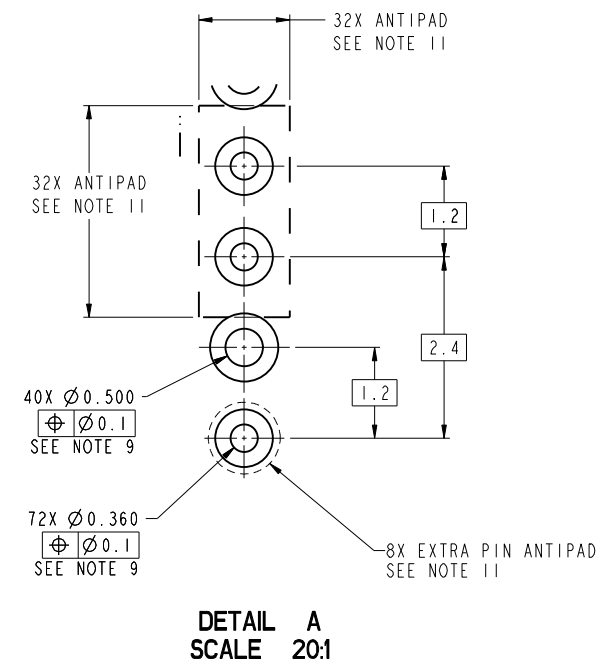
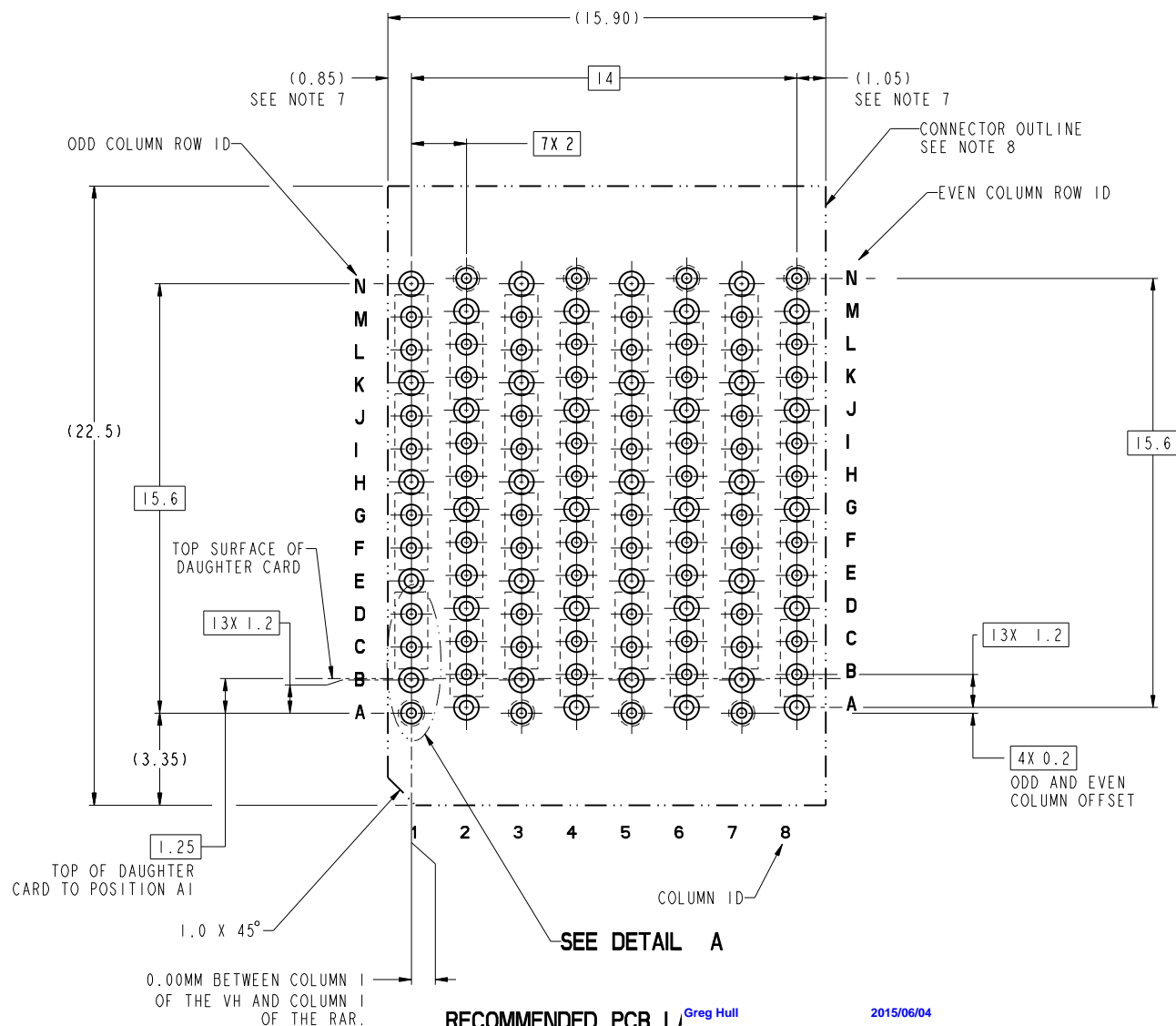




