	col. no.	SEE TABLE	Product - Customer Drw	sheet 3 of 11

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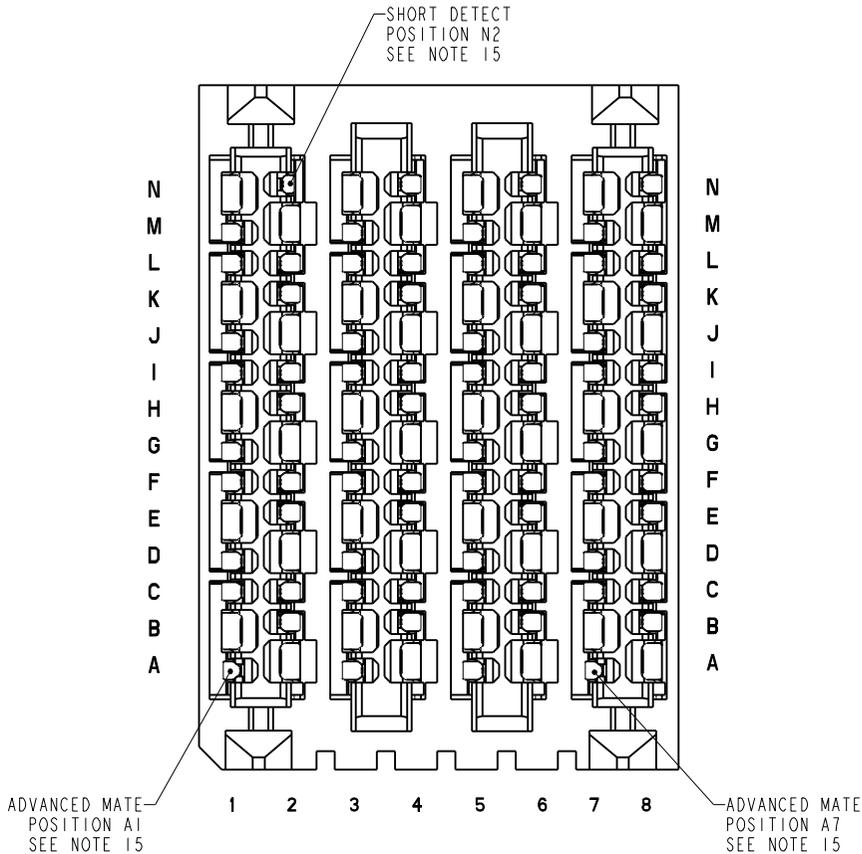


10135222 001 F  
 Greg Hull 2015/06/04  
 SHORT DETECT CONNECTOR  
 Peng-Bing Fu 2016/04/06  
 ONLY  
 FOR ETS 1 & 2

Preliminary

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	0.X	±.3		ExaMAX VERTICAL HEADER ASSY 4 PR, 85 Ohm, 112 POS, 8 IMLA		ang no	10135222
ISO 1302		0.XX	±.10		col. no.	SEE TABLE	Product - Customer Drw	sheet 4 of 11
	angular	0°	±°		rev			2

