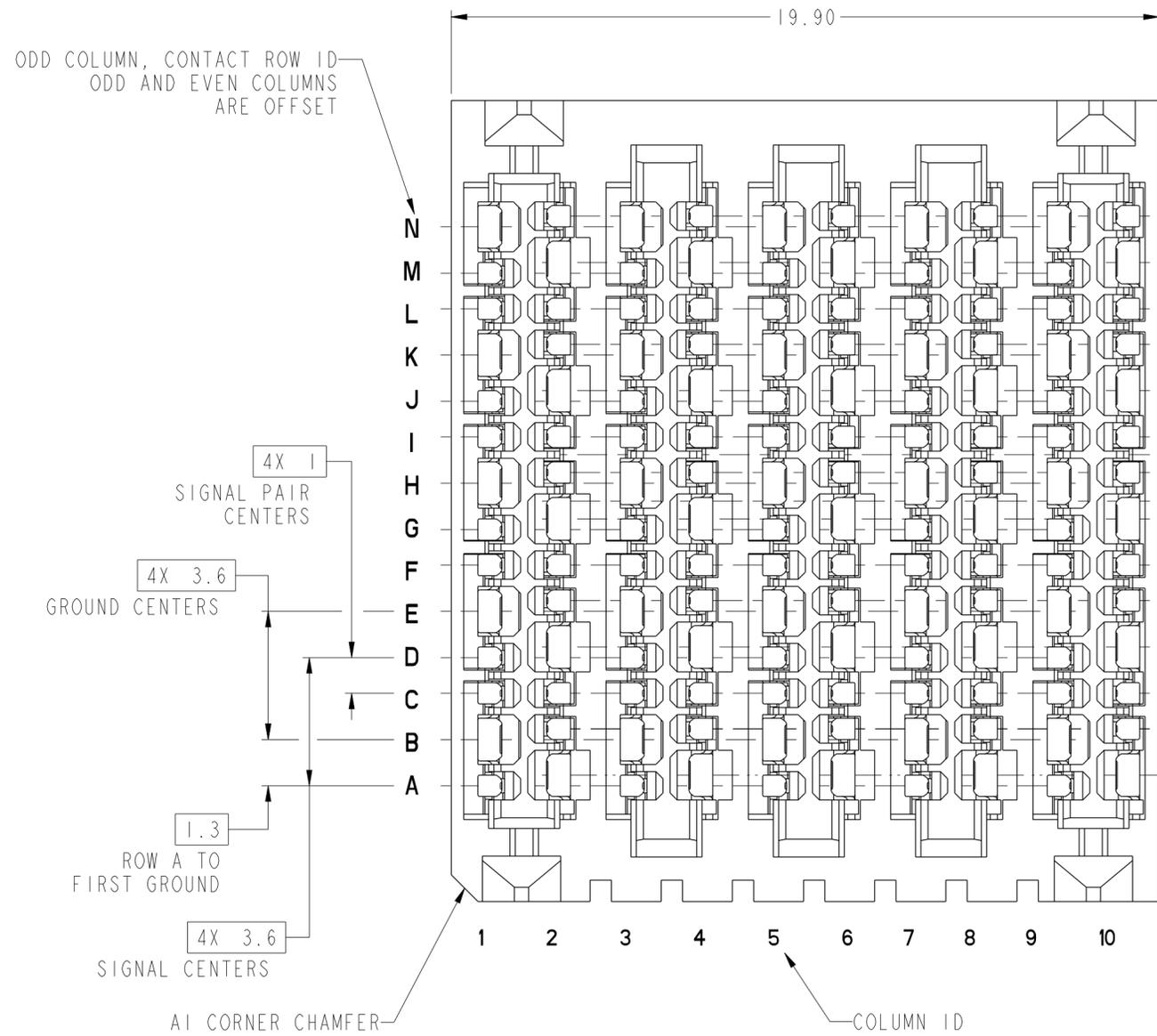
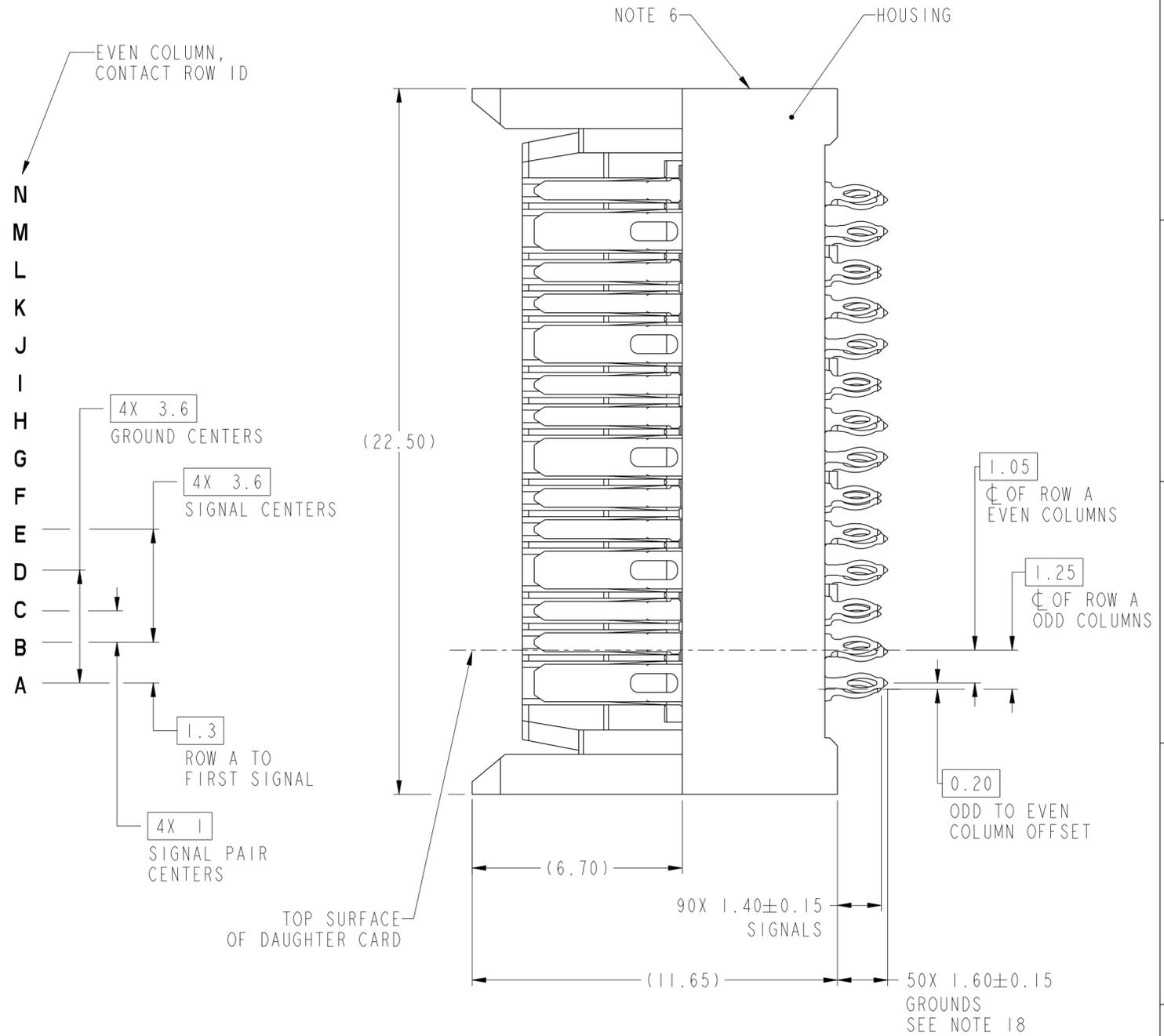