2016/04/06



**For information only. This is a preliminary customer document that is subject to change without notice.**



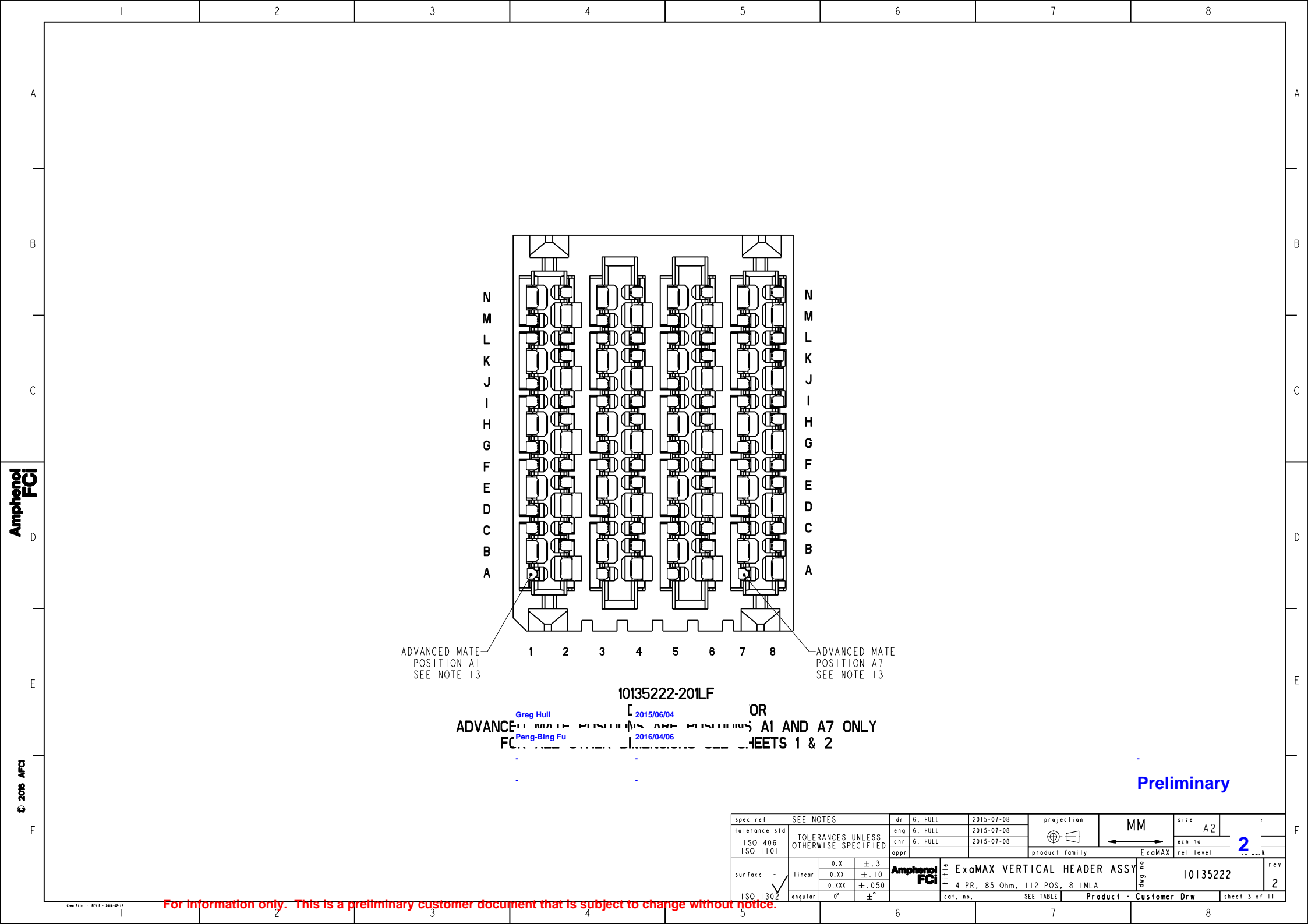
RECOMMENDED PCB LAYER: 10135222-Y01LF COMPOSITION: NOTES 7, 8, 9, 10, 11