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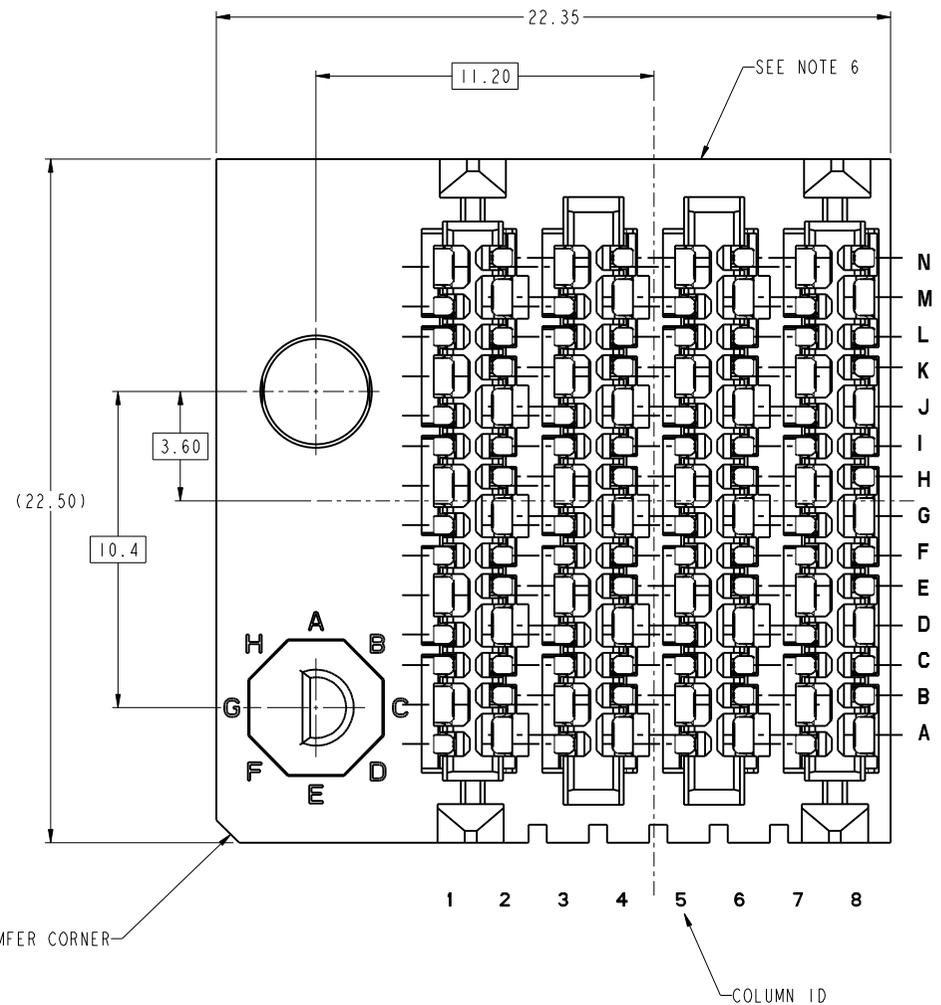
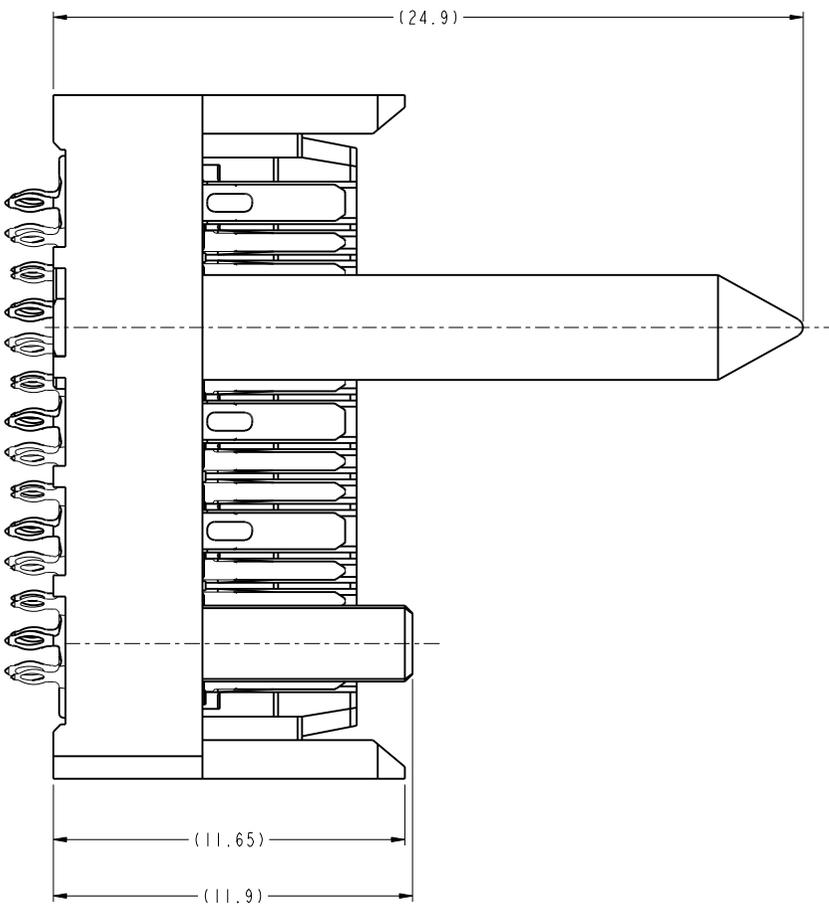