PRODUCT NUMBER  
SEE SHEET 10



10137069-Y01LF  
(10137069-101LF STANDARD MATE CONNECTOR SHOWN)



spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	8:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released
ISO 406		chr	-	cat. no.						
ISO 1101		appr	Heaven Cen	2018/01/05	product family	ExaMAX	rel level	Released		
surface	linear	0.X	±.3		<b>ExaMAX VERTICAL HEADER ASSY</b>		10137069	rev A		
		0.XX	±.10		4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON					
	angular	0°	±°							

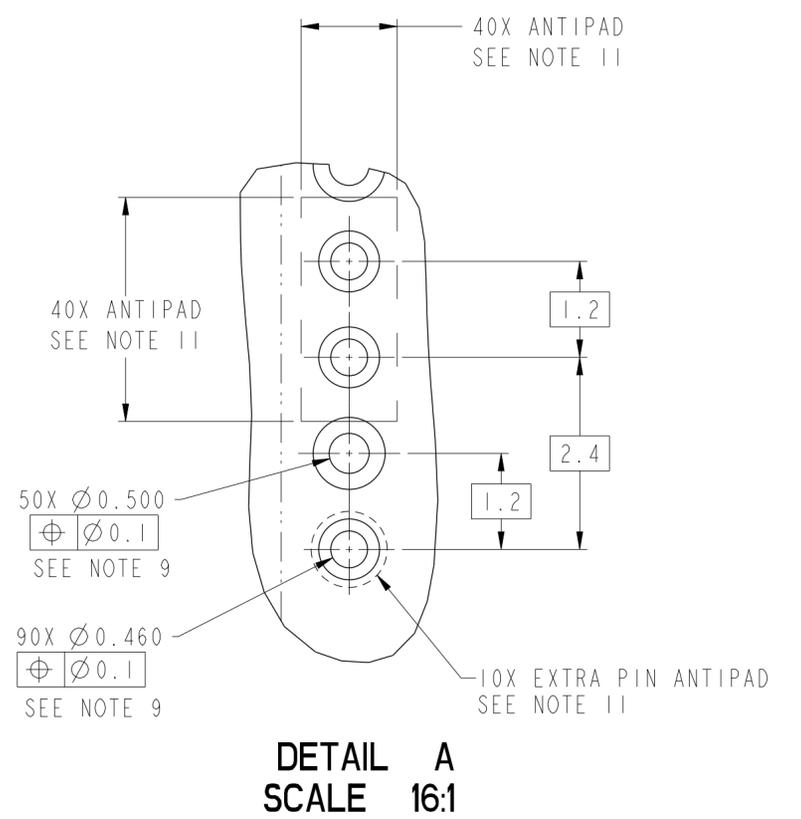
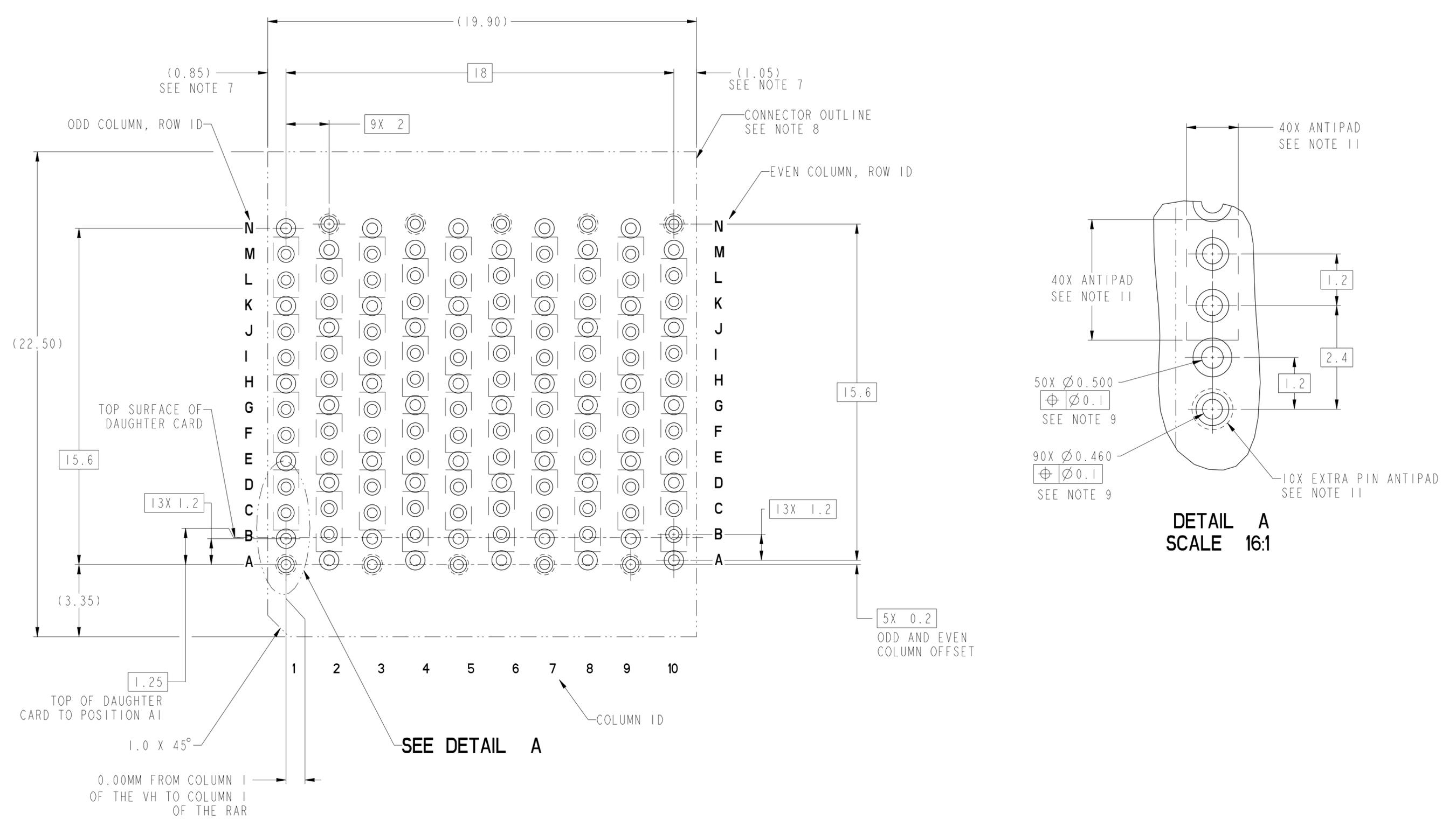
PDS: Rev :A