2015/06/04

2016/04/06

## Preliminary

spec ref	SEE NOTES		dr	G. HULL	2015-07-08	projection			size	A2	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	G. HULL	2015-07-08				ecn no	2	
ISO 406			chr	G. HULL	2015-07-08						
ISO 1101			appr			product family	ExaMAX		rel level		
surface	linear	0.X ±.3 0.XX ±.10 0.XXX ±.050	Amphenol FCI		ExaMAX VERTICAL HEADER ASSY			eng no	10135222		rel
ISO 1301	angular	0° ±			4 PR, 85 Ohm, 112 POS, 8 IMLA			cal. no.	SEE TABLE		Product - Customer Drw
											sheet 2 of 11

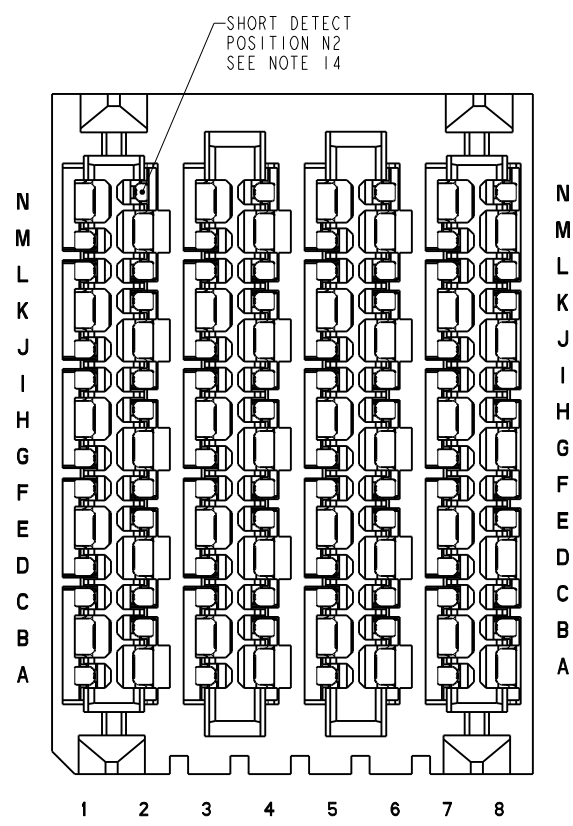


For information only. This is a preliminary customer document that is subject to change without notice.

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

Amphenol  
FCI

© 2016 Amphenol  
FCI



10135222 001 F  
S  
SHORT DETECT CONNECTOR  
ONLY  
ETS 1 & 2

FOR - E -

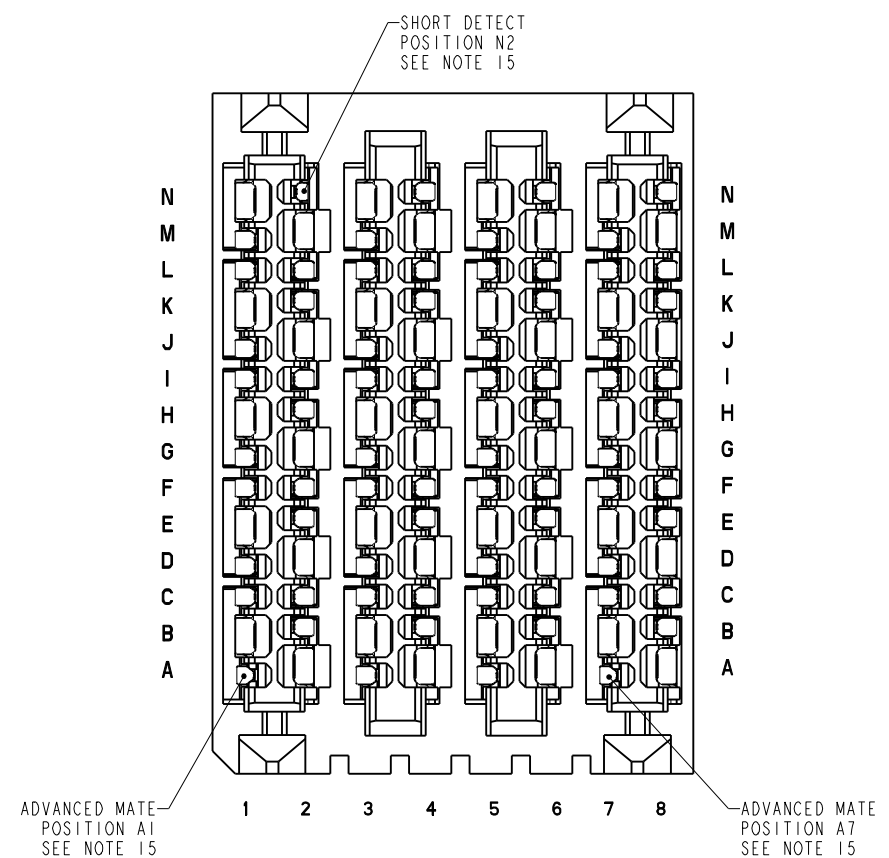
Preliminary

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

For information only. This is a preliminary customer document that is subject to change without notice.