**10135222-401LF**  
**ADVANCED MATE/SHORT DETECT CONNECTOR**  
 ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A7 ONLY  
 SHORT DETECT POSITION IS N2 ONLY

Greg Hull 2015/06/04  
 Peng-Bing Fu 2016/04/06

**Preliminary**

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	0.X	±.3		title ExaMAX VERTICAL HEADER ASSY		ang no 10135222	rev 2
		0.XX	±.10		4 PR, 85 Ohm, 112 POS, 8 IMLA			
		0.XXX	±.050	cat. no.	SEE TABLE	Product - Customer Drw	sheet 5 of 11	
ISO 1302	angular	0°	±°					



Greg Hull 2015/06/04  
 Peng-Bing Fu 2016/04/06

**F**  
 NOTE 17)  
 SHEET 1

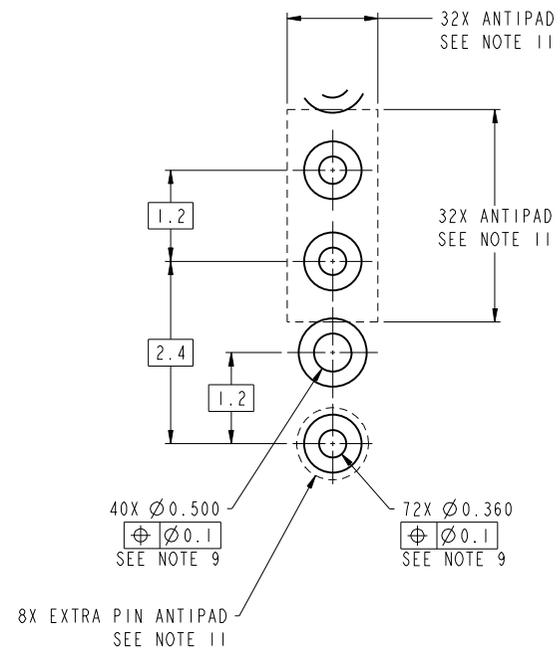
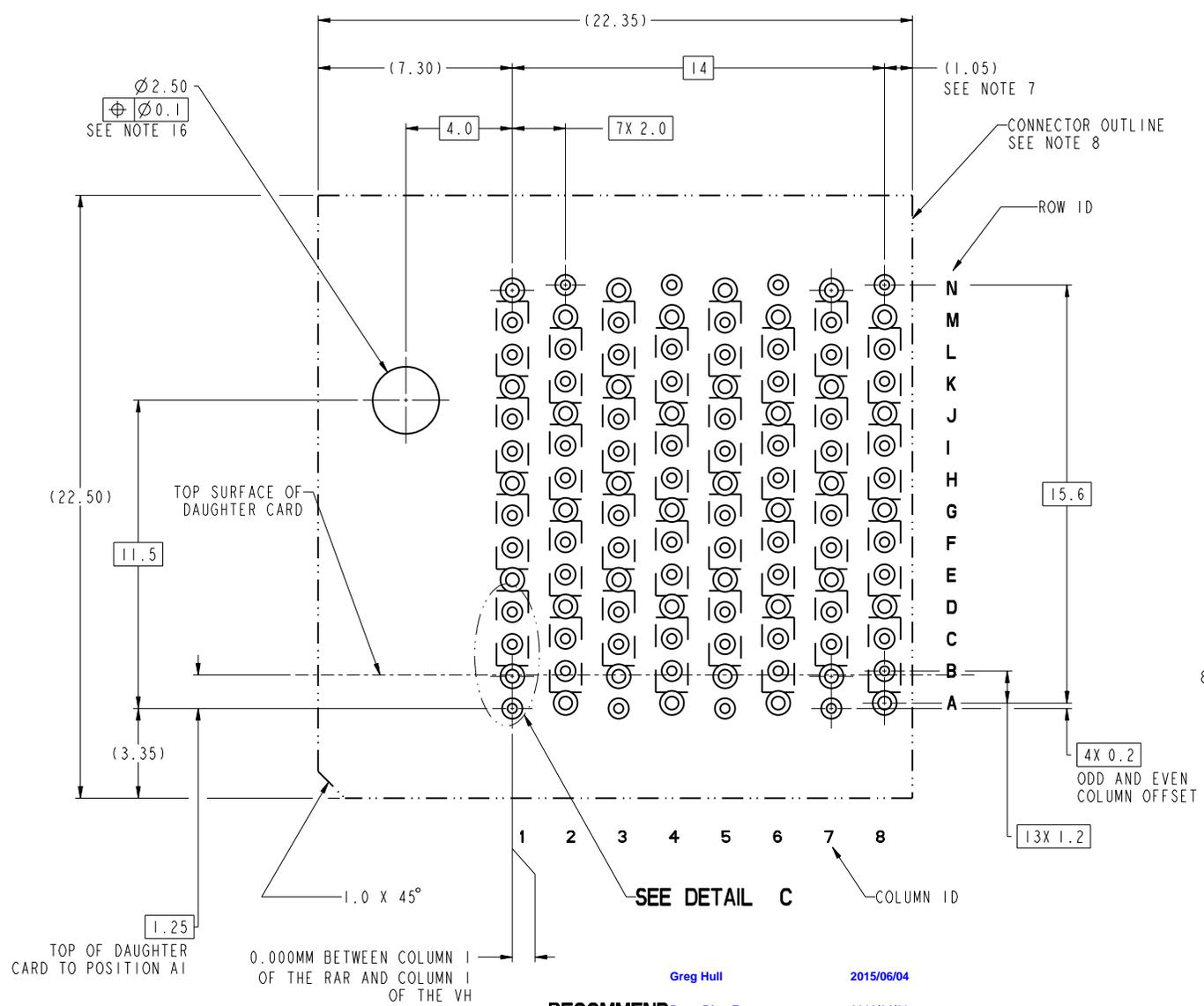
**Preliminary**