STATUS:Released

Printed: Jan 05, 2018

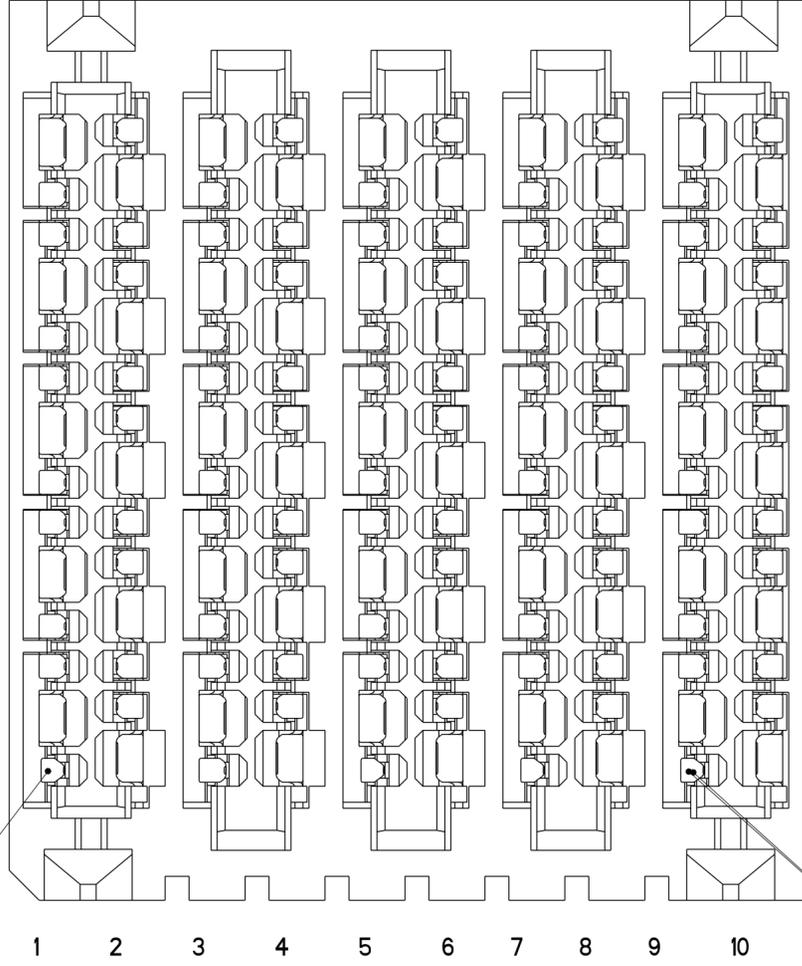
Amphenol  
FCI

© 2016 APCI



**RECOMMENDED PCB LAYOUT FOR  
10137069-Y01LF COMPONENT SIDE  
SEE NOTES 7, 8, 9, & 11**

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	3:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released
ISO 406 ISO 1101		chr	-	2018/01/05						
surface	linear	appr	Heaven Cen	2018/01/05	product family	ExaMAX	rel level	Released	rev	A
ISO 1302	angular			title ExaMAX VERTICAL HEADER ASSY 4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON		dwg no 10137069	cat. no. SEE TABLE	Product - Customer Drw	sheet 2 of 11	



ADVANCED MATE POSITION A1  
SEE NOTE 13

ADVANCED MATE POSITION A9  
SEE NOTE 13

**10137069-201LF**  
**ADVANCED MATE CONNECTOR**  
 ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY  
 FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

**Amphenol FCI**

© 2016 AFCI

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-		
ISO 406		chr	-	rel level			Released			
ISO 1101		appr	Heaven Cen	2018/01/05	product family	ExaMAX				
surface	linear			title ExaMAX VERTICAL HEADER ASSY 4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON		dwg no	10137069		rev	A
ISO 1302	angular			cat. no.	SEE TABLE	Product - Customer Drw	sheet 3 of 11			