Amphenol  
FCi

© 2016 Amphenol  
FCi



10135222-401LF  
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

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

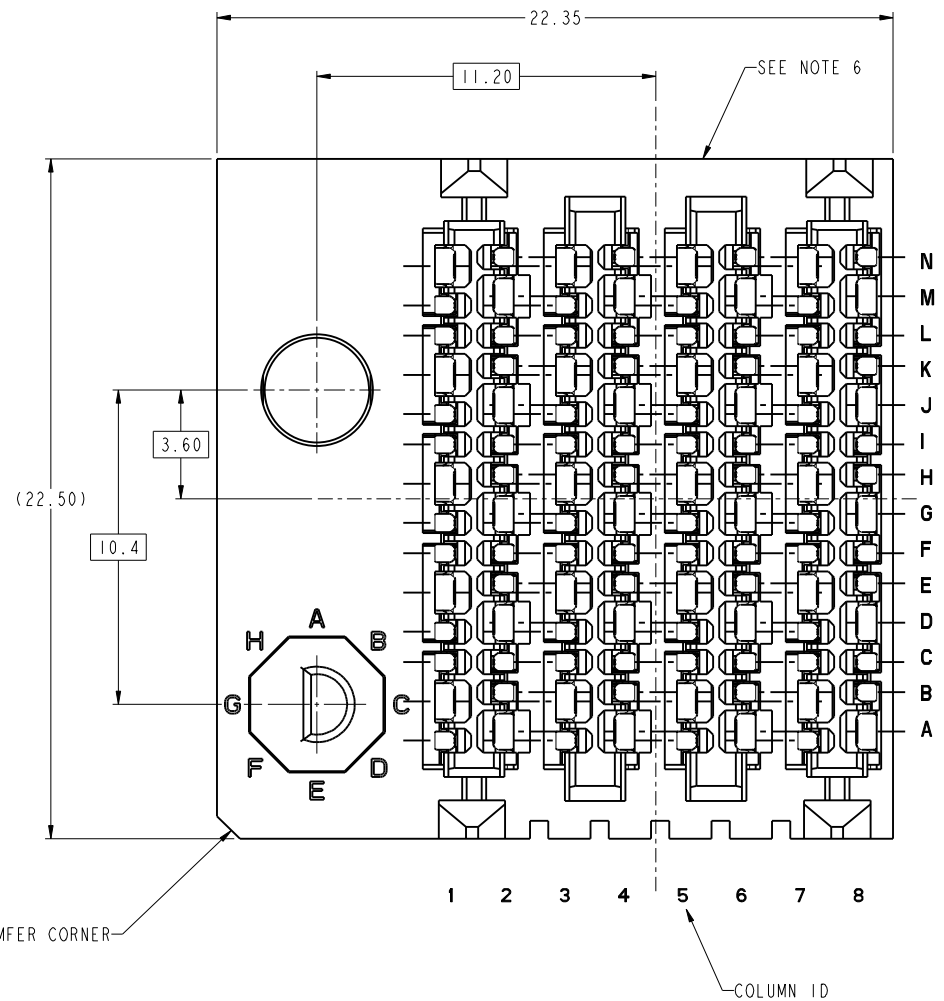
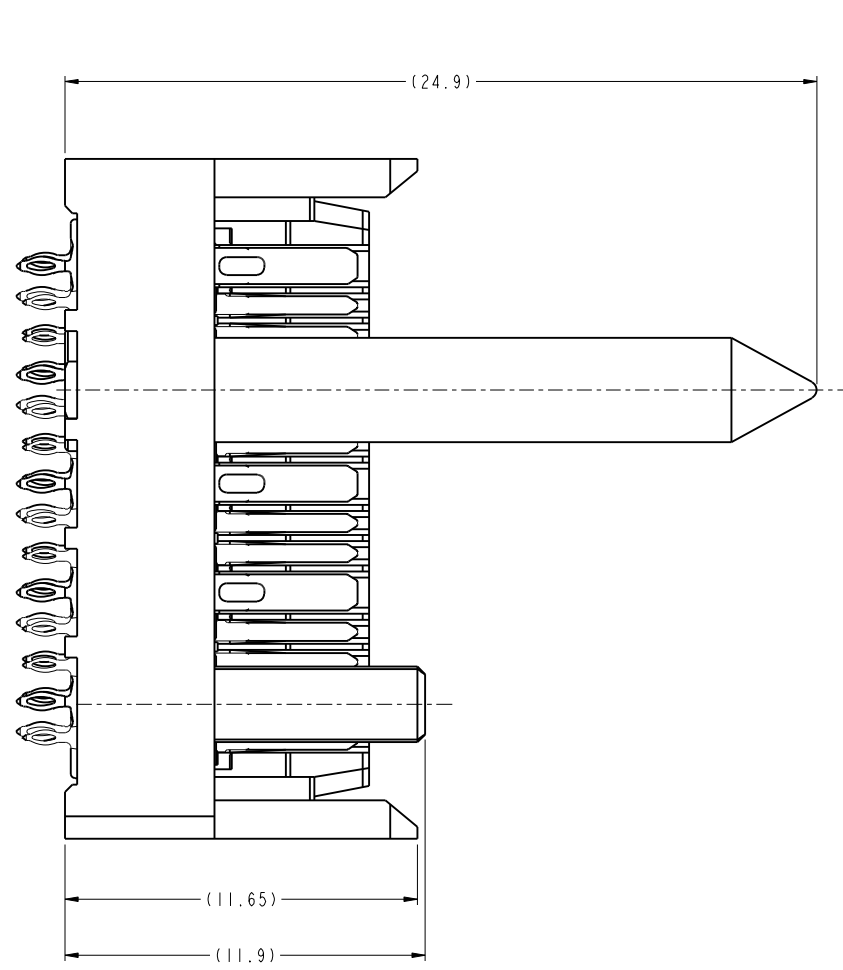
Preliminary