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	0.X	±.3		<b>ExaMAX VERTICAL HEADER ASSY</b>		eng no	10135222
		0.XX	±.10		4 PR, 85 Ohm, 112 POS, 8 IMLA		rev	2
		0.XXX	±.050		SEE TABLE		col. no.	
ISO 1302	angular	0°	±°		Product - Customer	Product - Customer	Product - Customer	Product - Customer

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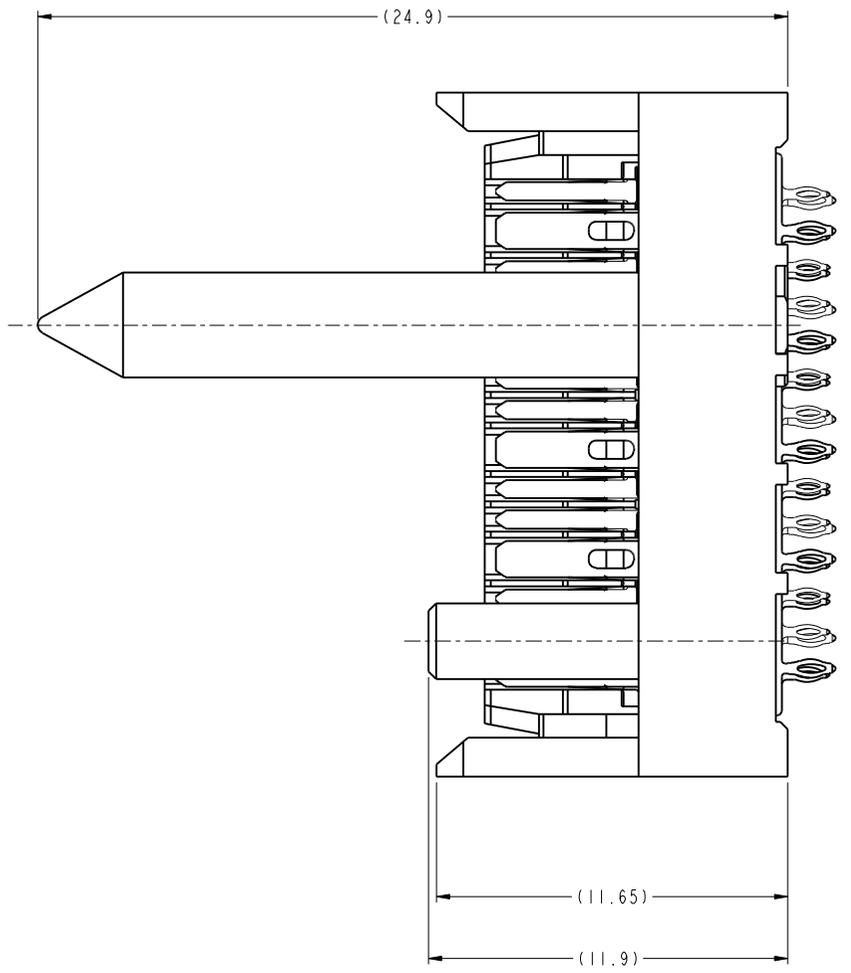
