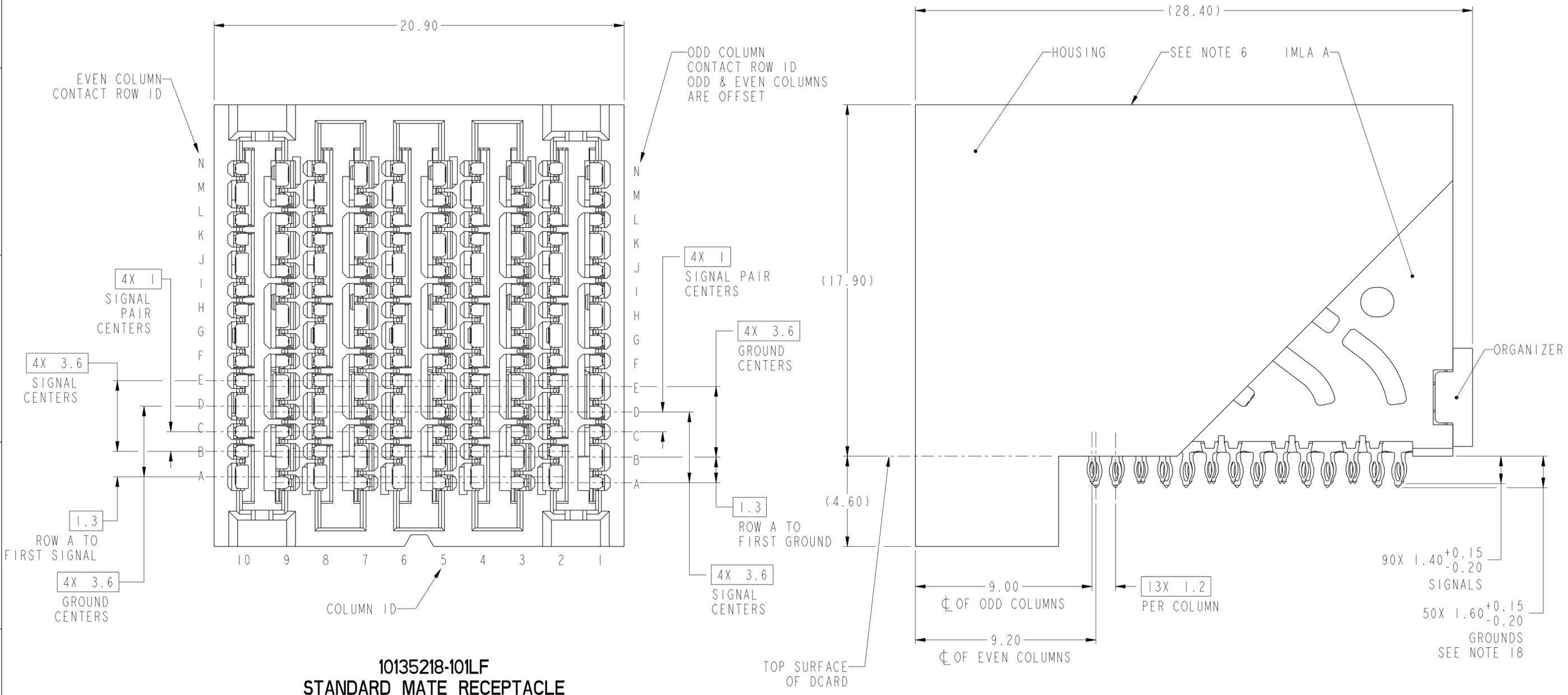


PRODUCT NUMBER
SEE TABLE

A
B
C
D
E
F

A
B
C
D
E
F

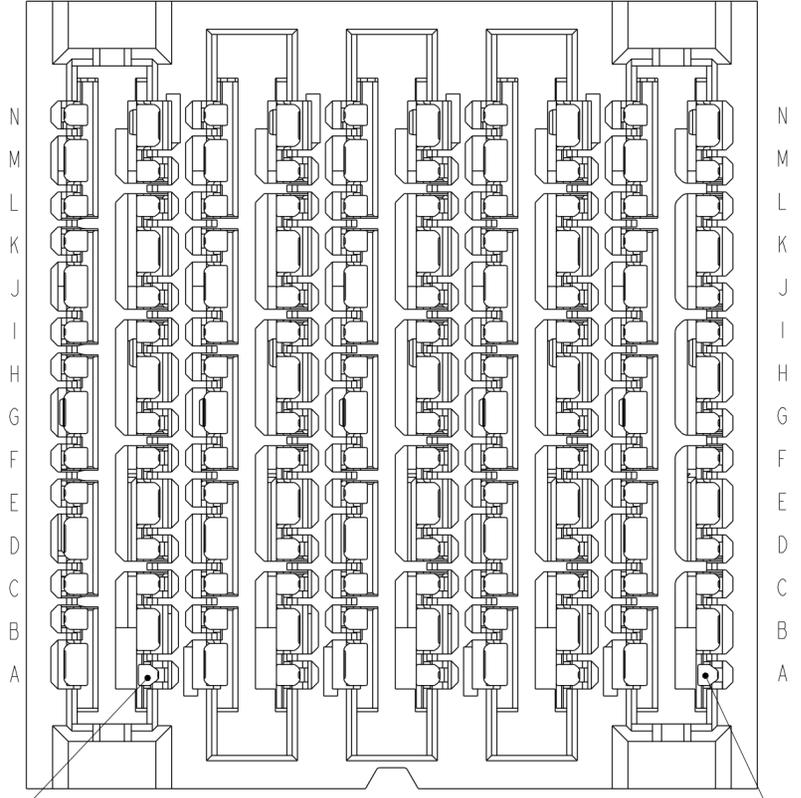


10135218-101LF
STANDARD MATE RECEPTACLE

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spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01		MM	A2	-	-	-
ISO 406		chr	-	-						
ISO 1101		appr	-	-	product family	ExaMax	rel level	Preliminary		
surface	linear	0.X	±.3		title		ExaMAX R.A. RECEPT ASSY		dwg no 10135218	rev 2
		0.XX	±.10		4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA					
		0.XXX	±.050		cat. no. 10135218-101LF		Product - Customer Drw	sheet 1 of 11		
	angular	0°	±°							