spec ref	SEE NOTES		dr	G. HULL	2015-07-08	projection	MM	size	A2	2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	G. HULL	2015-07-08			⊕	↔	
ISO 406			chr	G. HULL	2015-07-08	product family	ExaMAX			rel level
ISO 1101			appr							
surface	linear	0.X	±.3	Amphenol FCI	Title ExaMAX VERTICAL HEADER ASSY			ang no	10135222	rev 2
		0.XX	±.10							
		0.XXX	±.050							
ISO 1302	angular	0°	±°	cat. no.		SEE TABLE		Product - Customer Drw		sheet 5 of 11

For information only. This is a preliminary customer document that is subject to change without notice.

Amphenol  
FCI

© 2016 Amphenol  
FCI



Greg Hull 2015/06/04

Peng-Bing Fu 2016/04/06

NOTE 17)  
SHEET 1

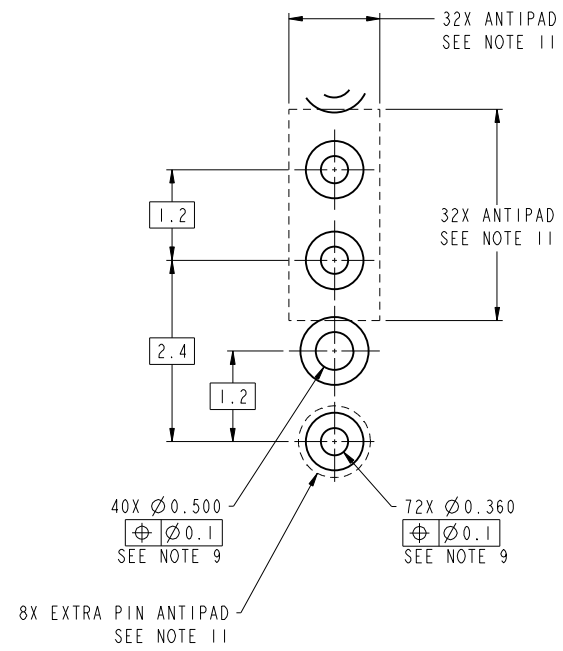
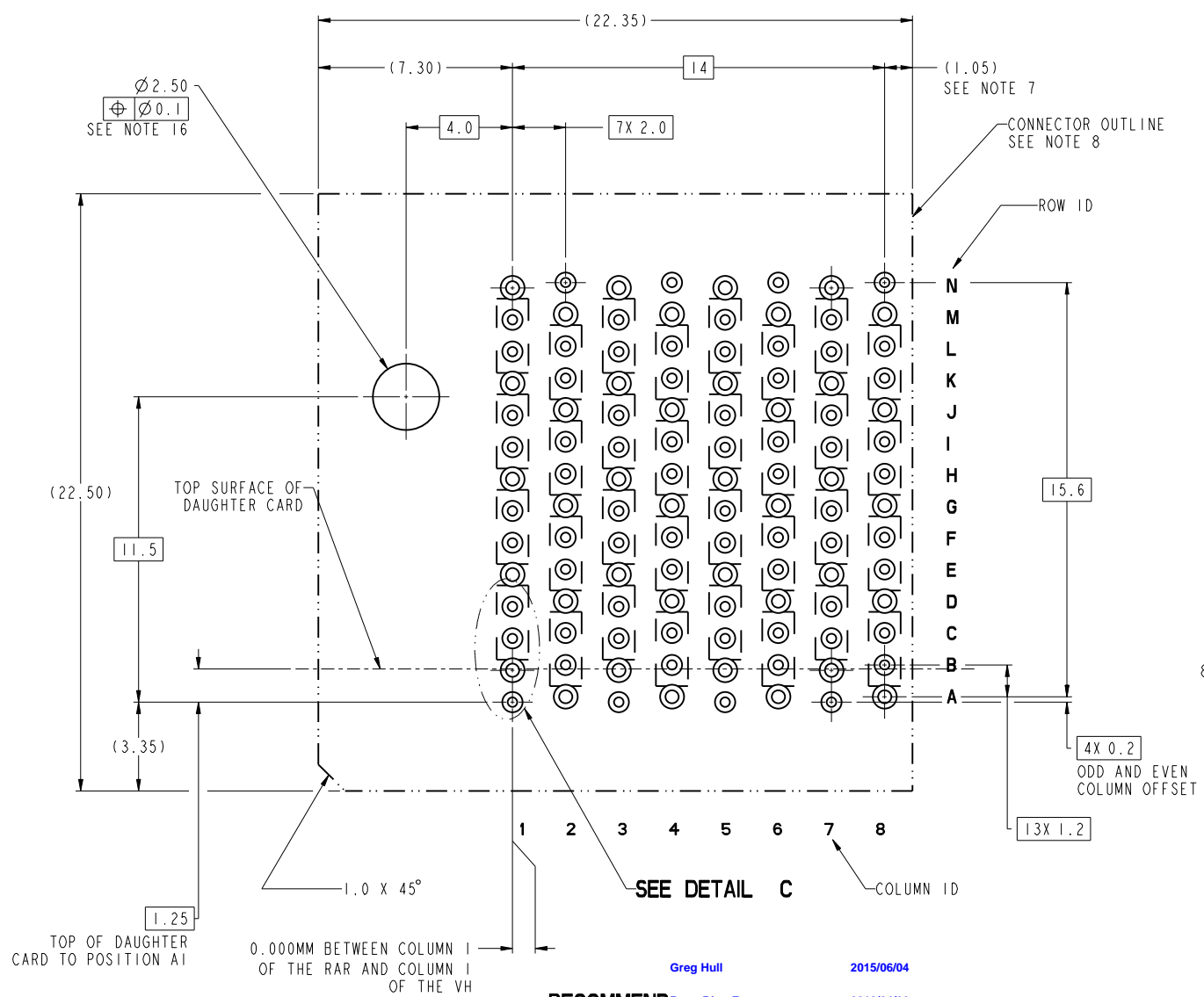
Preliminary