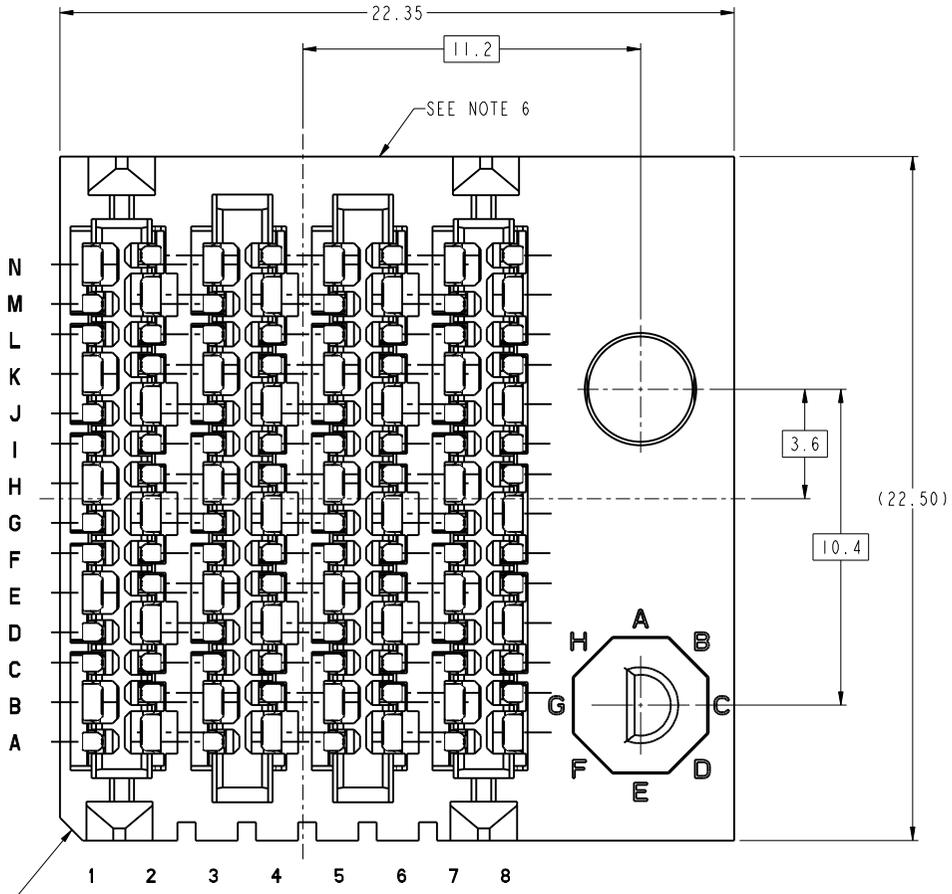


DETAIL C  
SCALE 20:1

Greg Hull 2015/06/04  
 RECOMMEND Peng-Bing Fu 2016/04/06  
 10135222-Y1  
 COM  
 SEE NOTE

Preliminary

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	0.x	±.3		ExaMAX VERTICAL HEADER ASSY 4 PR, 85 Ohm, 112 POS, 8 IMLA SEE TABLE	eng no 10135222	rev 2	
		0.xx	±.10					
		0.xxx	±.050					
ISO 1302	angular	0°	±°	col. no.	Product - Customer Drw	sheet 7 of 11		