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

B

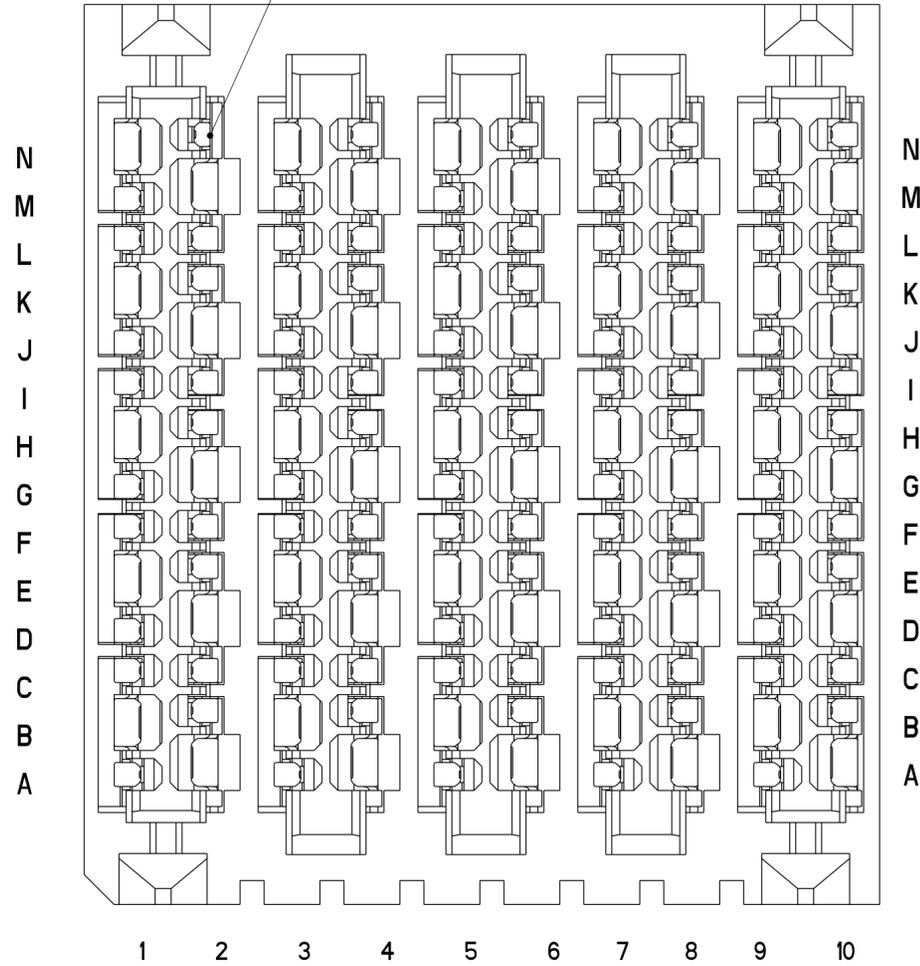
C

D

E

F

SHORT DETECT  
POSITION N2  
SEE NOTE 14



10137069-301LF  
SHORT DETECT CONNECTOR  
SHORT DETECT POSITION IS N2 ONLY  
FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2

Amphenol  
FCi

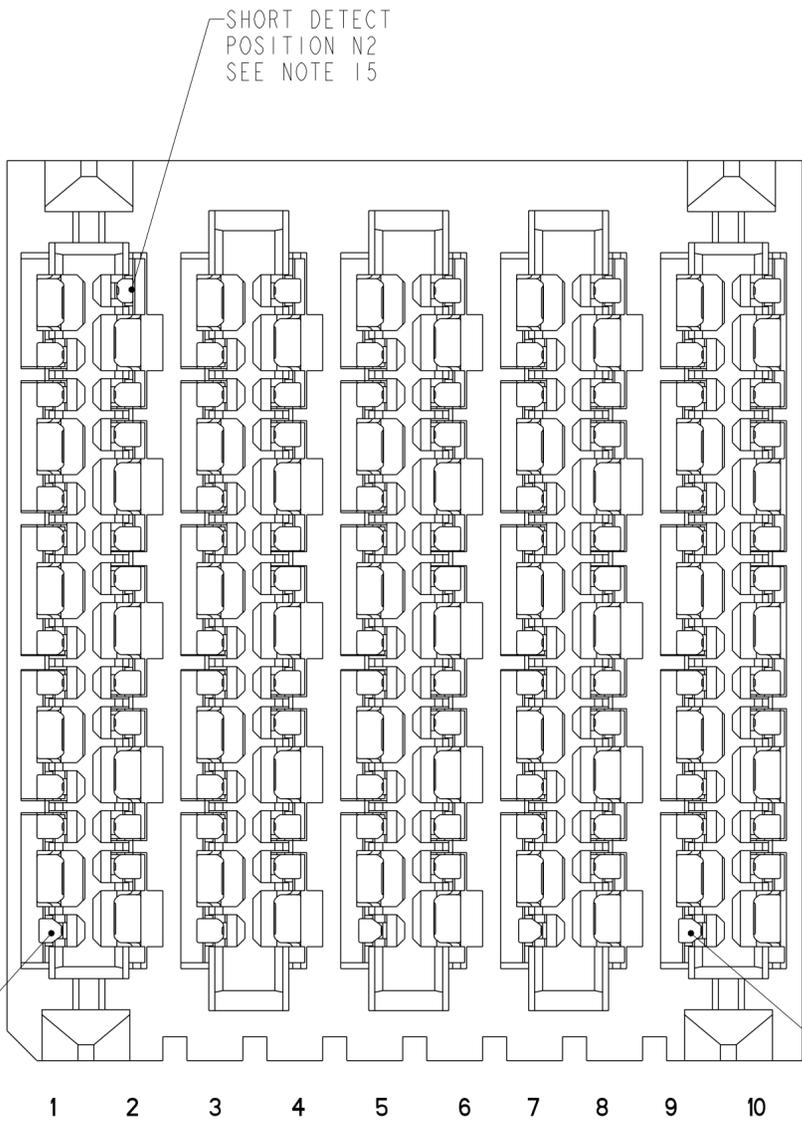
© 2016 AFci

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	6:1		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released		
ISO 406		chr	-	2018/01/05								
ISO 1101		appr	Heaven Cen	2018/01/05	product family	ExaMAX						
surface	linear	0.X	±.3		title		ExaMAX VERTICAL HEADER ASSY 4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON	div no 10137069	rev A			
		0.XX	±.10		cat. no.					SEE TABLE	Product - Customer Drw	sheet 4 of 11
ISO 1302	angular	0°	±°									

PDS: Rev :A

STATUS:Released

Printed: Jan 05, 2018



ADVANCED MATE  
POSITION A1  
SEE NOTE 15

ADVANCED MATE  
POSITION A9  
SEE NOTE 15

**10137069-401LF**  
**ADVANCED MATE/SHORT DETECT CONNECTOR**  
**ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY**  
**SHORT DETECT POSITION IS N2 ONLY**  
**FOR ALL OTHER DIMENSIONS SEE SHEETS 1 & 2**

**Amphenol  
FCi**

© 2016 AFci

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	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
ISO 406		chr	-	appr						
ISO 1101					product family	ExaMAX	rel level	Released		
surface	linear	0.X	±.3		<b>ExaMAX VERTICAL HEADER ASSY</b>		dwg no 10137069	rev A		
		0.XX	±.10		4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON					
		0.XXX	±.050		cat. no. SEE TABLE				Product - Customer Drw	sheet 5 of 11
ISO 1302	angular	0°	±°							