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	product family	ExaMAX	ech no	2
ISO 406		chr	G. HULL	2015-07-08			rel level	
ISO 1101		appr						
surface	linear	0.X	±.3	Amphenol FCI	ExaMAX VERTICAL HEADER ASSY	eng no	10135222	rev
		0.XX	±.10		4 PR, 85 Ohm, 112 POS, 8 IMLA			2
		0.XXX	±.050					
ISO 1302	angular	0°	±°		cat. no.	SEE TABLE	Product - Customer Drw	sheet 6 of 11

For information only. This is a preliminary customer document that is subject to change without notice.

Amphenol  
FCI

© 2016 APCI



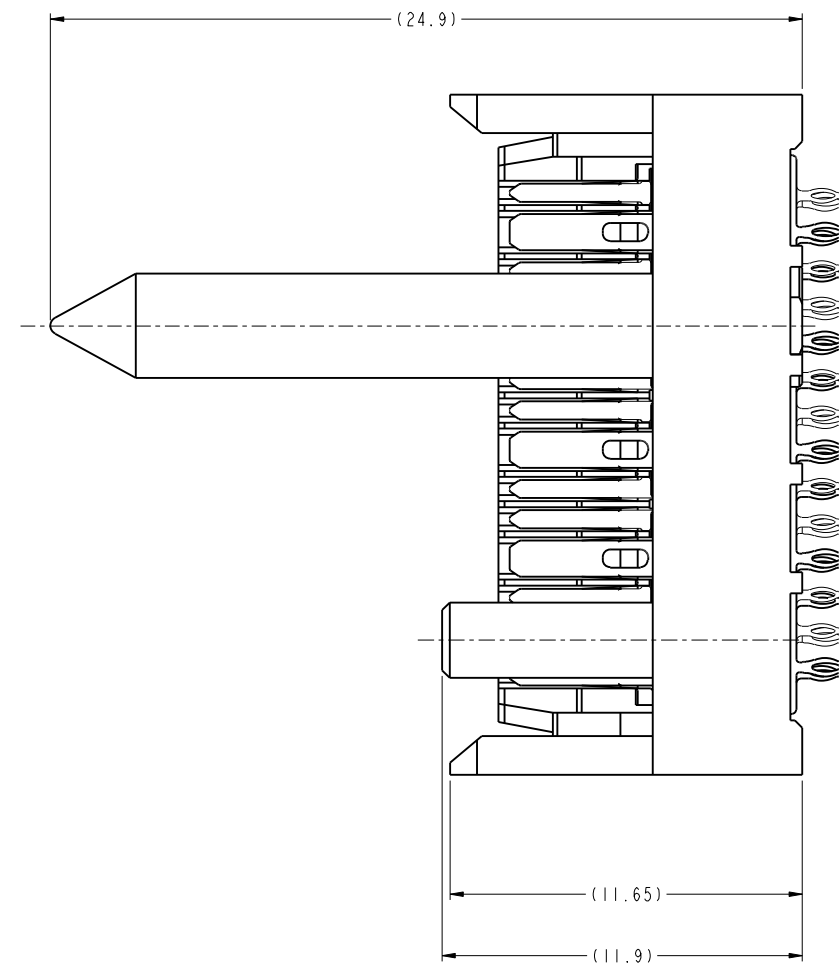
RECOMMEND  
10135222-Y1  
COM  
SEE NOTE

