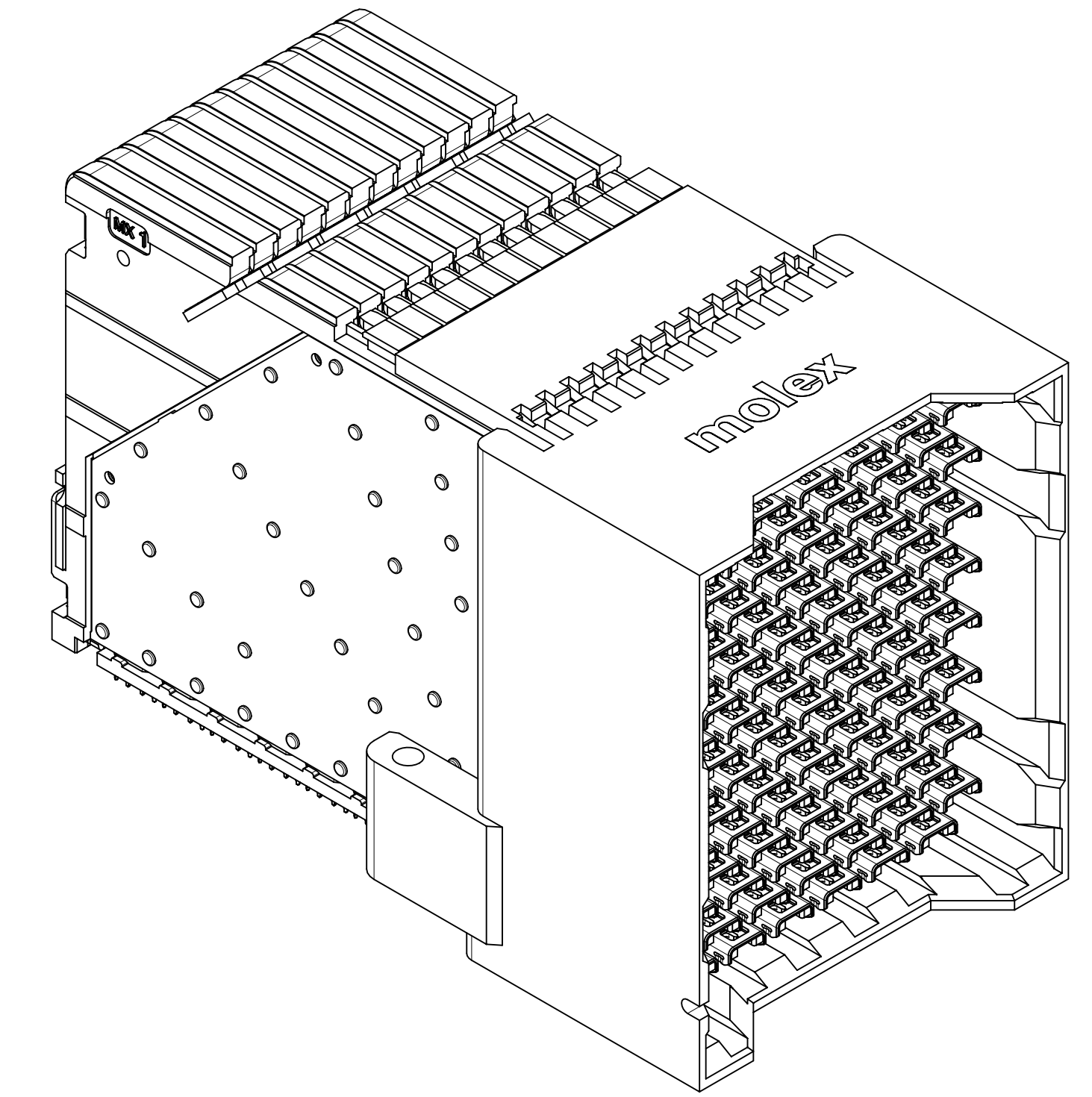
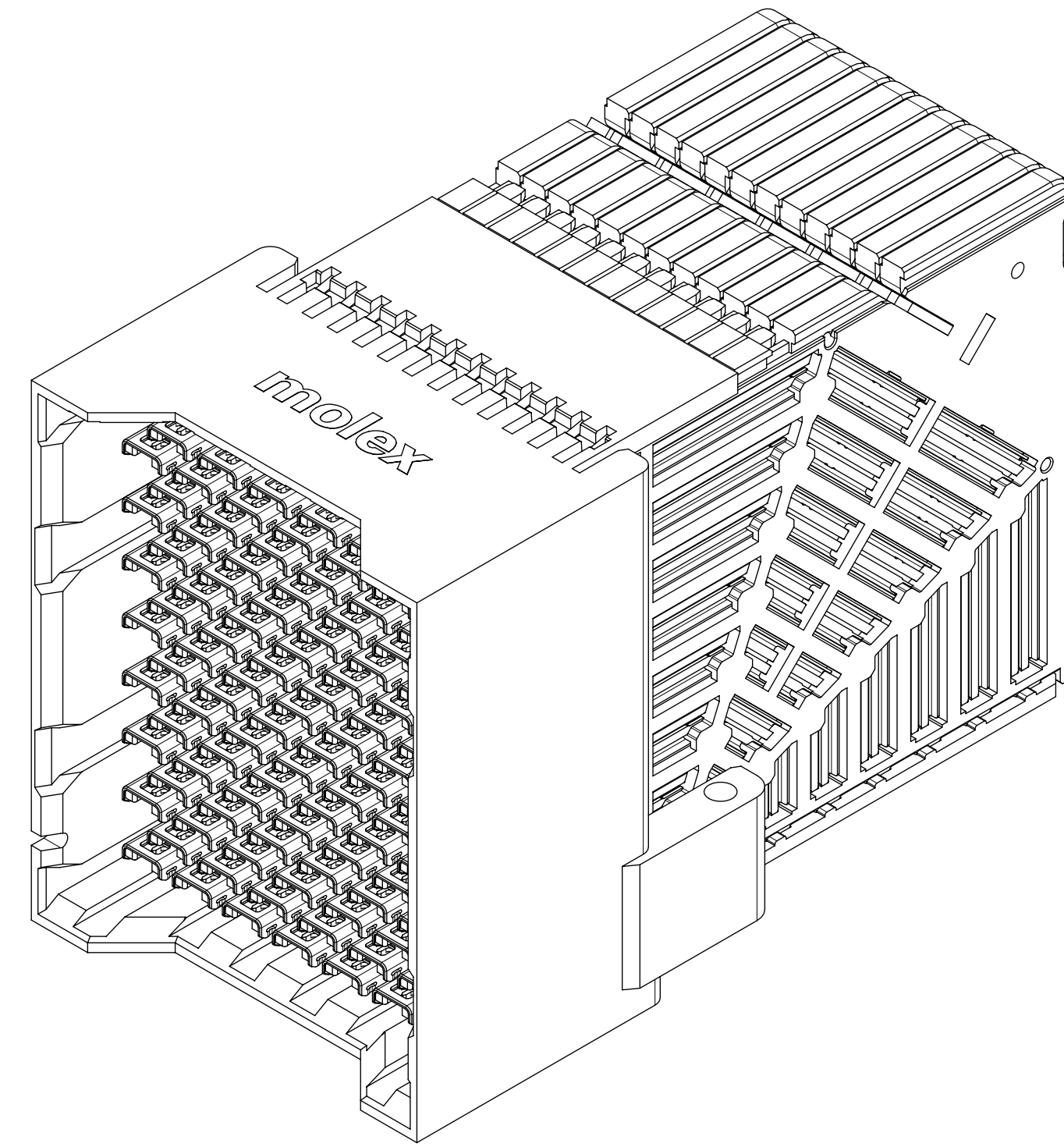
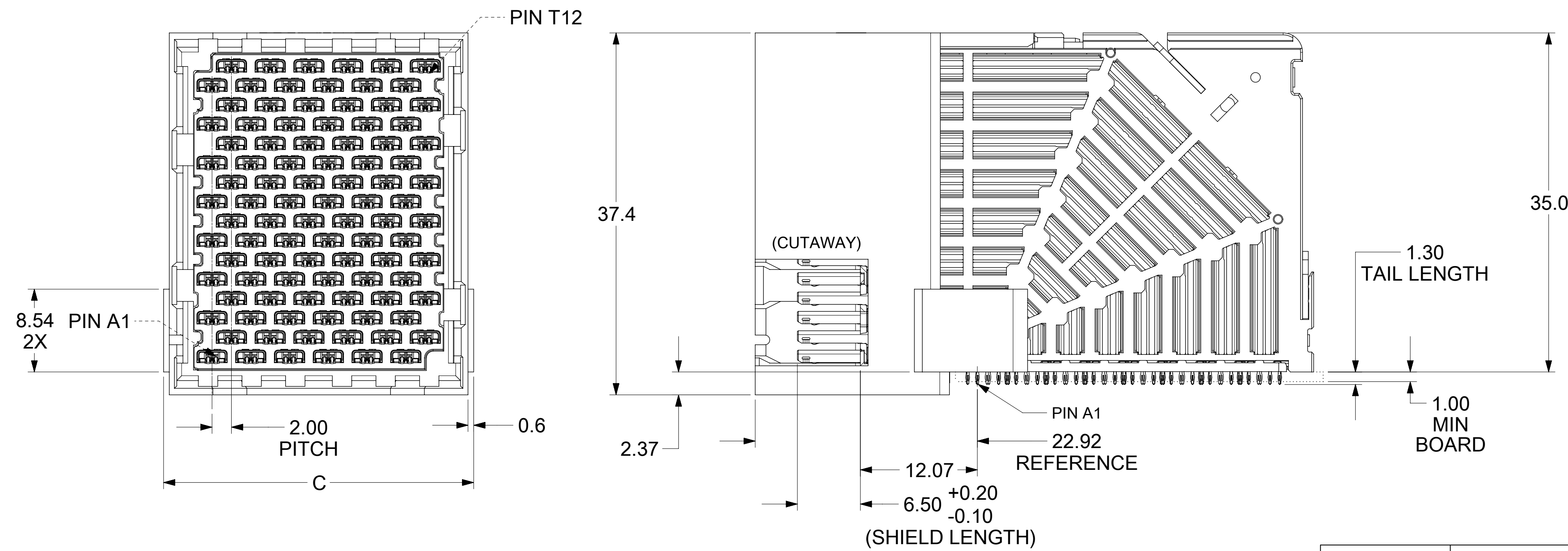


PART NUMBER  
"MXS" DATE CODE  
SEE NOTE 3



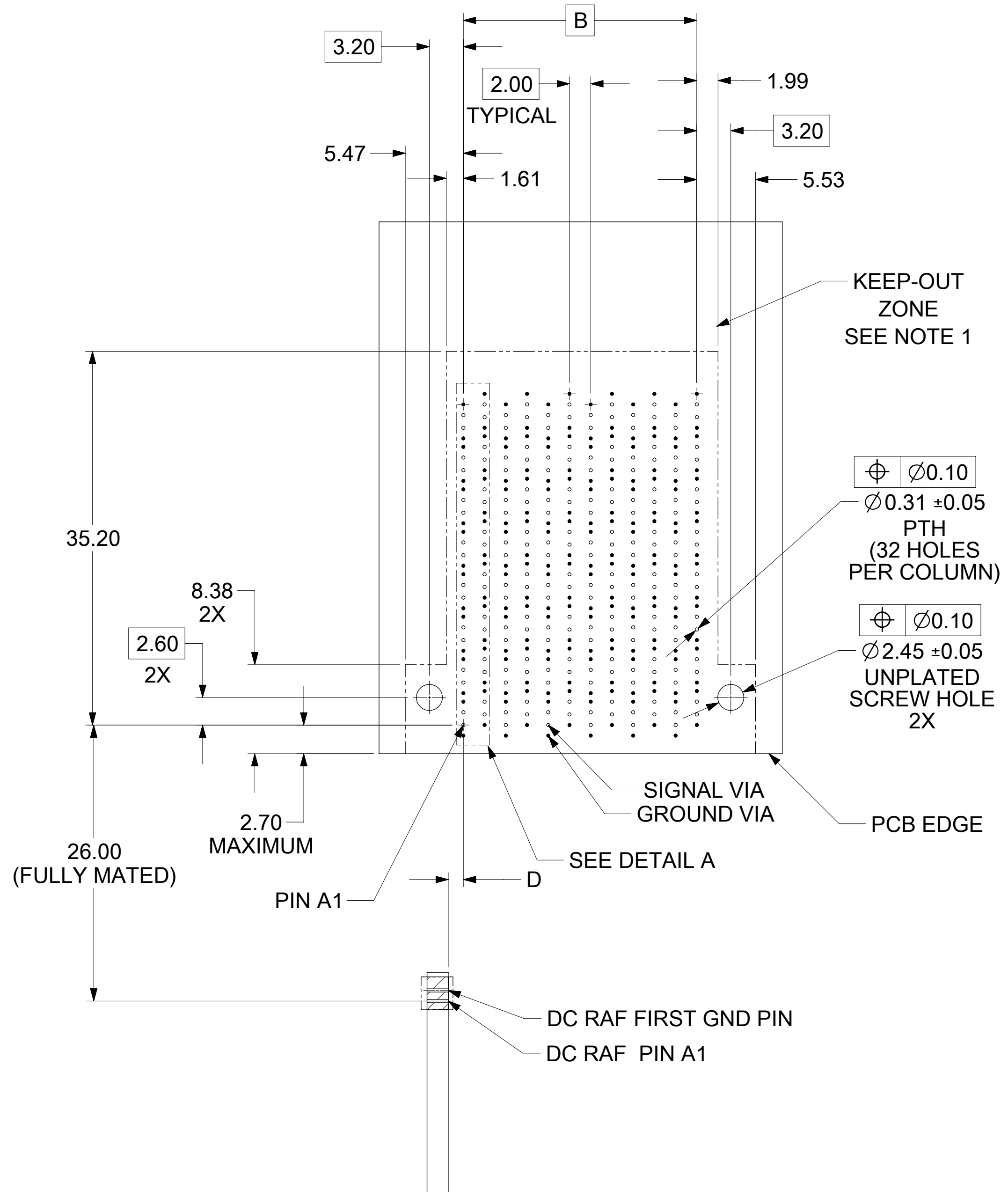