A

B

C

D

E

F

A

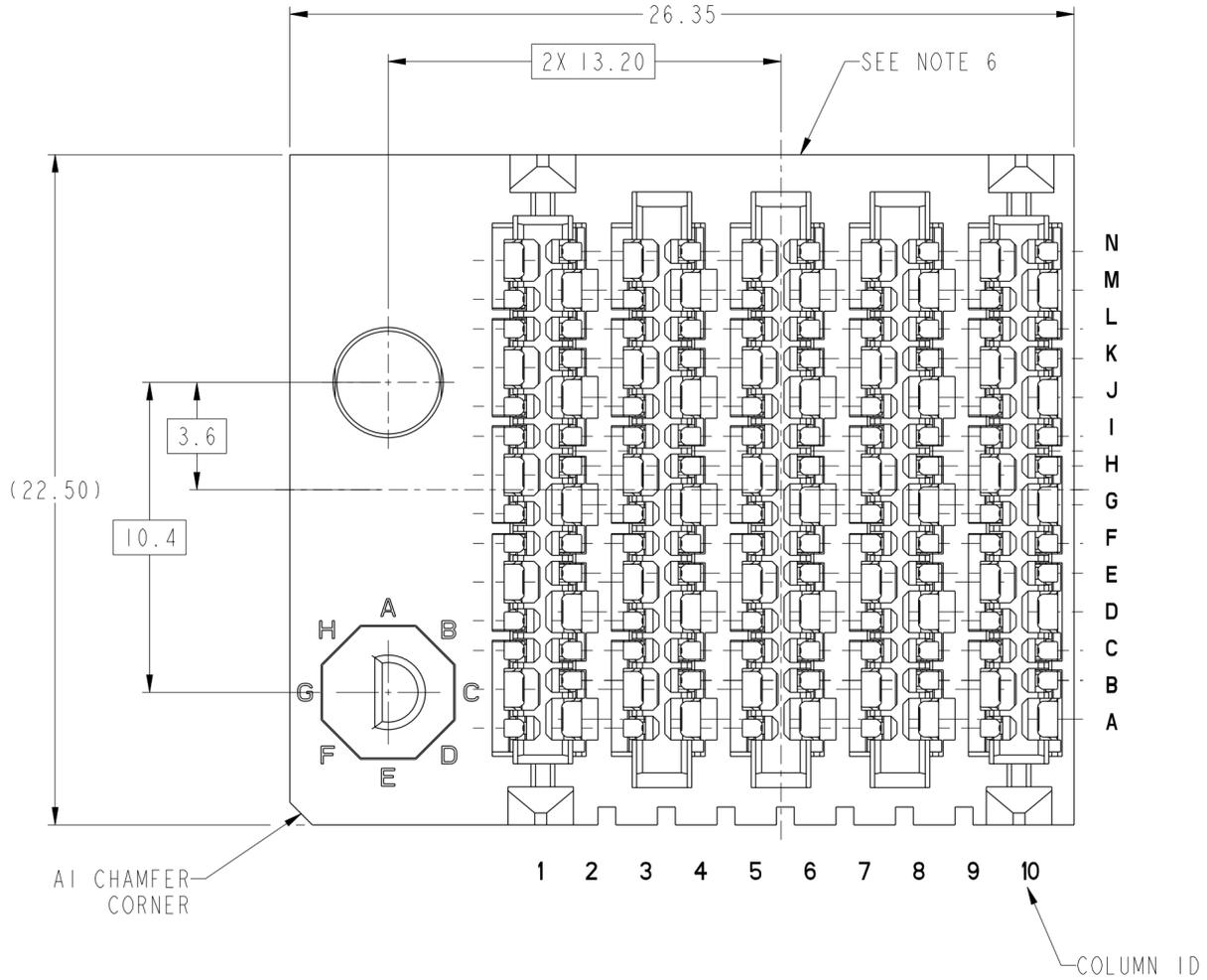
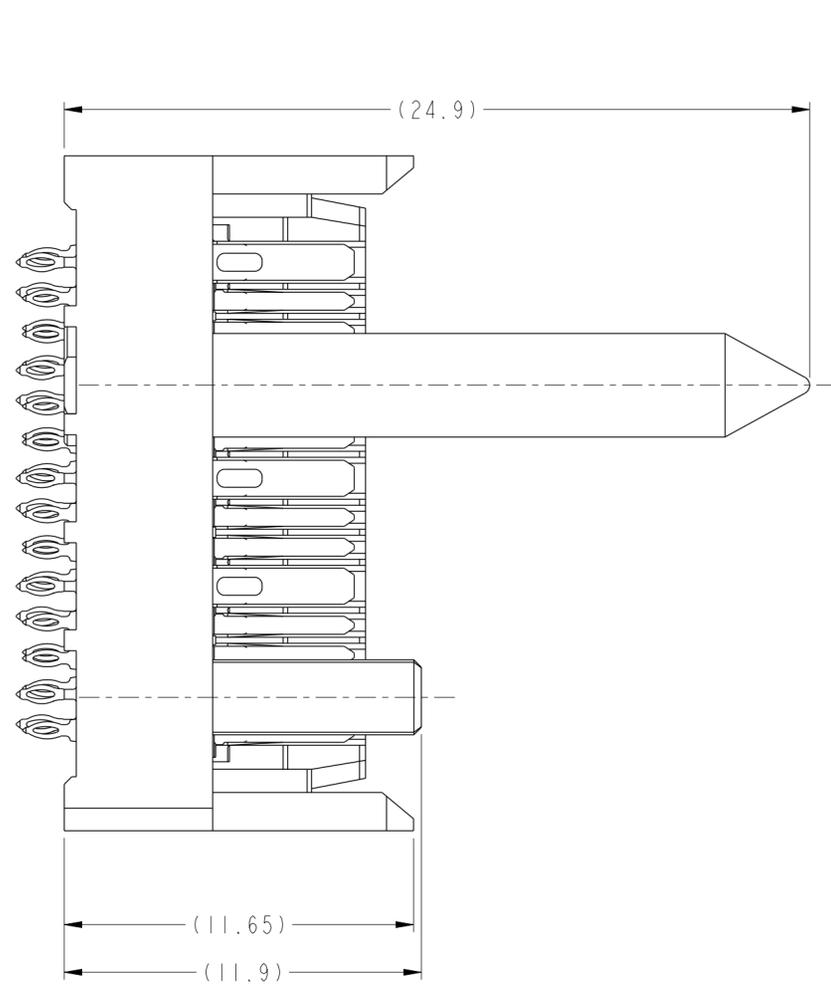
B