ADVANCED MATE
POSITION A9
SEE NOTE 13

ADVANCED MATE
POSITION A1
SEE NOTE 13

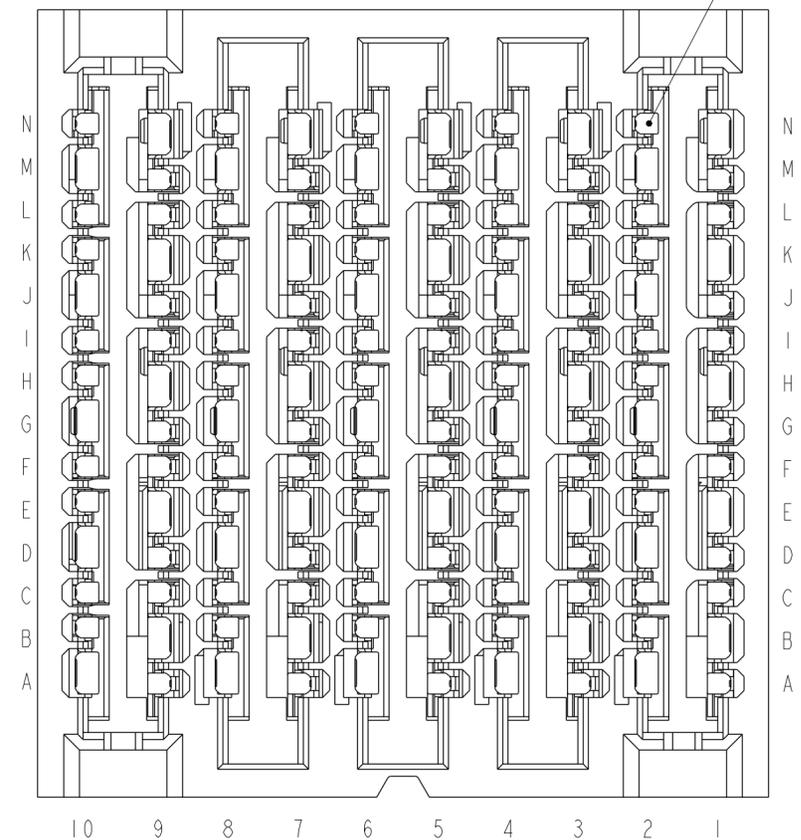
10135218-201LF
ADVANCED MATE RECEPTACLE
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
FOR ALL DIMENSIONS SEE 10135218-101LF ON SHEET 1

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spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level			
ISO 406		chr	-									
ISO 1101		appr	-		product family	ExaMax	rel level	Preliminary				
surface	linear	0.X	±.3		title		ExaMAX R.A. RECEPT ASSY		dwg no	10135218	rev	2
		0.XX	±.10		4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA							
		0.XXX	±.050		cat. no.		10135218-101LF		Product - Customer Drw		sheet 2 of 11	
ISO 1302	angular	0°	±°									

SHORT DETECT
POSITION N2
SEE NOTE 14

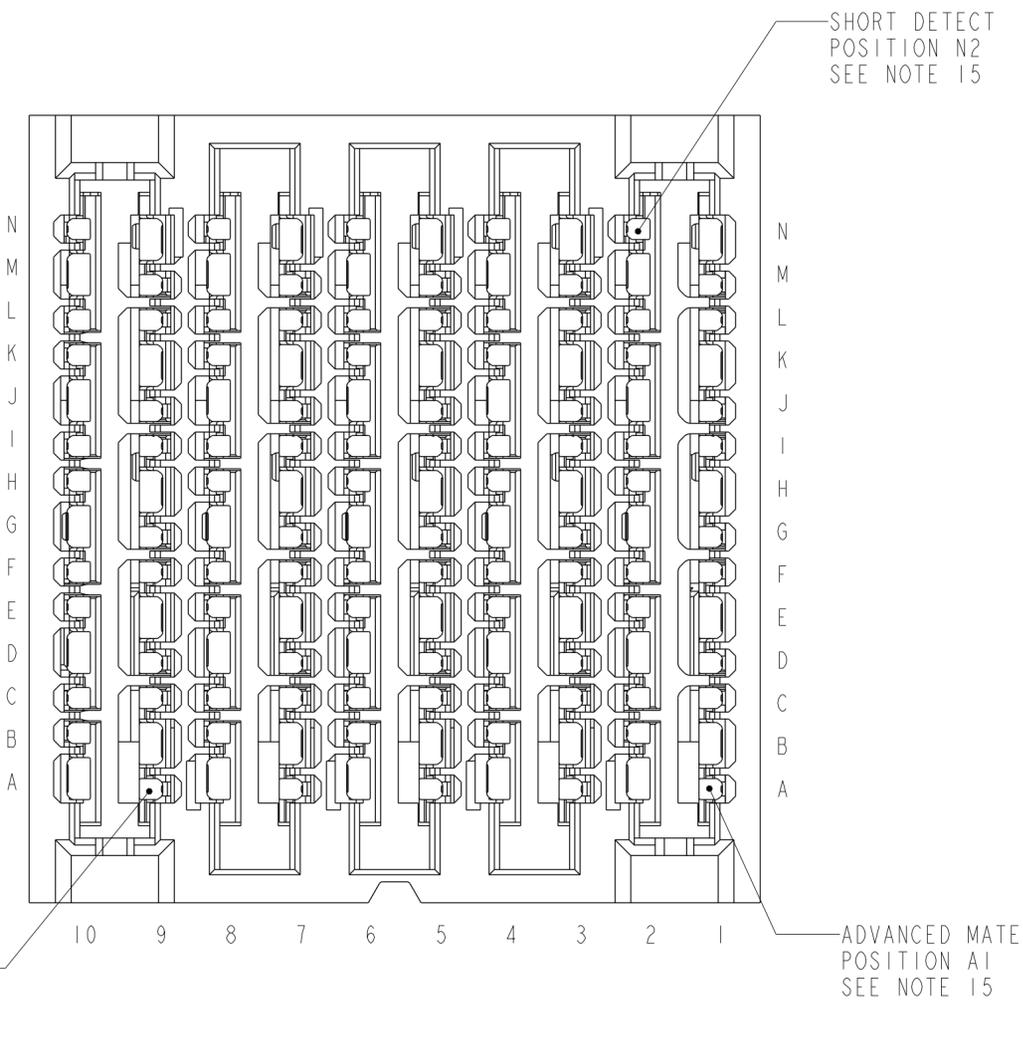


10135218-301LF
SHORT DETECT RECEPTACLE
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10135218-101LF ON SHEET 1

**Amphenol
FCi**

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spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level			
ISO 406		chr	-									
ISO 1101		appr	-		product family	ExaMax	rel level	Preliminary				
surface	linear	0.X	±.3		title		ExaMAX R.A. RECEPT ASSY		dwg no	10135218	rev	2
		0.XX	±.10		4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA							
		0.XXX	±.050		cat. no.		10135218-101LF		Product - Customer Drw		sheet 3 of 11	
ISO 1302	angular	0°	±°									