### 12 COLUMN PART SHOWN



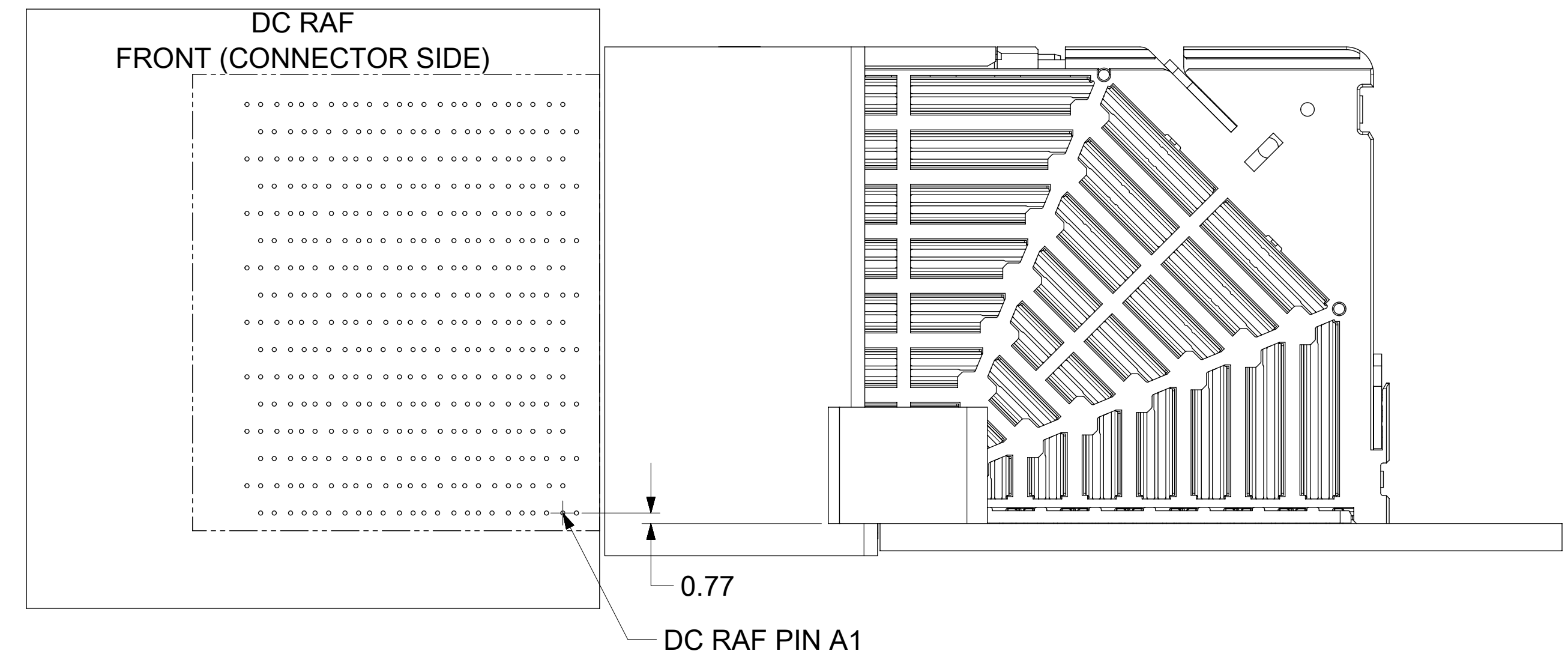
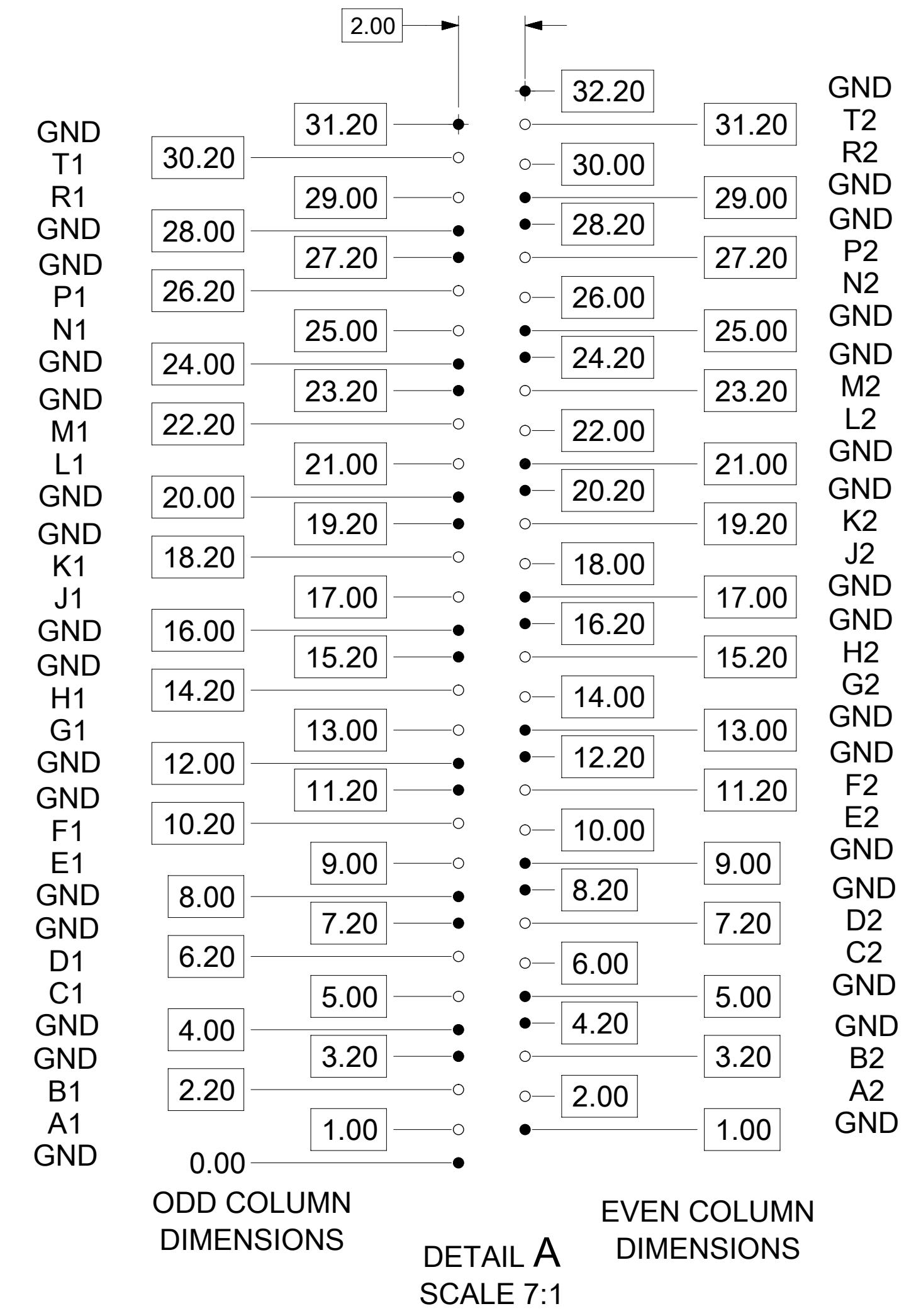
- NOTES:
- MATERIALS: HOUSING: LIQUID CRYSTAL POLYMER (LCP) GLASS-FILLED, UL94V-0  