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	chr	G. HULL	2015-07-08	ech no
ISO 406		appr	G. HULL	2015-07-08	product family	ExaMAX	rel level	2
ISO 1101								
surface	linear	0.X	±.3	Amphenol FCI	ExaMAX VERTICAL HEADER ASSY	ang no	10135222	rev
		0.XX	±.10		4 PR, 85 Ohm, 112 POS, 8 IMLA			2
		0.XXX	±.050		cat. no.	SEE TABLE	Product - Customer Drw	sheet 7 of 11
ISO 1302	angular	0°	±°					

For information only. This is a preliminary customer document that is subject to change without notice.





—A1 CORNER CHAMFER

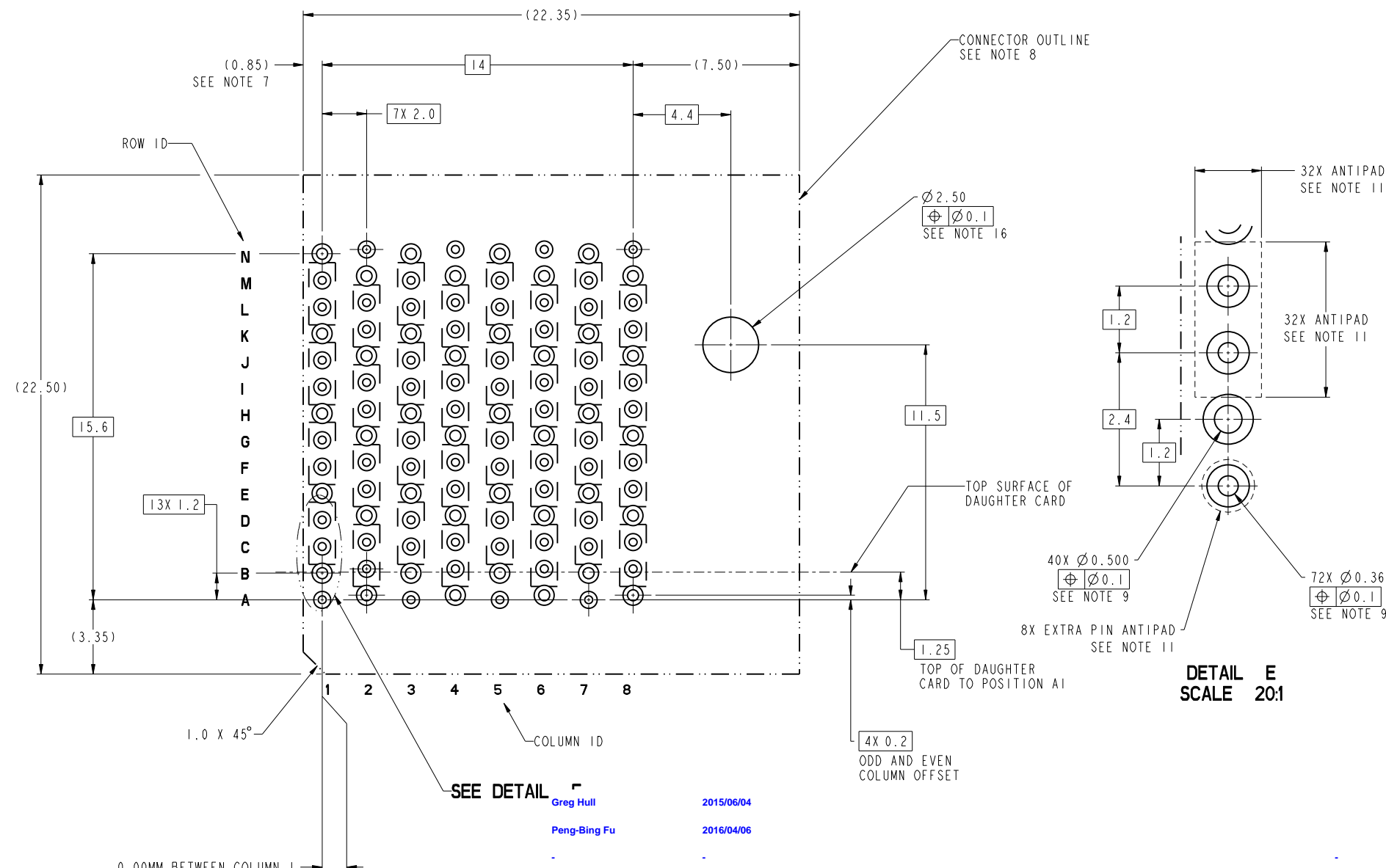
2015/06/04

2016/04/06

-2JLF  
SEE NOTE 17)  
SEE SHEET 1

## Preliminary


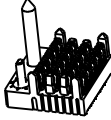
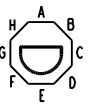
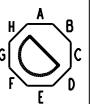
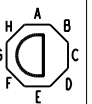
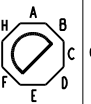
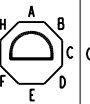
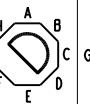
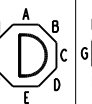
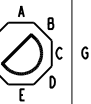
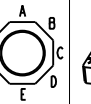


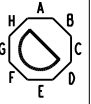
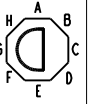
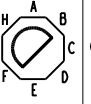
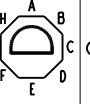
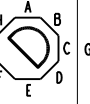
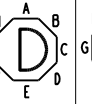
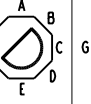
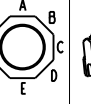
spec ref	SEE NOTES		dr	G. HULL	2015-07-08	projection 	MM 	size	A2	ecn no	2
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED		eng	G. HULL	2015-07-08			rel level	2		
ISO 406 ISO 1101			appr	G. HULL	2015-07-08			product family	ExaMAX		