C

D

E

F



10137069-Y1ALF THRU -Y1JLF  
 RIGHT GUIDANCE CONNECTOR (SEE NOTE 17)  
 FOR ALL OTHER DIMENSIONS SEE SHEET 1

Amphenol  
 FCI

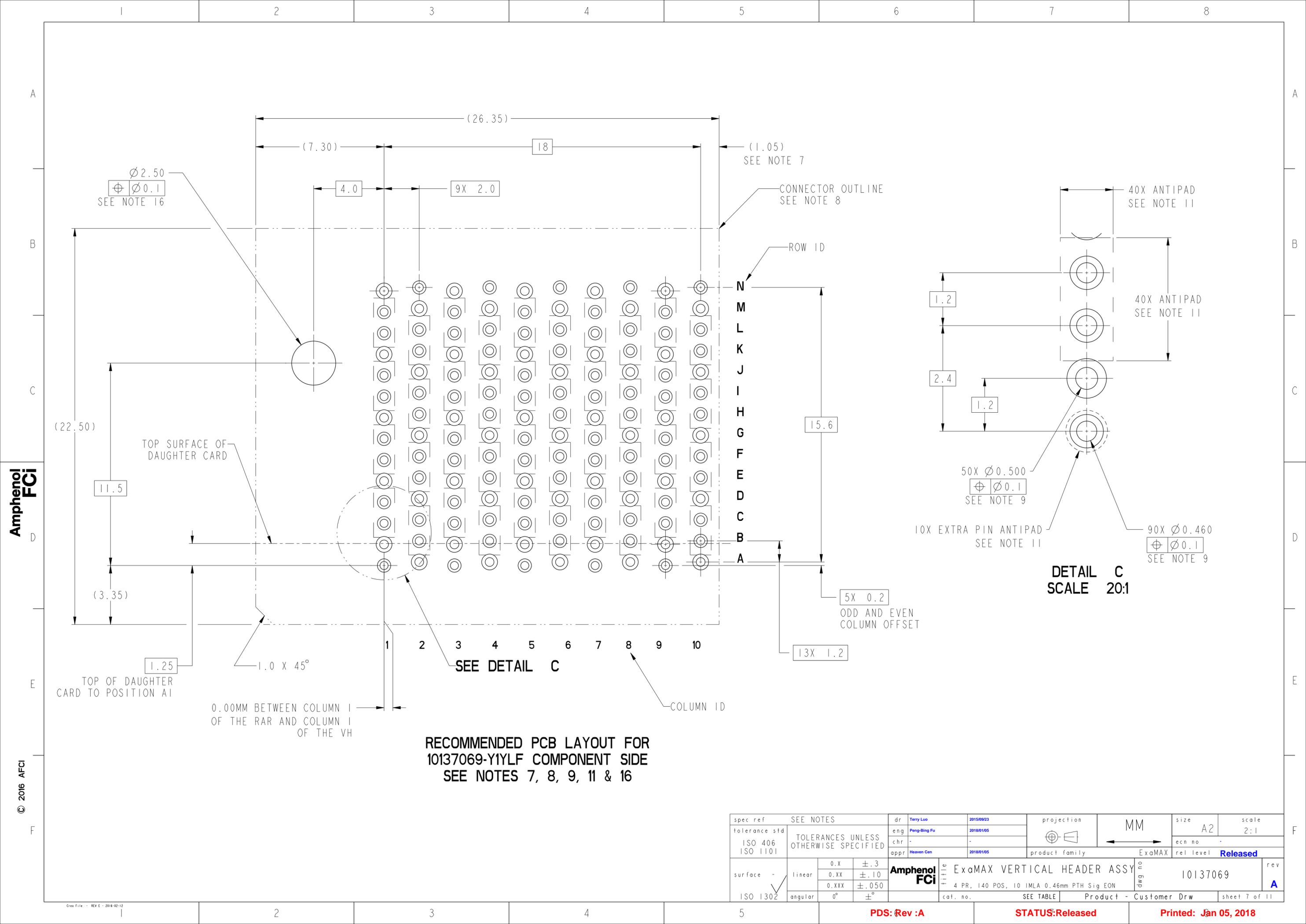
© 2016 APCI

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	6:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level <b>Released</b>	
ISO 406		chr	-	rel level						
ISO 1101		appr	Heaven Cen	2018/01/05			product family	ExaMAX		
surface	linear	0.X	±.3	<b>Amphenol FCI</b>	title ExaMAX VERTICAL HEADER ASSY		dwg no 10137069	rev A		
ISO 1302		0.XX	±.10		4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON					
	angular	0°	±°		cat. no. SEE TABLE					
					Product - Customer Drw		sheet 6 of 11			

PDS: Rev :A

STATUS:Released

Printed: Jan 05, 2018



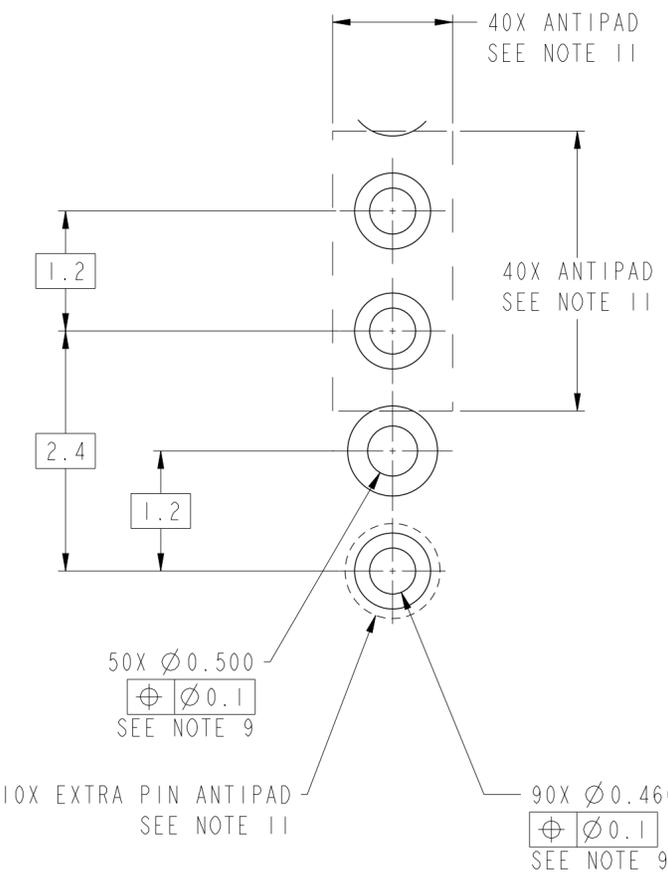
Ø2.50  
Ø0.1  
SEE NOTE 16

(1.05)  
SEE NOTE 7

CONNECTOR OUTLINE  
SEE NOTE 8

ROW ID

N  
M  
L  
K  
J  
I  
H  
G  
F  
E  
D  
C  
B  
A



DETAIL C  
SCALE 20:1

5X 0.2  
ODD AND EVEN  
COLUMN OFFSET

13X 1.2

SEE DETAIL C

COLUMN ID

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

RECOMMENDED PCB LAYOUT FOR  
10137069-Y1YLF COMPONENT SIDE  
SEE NOTES 7, 8, 9, 11 & 16

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	2:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released
ISO 406		chr	-							
ISO 1101		appr	Heaven Cen	2018/01/05	product family	ExaMAX				
surface	linear	0.X	±.3		title		10137069 4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON	rev A		
		0.XX	±.10		ExaMAX VERTICAL HEADER ASSY					
		0.XXX	±.050		cat. no.				SEE TABLE	Product - Customer Drw
ISO 1302	angular	0°	±°							