Greg Hull 2015/06/04  
 Peng-Bing Fu 2016/04/06  
 SEE NOTE 17)  
 SEE SHEET 1

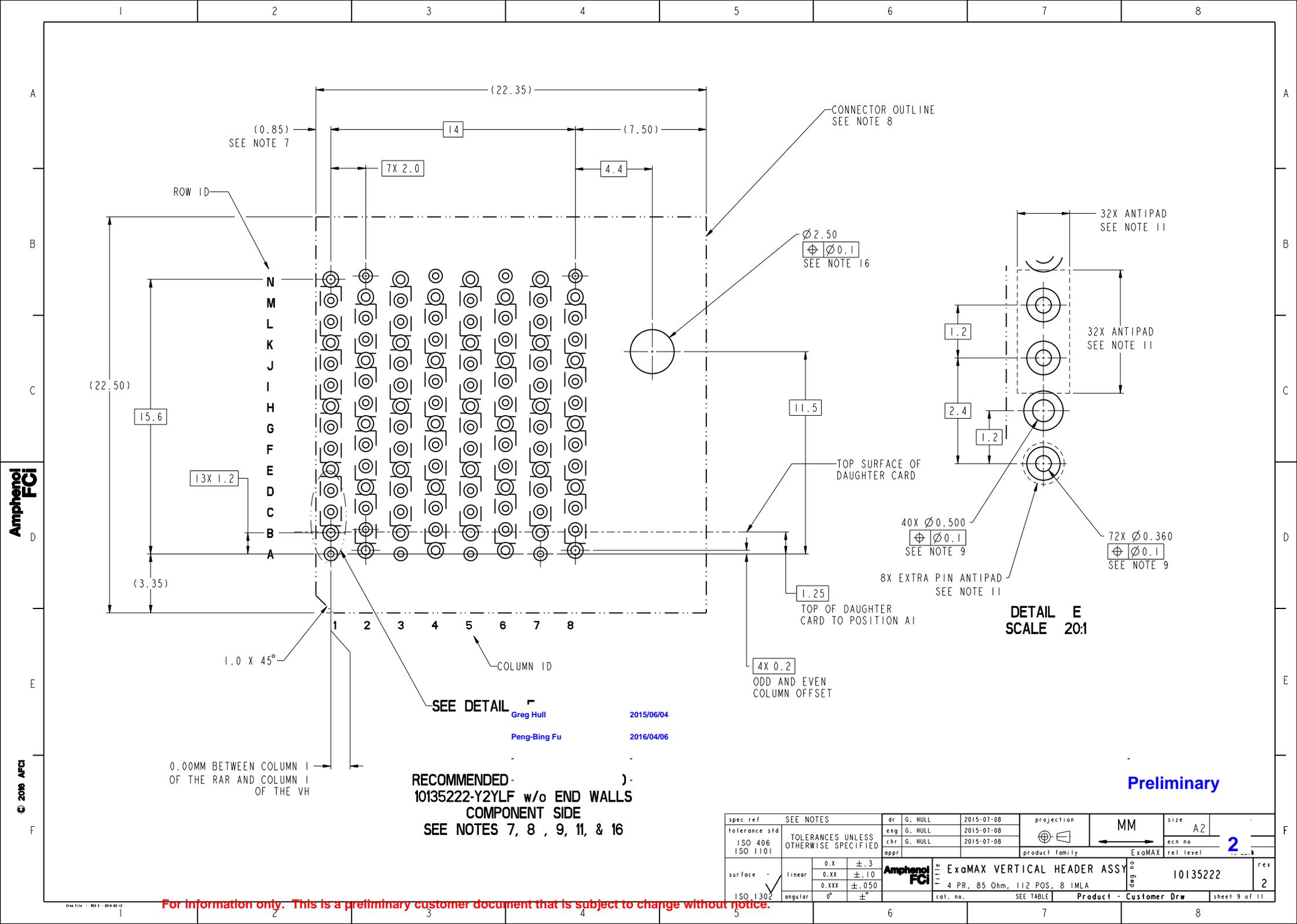
**Preliminary**

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX		
surface	linear	0.X	±.3		<b>ExaMAX VERTICAL HEADER ASSY</b>		ang no	10135222
		0.XX	±.10		4 PR, 85 Ohm, 112 POS, 8 IMLA	rev	2	
		0.XXX	±.050		col. no.	SEE TABLE	Product - Customer Drw	sheet 8 of 11
ISO 1302	angular	0°	±°					