surface	linear	0.X	±.3	Amphenol FCI	Title ExaMAX VERTICAL HEADER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



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

10135222 - Y Y Y L F




ASSEMBLY PART NUMBER	DESCRIPTION
10135222-1YYLF	STANDARD MATE
10135222-2YYLF	ADVANCED MATE
10135222-3YYLF	SHORT DETECT
10135222-4YYLF	ADVANCED MATE & SHORT DETECT

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)	
										

Greg Hull 2015/06/04

Peng-Bing Fu 2016/04/06

Preliminary

spec ref	SEE NOTES		dr	G. HULL	2015-07-08	projection		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	Amphenol FCI	ExaMAX VERTICAL HEADER ASSY			10135222		
		0.XX	±.10							
		0.XXX	±.050							
ISO 1302	angular	0°	±°	4 PR. 85 Ohm, 112 POS. 8 IMLA				2		
					SEE TABLE			Product - Customer Drw		
								sheet 10 of 11		

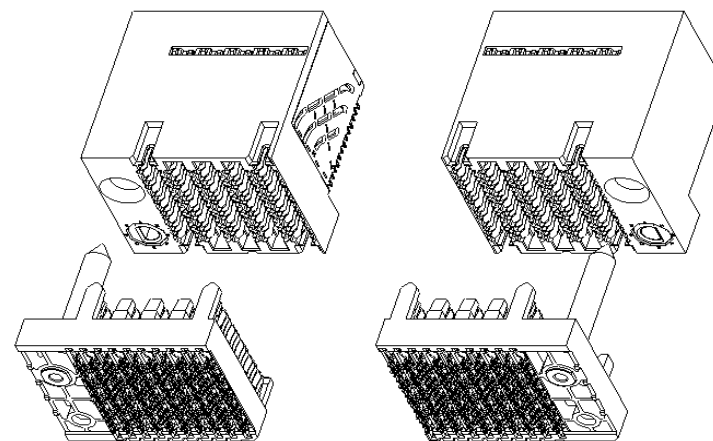
For information only. This is a preliminary customer document that is subject to change without notice.

## 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 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.
- 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.

Greg Hull 2015/06/04

Peng-Bing Fu 2016/04/06



LEFT GUIDE

RIGHT GUIDE

ExaMAX INTEGRATED GUIDE ORIENTATION  
4-PAIR 10-IMLA CONNECTORS SHOWN FOR REFERENCE ONLY  
SEE NOTE 17

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	Amphenol FCI	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 11 of 11	
ISO 1302	angular	0°	±°						

# Mouser Electronics

Authorized Distributor

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

[FCI / Amphenol:](#)

[10135222-11JLF](#) [10135222-12JLF](#) [10135222-101LF](#)