PDS: Rev :A

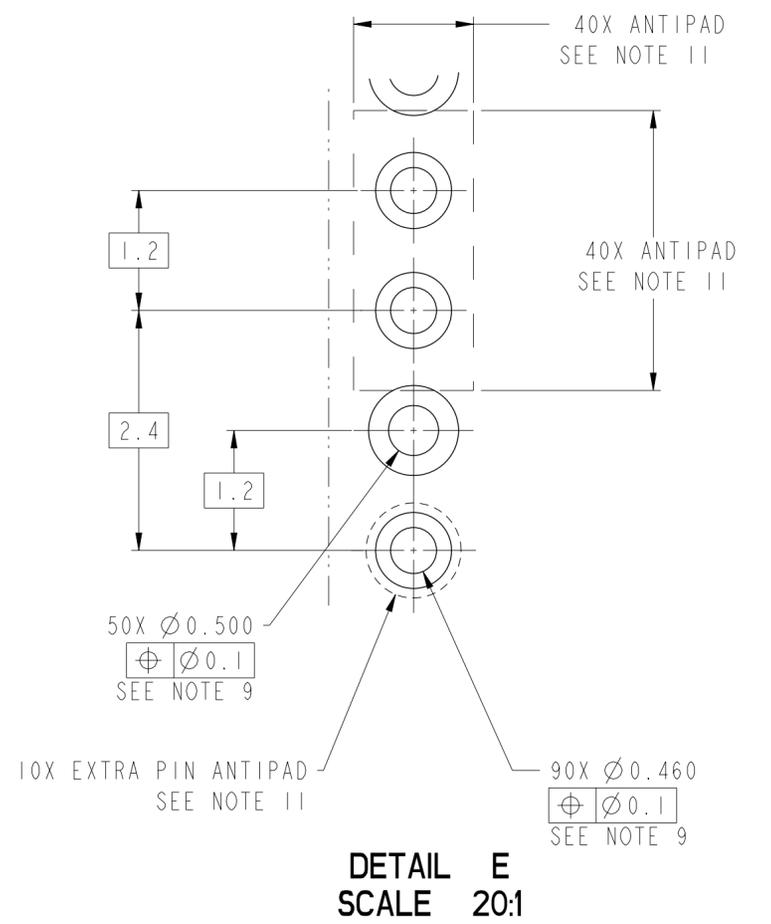
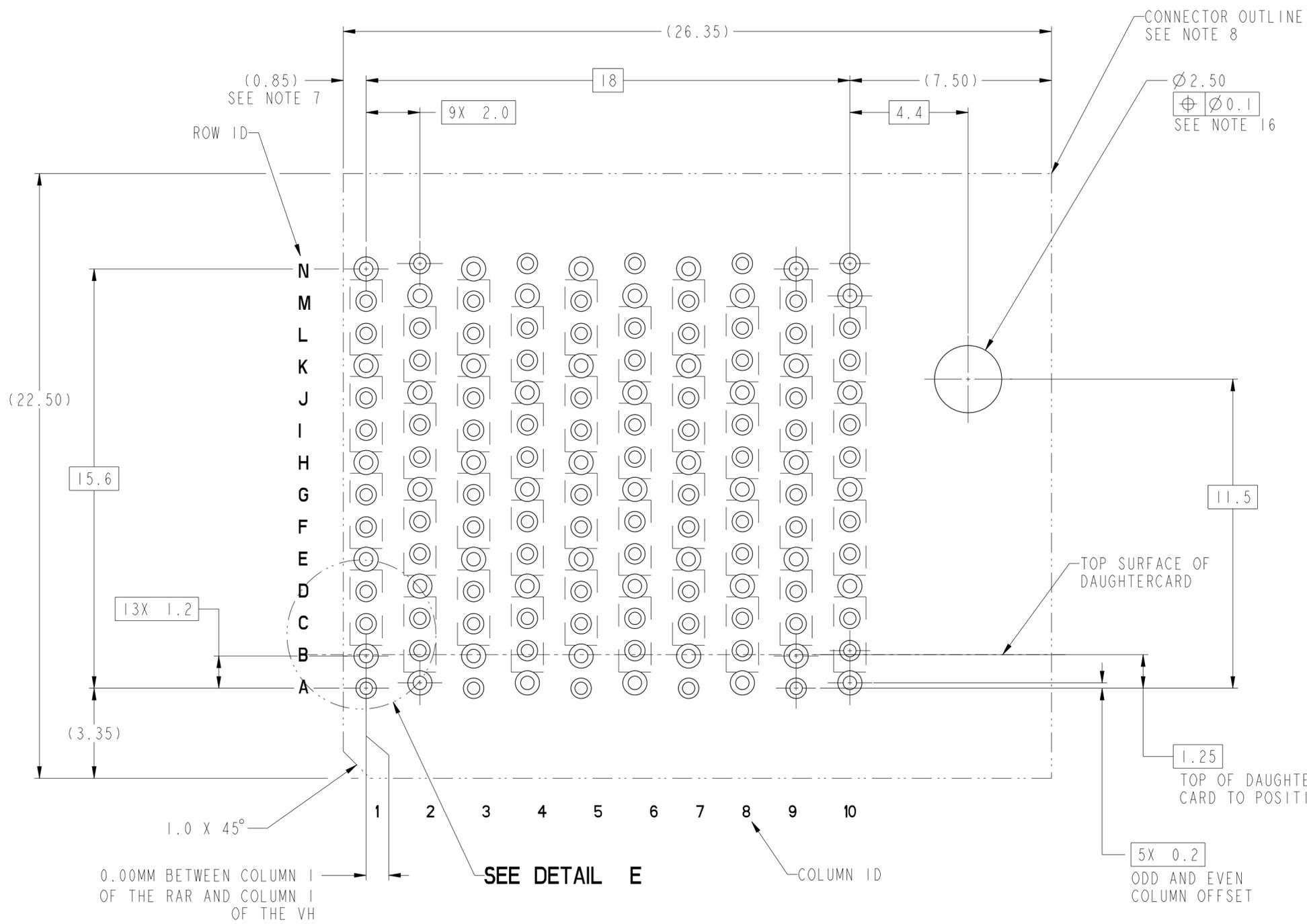
STATUS:Released