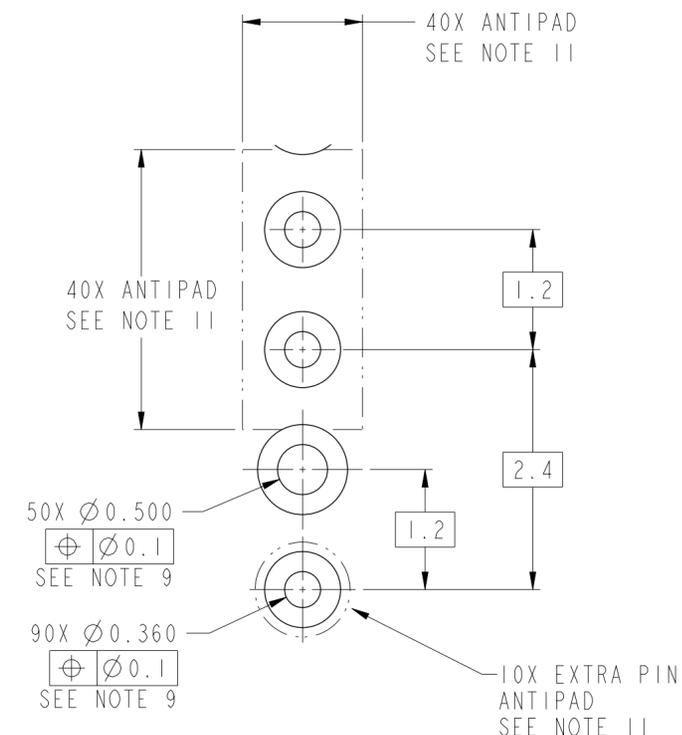
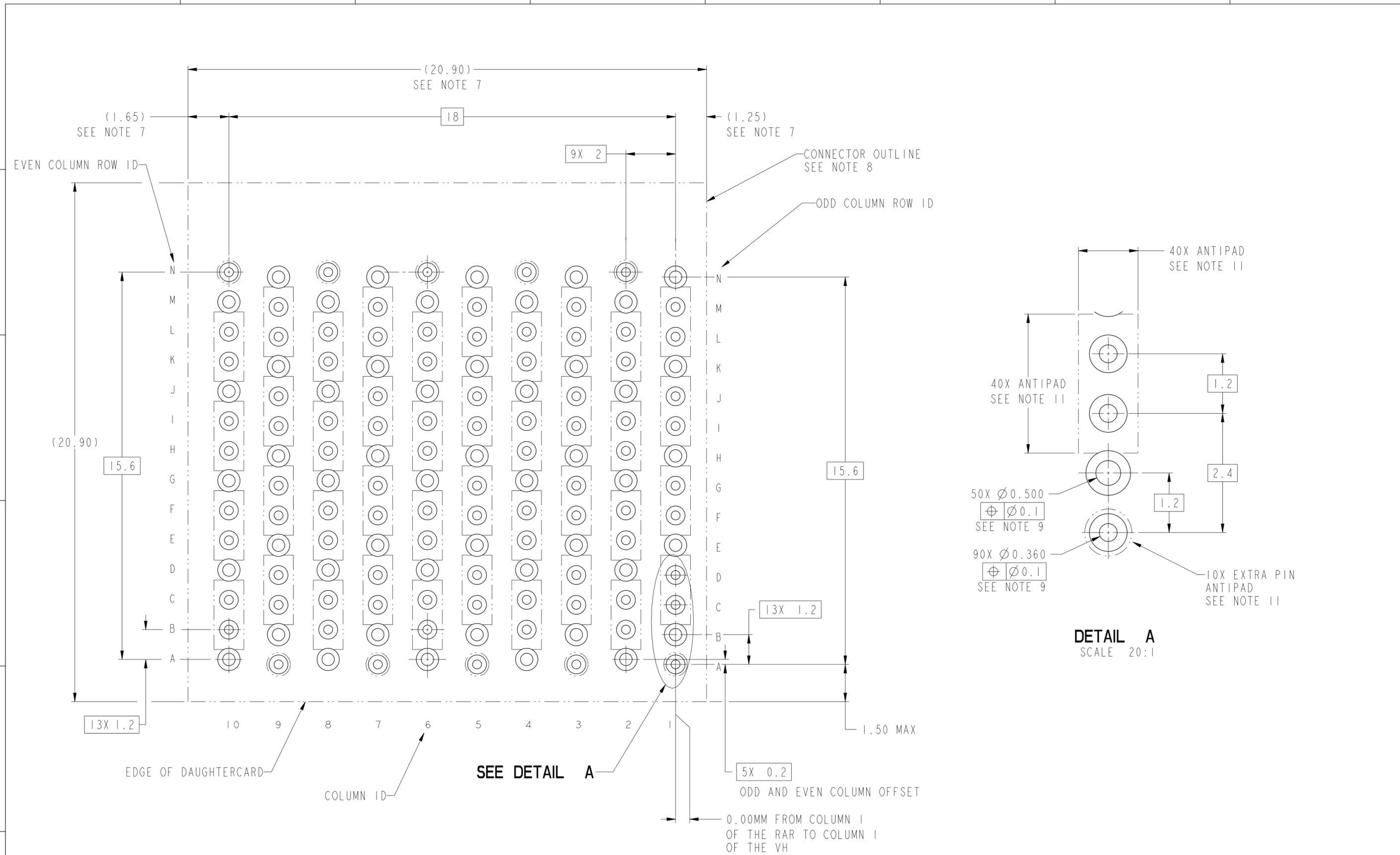


10135218-401LF
ADVANCED MATE/SHORT DETECT RECEPTACLE
ADVANCED MATE POSITIONS ARE POSITIONS A1 AND A9 ONLY
SHORT DETECT POSITION IS N2
FOR ALL DIMENSIONS SEE 10135218-101LF ON SHEET 1