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

**RECOMMENDED -**  
**10135222-Y2YLF w/o END WALLS**  
**COMPONENT SIDE**  
**SEE NOTES 7, 8, 9, 11, & 16**

SEE DETAIL  
 Greg Hull 2015/06/04  
 Peng-Bing Fu 2016/04/06

CONNECTOR OUTLINE  
 SEE NOTE 8

Ø 2.50  
 ⊕ Ø 0.1  
 SEE NOTE 16

TOP SURFACE OF  
 DAUGHTER CARD

40X Ø 0.500  
 ⊕ Ø 0.1  
 SEE NOTE 9

8X EXTRA PIN ANTI PAD  
 SEE NOTE 11

32X ANTI PAD  
 SEE NOTE 11

32X ANTI PAD  
 SEE NOTE 11

72X Ø 0.360  
 ⊕ Ø 0.1  
 SEE NOTE 9

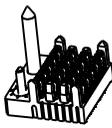
**DETAIL E**  
**SCALE 20:1**

**Preliminary**

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr			product family	ExaMAX	rel level	
surface	linear	Amphenol FCI		ExaMAX VERTICAL HEADER ASSY		eng no	10135222	rev
	0.x ±.3			4 PR, 85 Ohm, 112 POS, 8 IMLA		col. no.	SEE TABLE	Product - Customer Draw
	0.xx ±.10					sheet	9 of 11	
	0.xxx ±.050							
ISO 1302	angular							
	0° ±°							

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10135222 - 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
10135222-1YYLF	STANDARD MATE
10135222-2YYLF	ADVANCED MATE
10135222-3YYLF	SHORT DETECT
10135222-4YYLF	ADVANCED MATE & SHORT DETECT

Greg Hull 2015/06/04  
 Peng-Bing Fu 2016/04/06

Preliminary

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2	
ISO 406		chr	G. HULL	2015-07-08					product family
ISO 1101		appr					ang no	10135222	
surface	linear	0.X	±.3		ExaMAX VERTICAL HEADER ASSY		rev	2	
		0.XX	±.10						
		0.XXX	±.050						
ISO 1302	angular	0°	±°	4 PR, 85 Ohm, 112 POS, 8 IMLA		cat. no.	SEE TABLE	Product - Customer Drw	sheet 10 of 11

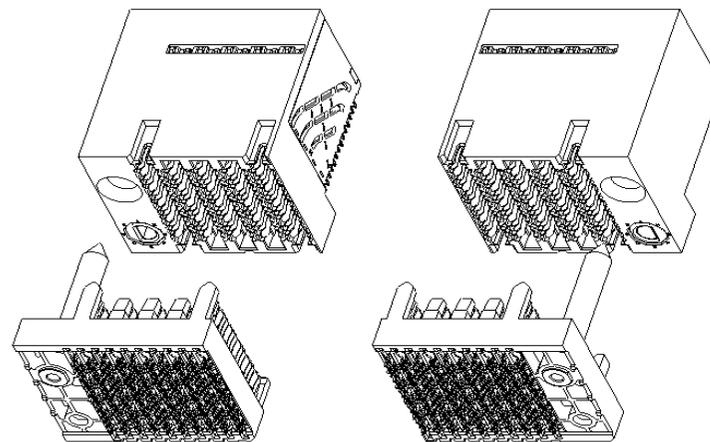
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NOTES

- 1 - CONNECTOR MATERIALS:  
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0  
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, NATURAL, UL94-V0  
CONTACT: COPPER ALLOY  
GUIDE PIN: ZINC ALLOY  
POLARIZING 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 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 THE APPLICATION SPECIFICATION FOR TRACE ROUTING EXAMPLES THAT INCLUDE DIMENSIONS FOR ANTIPADS, TRACE WIDTHS, 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 HEADER, 10135222-2YYLF, 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, 10135222-3YYLF, WHEN MATED WITH A STANDARD MATE RECEPTACLE WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00 MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- 15 - THE ADVANCED MATE/SHORT DETECT HEADER, 10135222-4YYLF, WHEN MATED WITH AN ADVANCED MATE RECEPTACLE 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 1.00 MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- 16 - FOR CONNECTORS WITH EITHER A RIGHT OR LEFT GUIDE MODULE, ONE PHILLIP SREW 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.
- 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**

Greg Hull 2015/06/04

Peng-Bing Fu 2016/04/06

**Preliminary**

spec ref	SEE NOTES	dr	G. HULL	2015-07-08	projection	MM	size	A2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	G. HULL	2015-07-08			ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	2
ISO 1101		appr					product family	ExaMAX
surface	linear	0.X	±.3	<b>Amphenol FCI</b>	ExaMAX VERTICAL HEADER ASSY 4 PR, 85 Ohm, 112 POS, 8 IMLA	cat. no. SEE TABLE	eng no	10135222
ISO 1302	angular	0°	±°				rel level	2
							Product - Customer Drw	sheet 11 of 11