Printed: Jan 05, 2018

Amphenol  
FCI

© 2016 APCI

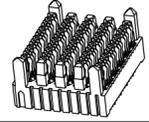
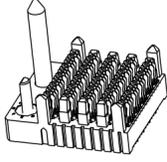
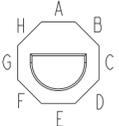
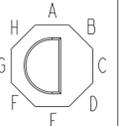
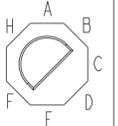
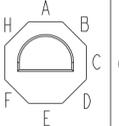
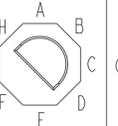
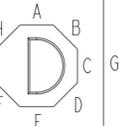
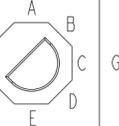
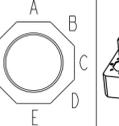
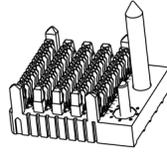
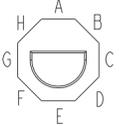
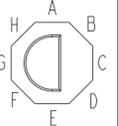
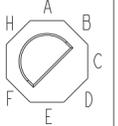
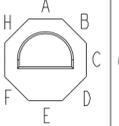
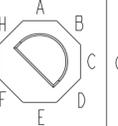
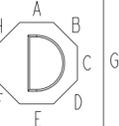
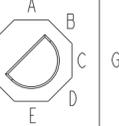
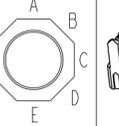




**RECOMMENDED PCB LAYOUT FOR  
10137069-Y2YLF COMPONENT SIDE  
SEE NOTES 7, 8, 9, 11 & 16**

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	2:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released	
ISO 406		chr	-								
ISO 1101		appr	Heaven Cen	2018/01/05							
surface	linear	0.X	±.3		product family ExaMAX	title ExaMAX VERTICAL HEADER ASSY 4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON	div no 10137069	rev A	cat. no. SEE TABLE	Product - Customer Drw	sheet 9 of 11
		0.XX	±.10								
		0.XXX	±.050								
ISO 1302	angular	0°	±°								

10137069 - Y Y Y L F

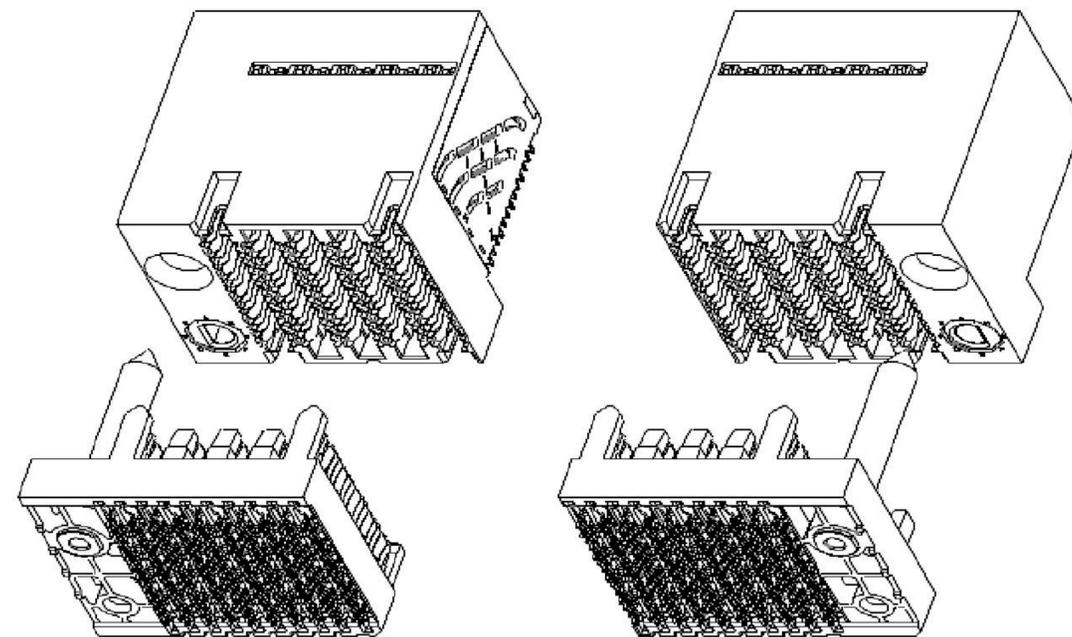
MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER										BASE MODULE
STANDARD NO GUIDANCE (SEE SHEET 1)	01										
RIGHT GUIDANCE MODULE (SEE SHEET 6)	<b>1A</b>	<b>1B</b>	<b>1C</b>	<b>1D</b>	<b>1E</b>	<b>1F</b>	<b>1G</b>	<b>1H</b>	<b>1J</b> (NO KEY)		
											
LEFT GUIDANCE MODULE (SEE SHEET 8)	<b>2A</b>	<b>2B</b>	<b>2C</b>	<b>2D</b>	<b>2E</b>	<b>2F</b>	<b>2G</b>	<b>2H</b>	<b>2J</b> (NO KEY)		
											

ASSEMBLY PART NUMBER	DESCRIPTION
10137069-1YYLF	STANDARD MATE
10137069-2YYLF	ADVANCED MATE
10137069-3YYLF	SHORT DETECT
10137069-4YYLF	ADVANCED MATE & SHORT DETECT

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	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	
ISO 406		chr	-	product family			ExaMAX				
ISO 1101		appr	Heaven Cen	2018/01/05			rel level	Released			
surface	linear	0.X	±.3	<b>Amphenol FCI</b>	title	ExaMAX VERTICAL HEADER ASSY	dwg no	10137069	rev	A	
ISO 1302		0.XX	±.10								4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON
	angular	0°	±°								

NOTES

- ①- CONNECTOR MATERIALS:  
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0  
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0  
CONTACT: COPPER ALLOY  
GUIDE PIN: ZINC ALLOY  
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 CONNECTOR WILL BE 2.0mm OR 3.0mm 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, 10137069-2YYLF, 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, 10137069-3YYLF, 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, 10137069-4YYLF, 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 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  
SEE NOTE 17

spec ref	SEE NOTES	dr	Terry Luo	2015/09/23	projection	MM	size	A2	scale	2:1			
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2018/01/05			ecn no	-	rel level	Released			
ISO 406		chr	-	apppr							Heaven Cen	2018/01/05	product family
ISO 1101		surface	-	linear	0.X	±.3	Amphenol FCI	title	ExaMAX VERTICAL HEADER ASSY	dwg no	10137069	rev	A
					0.XX	±.10			4 PR, 140 POS, 10 IMLA 0.46mm PTH Sig EON	cat. no.	SEE TABLE	Product - Customer Drw	sheet 11 of 11
					0.XXX	±.050							
					angular	0°							