**Amphenol
FCi**

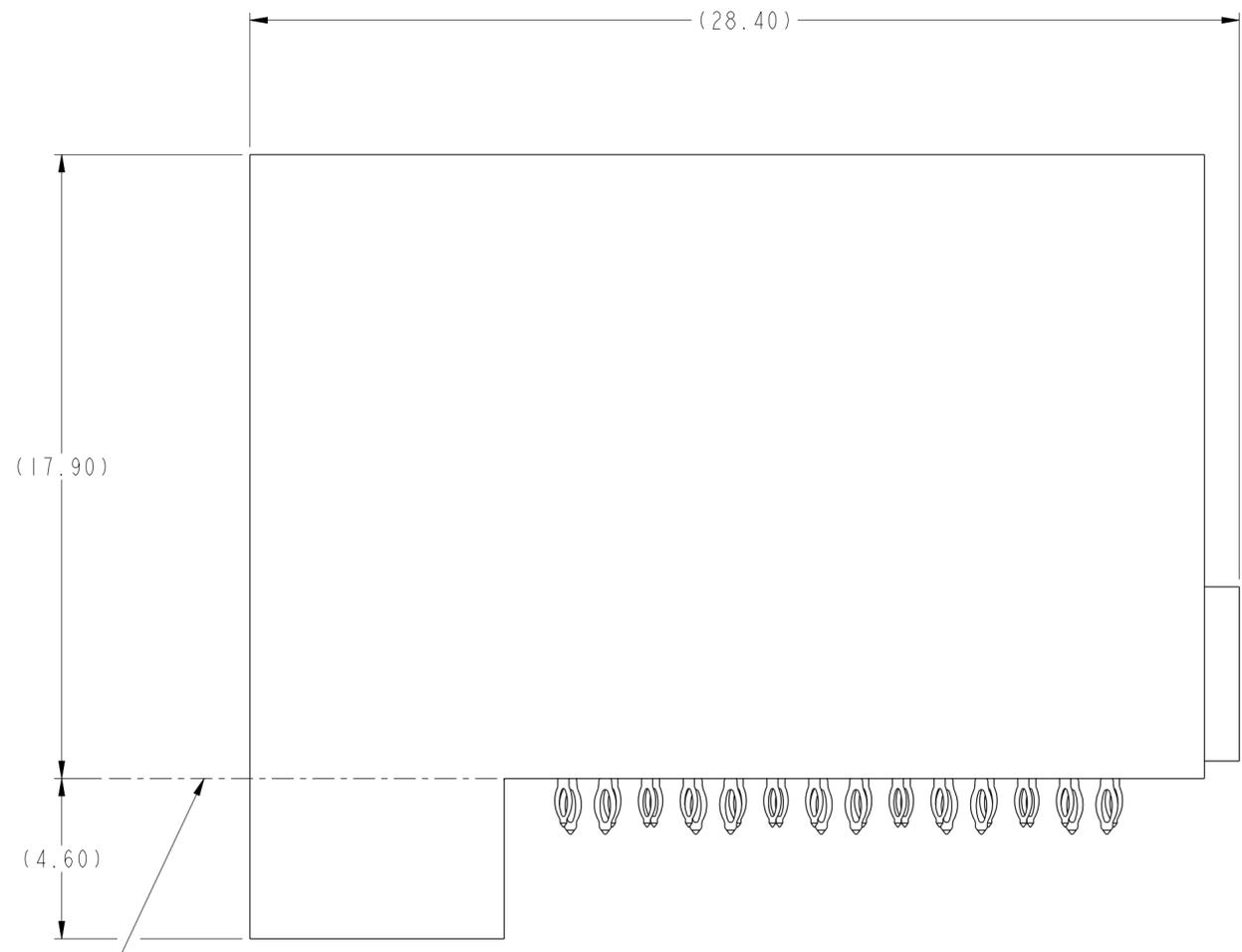
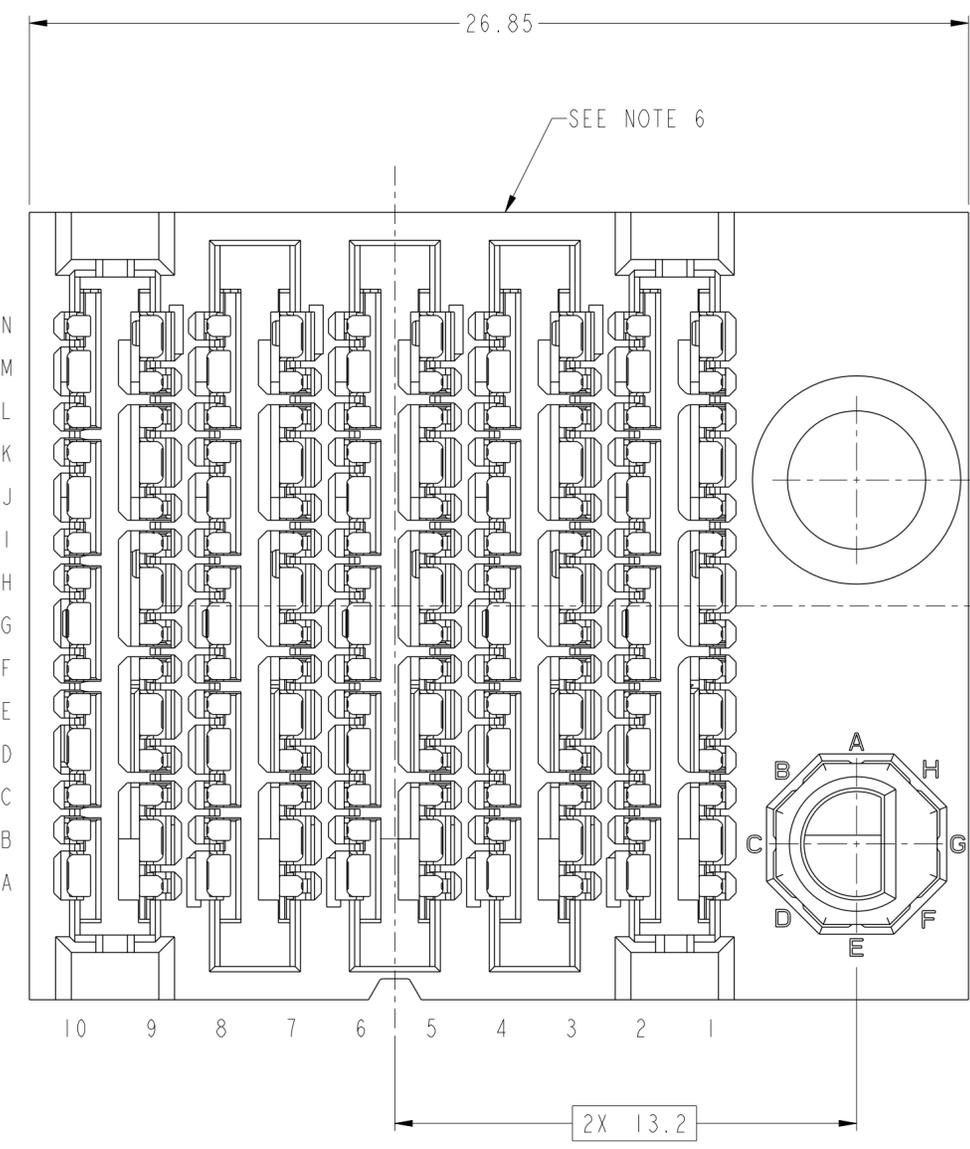
© 2016 AFCI

spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level			
ISO 406		chr	-									
ISO 1101		appr	-		product family	ExaMax	rel level	Preliminary				
surface	linear	Amphenol FCi			title ExaMAX R.A. RECEPT ASSY 4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA			dwg no	10135218			
	angular							0°	±°	rev	2	
ISO 1302										cat. no.	10135218-101LF	
					Product - Customer Drw			sheet 4 of 11				



**10135218-X01 RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, & 11
SCALE 10:1**

spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level	Preliminary
ISO 406 ISO 1101		chr	-	appr						
surface	linear	Amphenol FCI			title		ExaMAX R.A. RECEPT ASSY		dwg no	10135218
ISO 1302	angular				4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA		Product - Customer Drw		rev	2
					cat. no.				sheet 5 of 11	

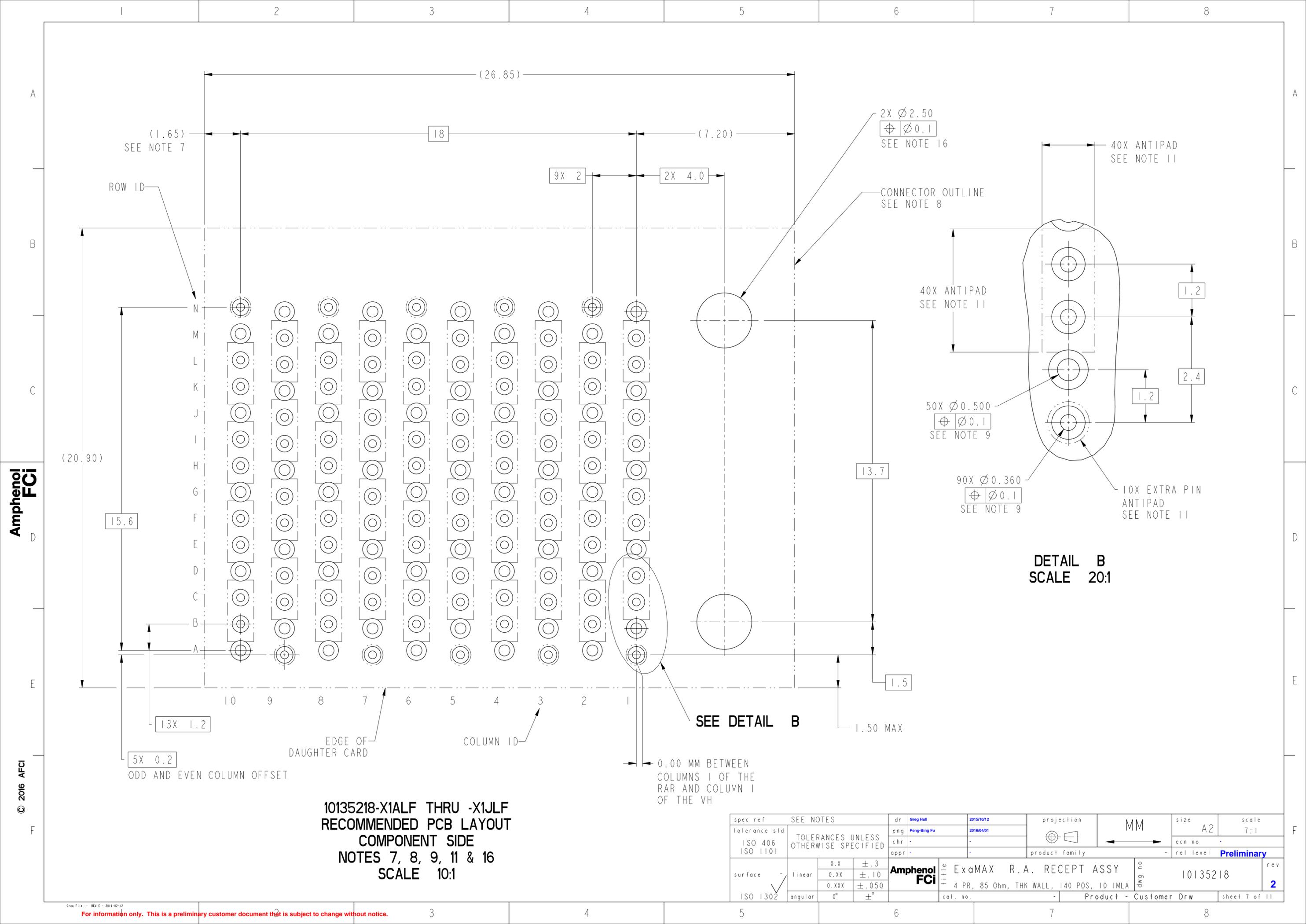


10135218-X1ALF THRU 10135218-X1JLF
 RIGHT GUIDANCE (SEE NOTE 17)
 FOR ALL OTHER DIMENSIONS SEE 10135218-101LF ON SHEET 1

Amphenol
 FCI

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spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level	Preliminary
ISO 406 ISO 1101		chr	-	product family			ExaMax			
surface	linear	0.X	±.3	Amphenol FCI	title ExaMAX R.A. RECEIPT ASSY		dwg no 10135218	rev 2	cat. no. 10135218-101LF	
		0.XX	±.10		4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA				Product - Customer Drw	
ISO 1302	angular	0°	±°		sheet 6 of 11					



Amphenol FCI

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10135218-X1ALF THRU -X1JLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

DETAIL B
SCALE 20:1

spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01	chr	-	rel level	Preliminary		
ISO 406		appr	-	-	product family	-				
ISO 1101										
surface	linear	0.X	±.3	Amphenol FCI	title	ExaMAX R.A. RECEIPT ASSY	dwg no	10135218	rev	2
		0.XX	±.10			4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA				
		0.XXX	±.050		cat. no.	-	Product - Customer Drw	sheet 7 of 11		
ISO 1302	angular	0°	±°							

(20.90)

(1.65)
SEE NOTE 7

18

(7.20)

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

13X 1.2

5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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

10

9

8

7

6

5

4

3

2

1

18

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

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5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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D
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A

10

9

8

7

6

5

4

3

2

1

18

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

13X 1.2

5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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

10

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4

3

2

1

18

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

13X 1.2

5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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

10

9

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7

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4

3

2

1

18

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

13X 1.2

5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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

10

9

8

7

6

5

4

3

2

1

18

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

13X 1.2

5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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

10

9

8

7

6

5

4

3

2

1

18

9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

40X ANTIPAD
SEE NOTE 11

1.2

2.4

50X Ø0.500
±0.1
SEE NOTE 9

10X EXTRA PIN
ANTIPAD
SEE NOTE 11

90X Ø0.360
±0.1
SEE NOTE 9

13.7

1.5

1.50 MAX

SEE DETAIL B

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

EDGE OF
DAUGHTER CARD

COLUMN ID

13X 1.2

5X 0.2

ODD AND EVEN COLUMN OFFSET

ROW ID

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

10

9

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6

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4

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2

1

18

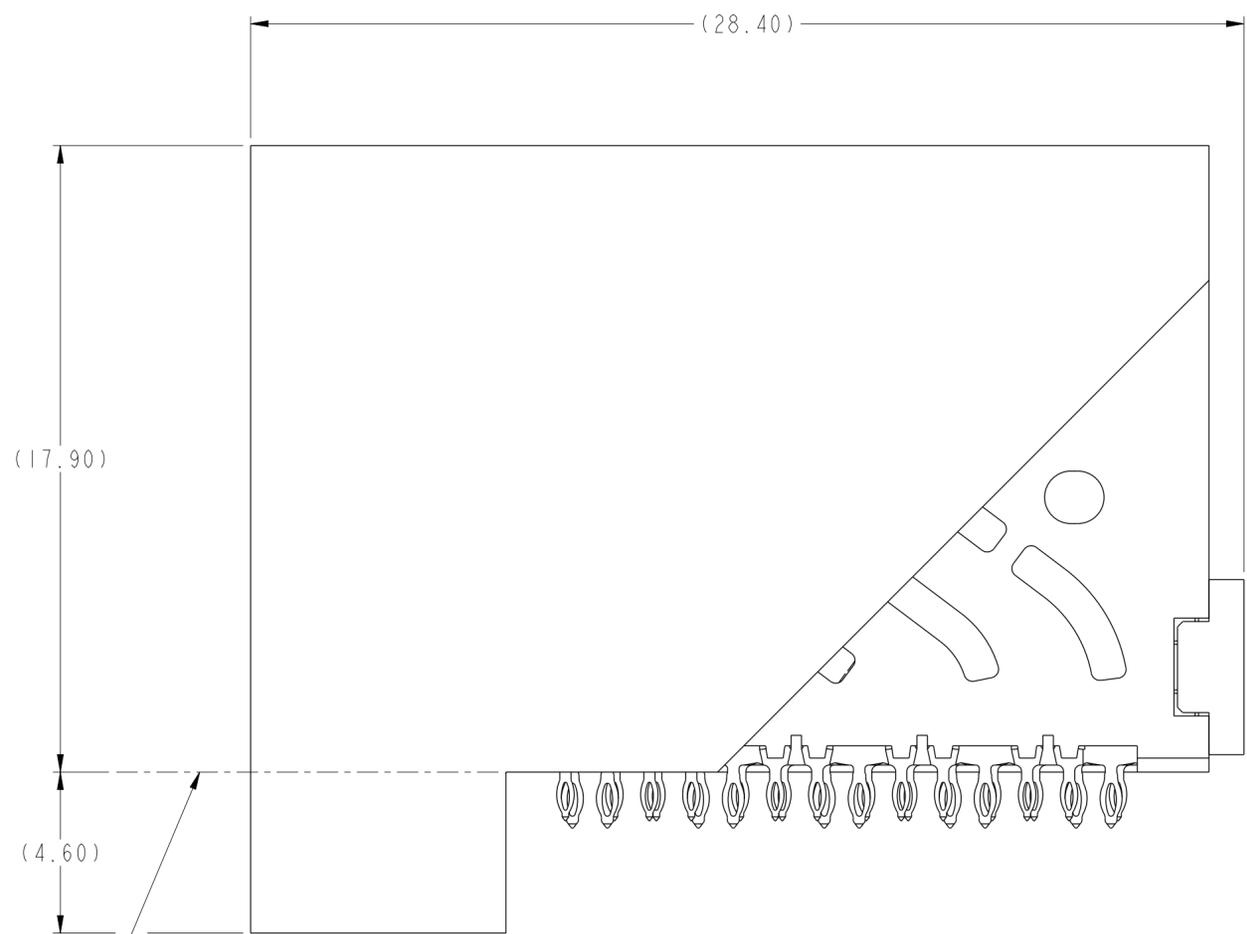
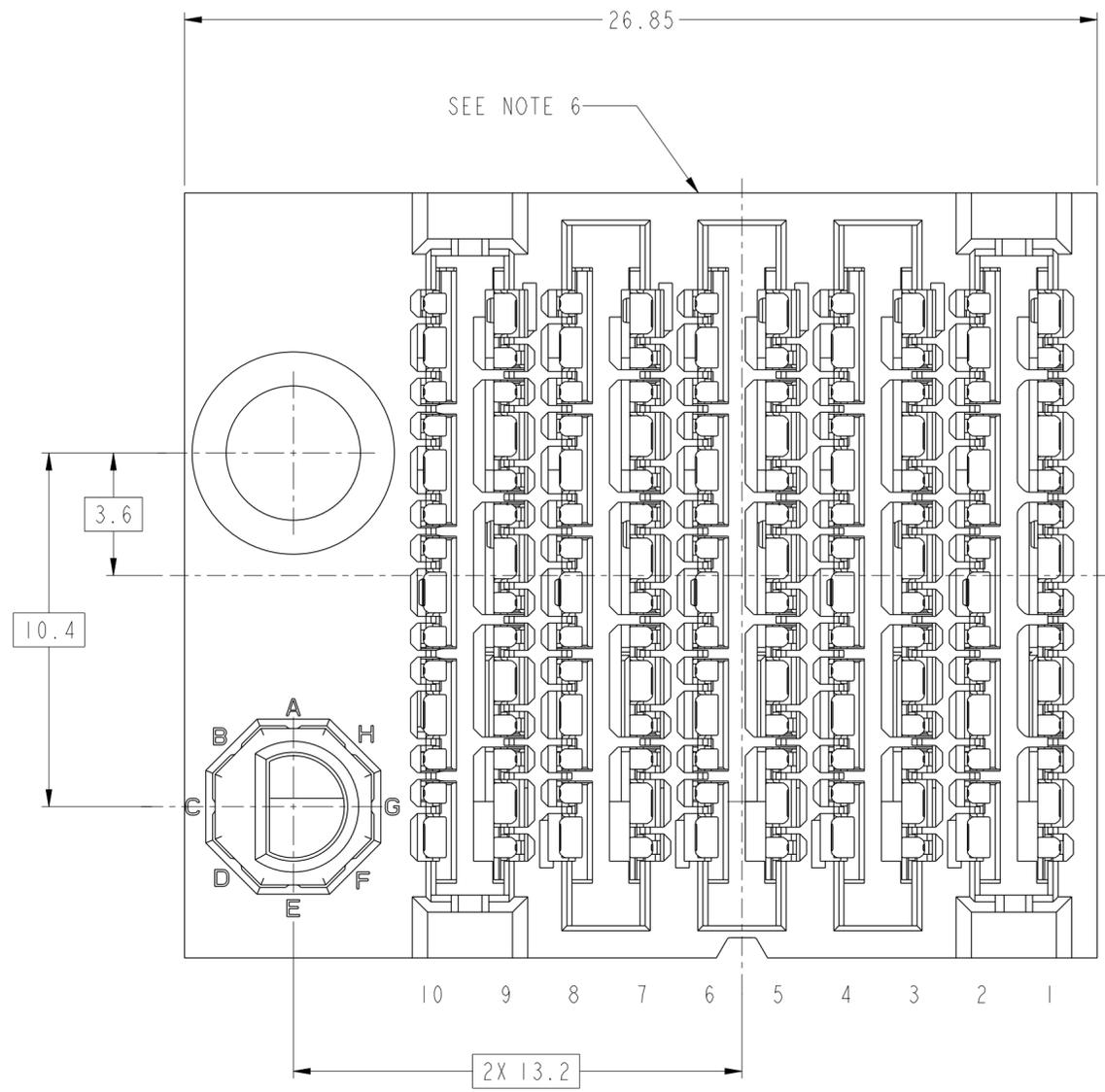
9X 2

2X 4.0

2X Ø2.50
±0.1
SEE NOTE 16

CONNECTOR OUTLINE
SEE NOTE 8

40X ANTIPAD
SEE NOTE 11

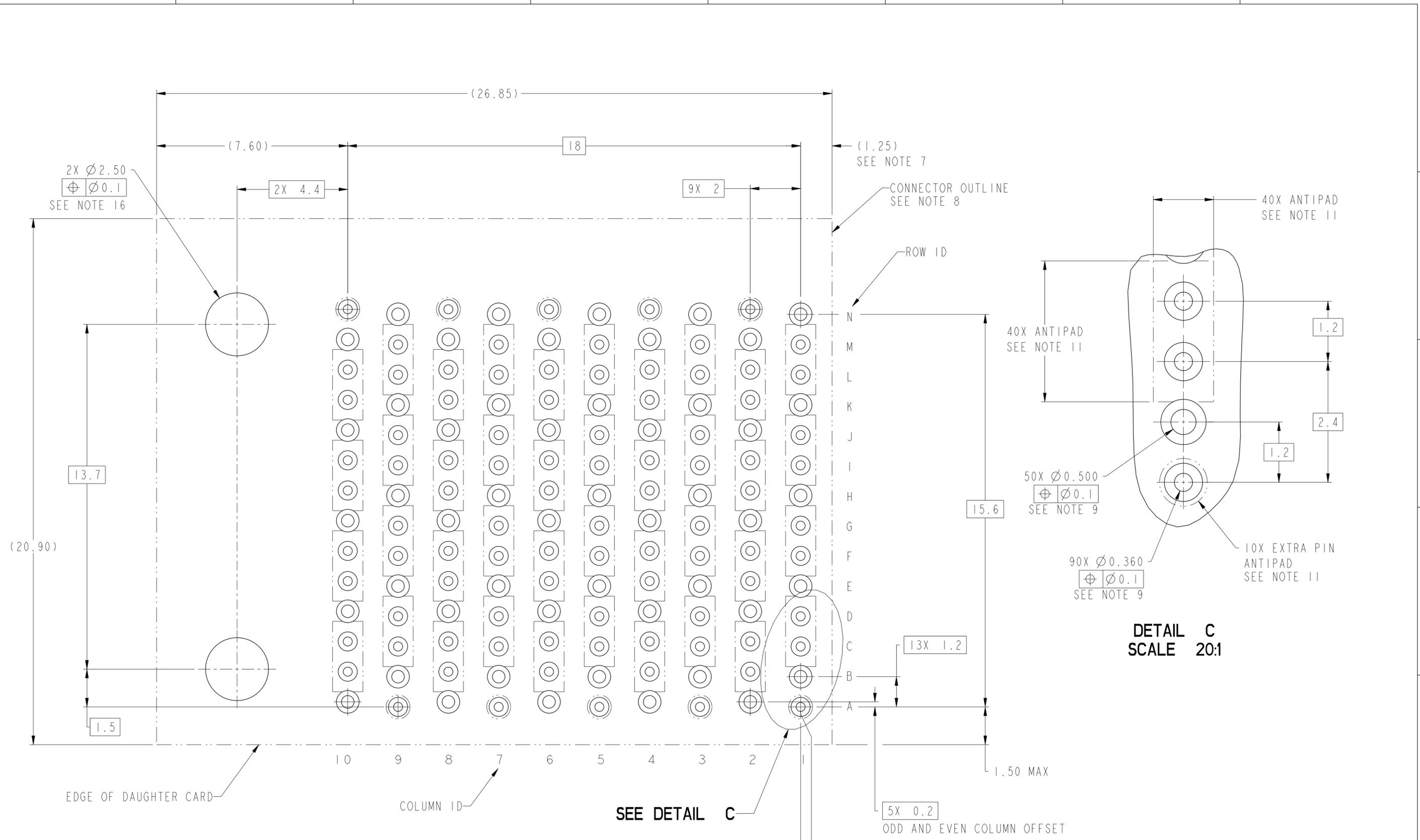


10135218-X2ALF THRU 10135218-X2JLF
 LEFT GUIDANCE (SEE NOTE 17)
 FOR ALL OTHER DIMENSIONS SEE 10135218-101LF ON SHEET 1

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spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1		
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level	Preliminary		
ISO 406 ISO 1101		chr	-	product family			ExaMax					
surface	linear	0.X	±.3		title		ExaMAX R.A. RECEIPT ASSY		dwg no	10135218	rev	2
		0.XX	±.10		4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA		cat. no.	10135218-101LF	Product - Customer Drw		sheet 8 of 11	
	angular	0°	±°									



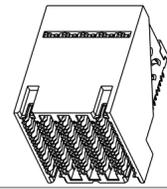
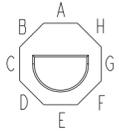
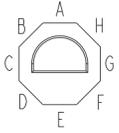
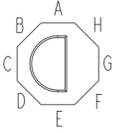
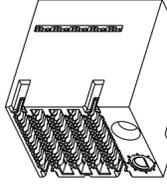
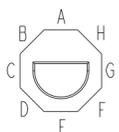
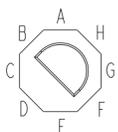
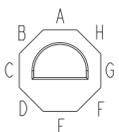
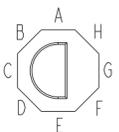
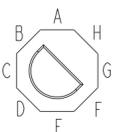
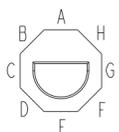
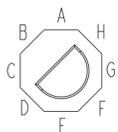
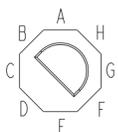
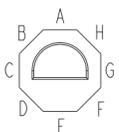
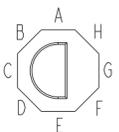
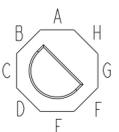
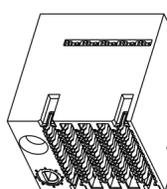
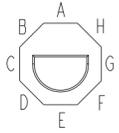
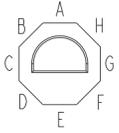
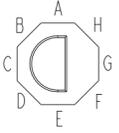
10135218-X2ALF THRU -X2JLF
RECOMMENDED PCB LAYOUT
COMPONENT SIDE
NOTES 7, 8, 9, 11 & 16
SCALE 10:1

DETAIL C
SCALE 20:1

spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1	
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level	Preliminary	
ISO 406		chr	-								
ISO 1101		appr	-		product family	-					
surface	linear	0.X	±.3		title ExaMAX R.A. RECEIPT ASSY 4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA		dwg no	10135218		rev	2
		0.XX	±.10		cat. no.	-	Product - Customer Drw	sheet 9 of 11			
	angular	0°	±°								

1 0 1 3 5 2 1 8 - Y Y Y L F

ASSEMBLY PART NUMBER	DESCRIPTION
10135218-1YYLF	STANDARD MATE
10135218-2YYLF	ADVANCED MATE
10135218-3YYLF	SHORT DETECT
10135218-4YYLF	ADVANCED MATE & SHORT DETECT

MODULE DESCRIPTION	DESIGNATION REPRESENTED IN DASH NUMBER										BASE MODULE
	1A	1B	1C	1D	1E	1F	1G	1H	1J (NO KEY)		
WITHOUT END GUIDES MODULE (SEE SHEET 1)	01										
RIGHT GUIDANCE MODULE (SEE SHEET 6)									1J (NO KEY)		
									2J (NO KEY)		
LEFT GUIDANCE MODULE (SEE SHEET 8)									2J (NO KEY)		
									1J (NO KEY)		

Amphenol FCI

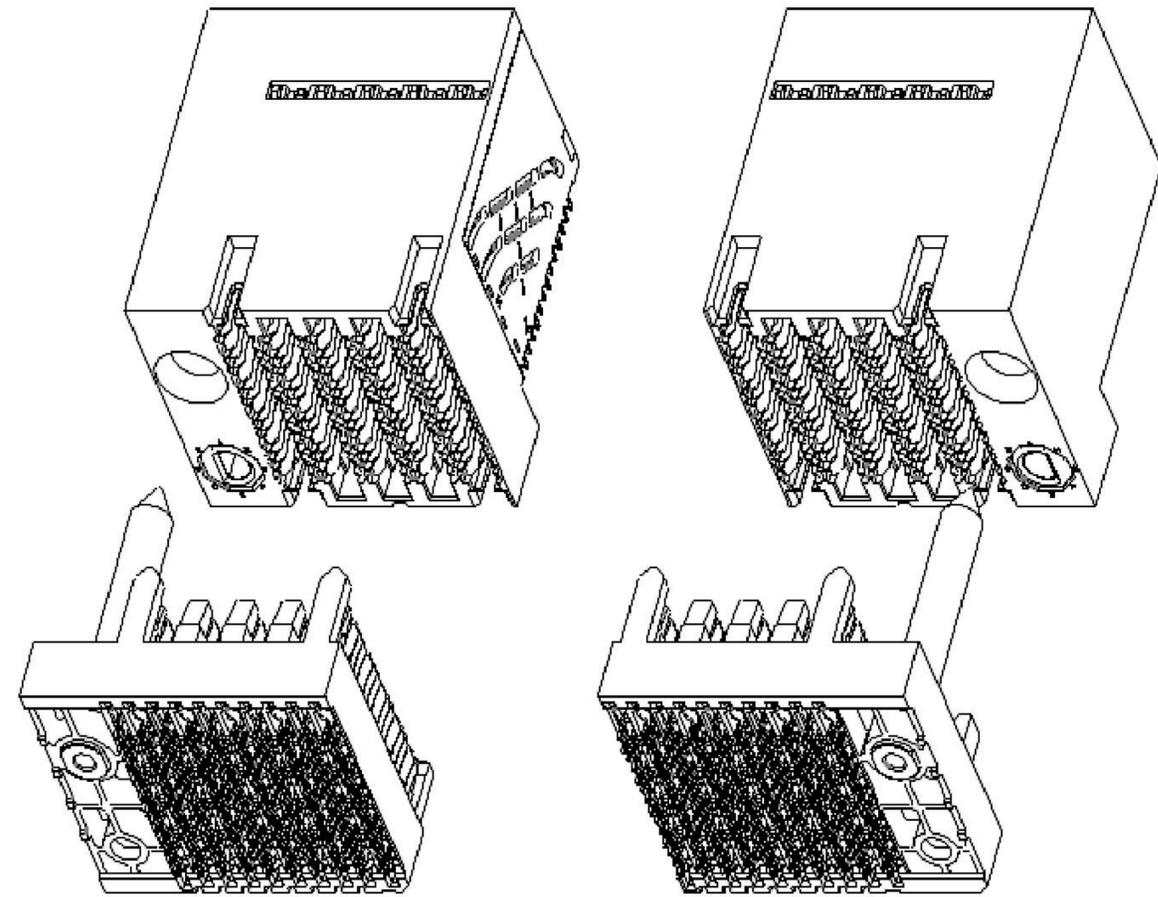
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spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	1:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01		← →	ecn no	-	rel level	Preliminary
ISO 406		chr	-	-						
ISO 1101		appr	-	-						
surface	linear	0.X	±.3	Amphenol FCI	title	ExaMAX R.A. RECEIPT ASSY	dwg no	10135218	rev	2
ISO 1302		0.XX	±.10							
	angular	0°	±°							
cat. no.		10135218-101LF		Product - Customer Drw		sheet 10 of 11				

NOTES:

- ① - CONNECTOR MATERIALS:
HOUSING: HIGH TEMP THERMOPLASTIC, BLACK, UL94-V0
IMLA PLASTIC: HIGH TEMP THERMOPLASTIC, NATURAL, UL94-V0
CONTACT: COPPER ALLOY
ORGANIZER: STAINLESS STEEL
- 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, (PROTOTYPE, PART NUMBER & LOT CODE), ON THIS SURFACE.
- ⑦ - THE MINIMUM VIA SPACING BETWEEN STACKED CONNECTORS IS 3.0 MM FOR THIS RAR AND THE MATING HEADER. 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 APPLICATION SPECIFICATION FOR TRACE ROUTING EXAMPLES THAT INCLUDE DIMENSIONS FOR ANTIPADS, TRACE WIDTH, 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 RECEPTACLE, 10135218-2XXLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER WILL PROVIDE 2 PAIRS OF MATING CONTACTS THAT MATE 0.75MM BEFORE THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- ⑭ - THE SHORT DETECT RECEPTACLE, 10135218-3XXLF, WHEN MATED WITH A STANDARD MATE VERTICAL HEADER OR A STANDARD MATE RIGHT-ANGLE HEADER WILL PROVIDE 1 PAIR OF MATING CONTACTS THAT MATE 1.00MM AFTER THE REMAINDER OF THE SIGNAL AND GROUND CONTACTS.
- ⑮ - THE ADVANCE MATE/SHORT DETECT RECEPTACLE, 10135218-4XXLF, WHEN MATED WITH AN ADVANCED MATE VERTICAL HEADER OR AN ADVANCED MATE RIGHT-ANGLE HEADER 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, TWO PHILLIPS PAN HEAD M2 HOLD DOWN SCREW MUST BE USED TO SECURE THE CONNECTOR TO THE PCB. THE SCREW LENGTH SHALL BE 2.0-6.0mm PLUS THE THICKNESS OF THE 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 VERTICAL HEADER MATES WITH A RIGHT GUIDE RIGHT ANGLE RECEPTACLE.)
- ⑱ - ALL GROUND CONTACTS ARE COMMONED IN A COLUMN.



LEFT GUIDE

RIGHT GUIDE

ExaMAX INTEGRATED GUIDE ORIENTATION
SEE NOTE 17

spec ref	SEE NOTES	dr	Greg Hull	2015/10/12	projection	MM	size	A2	scale	7:1
tolerance std	TOLERANCES UNLESS OTHERWISE SPECIFIED	eng	Peng-Bing Fu	2016/04/01			ecn no	-	rel level	Preliminary
ISO 406		chr	-	product family			ExaMax			
ISO 1101		appr	-	title	ExaMAX R.A. RECEPT ASSY	dwg no	10135218	rev	2	
surface	linear	0.X	±.3	Amphenol FCI	4 PR, 85 Ohm, THK WALL, 140 POS, 10 IMLA	cat. no.	10135218-101LF	Product - Customer Drw	sheet 11 of 11	
	angular	0°	±°							