TERMINALS: HIGH PERFORMANCE COPPER ALLOY
  - FINISH: SELECTIVE GOLD IN SIGNAL AND U-SHIELD CONTACT AREA ONLY.  
SELECTIVE TIN ON PCB TAILS.  
NICKEL OVERALL.
  - PARTS ARE MARKED WITH THE PART NUMBER, "MXS", AND A DATECODE.  
DATECODE FORMAT: 2 DIGIT YEAR, 3 DIGIT DAY (YYDDD), AND 2 DIGIT HOUR, MINUTE & SECONDS (HHMMSS).
  - REFER TO MOLEX PRODUCT SPECIFICATION 1735109000-PS\_PS FOR PERFORMANCE SPECIFICATIONS.
  - PRODUCT WILL BE PACKAGED PER: 1736101000PDD\_PK.
  - MATES WITH IMPULSE DC RAF (RIGHT ANGLE FEMALE) UNGUIDED NUMBER: SEE TABLE.
  - APPLICATION SPECIFICATION: 1735109997-AS\_PS.
  - REFER TO IMPULSE PCB ROUTING GUIDE 1735109999-AS\_PS FOR ANTIPAD,  
ROUTING RECOMMENDATIONS, BACKDRILL, AND ADDITIONAL PCB INFORMATION.
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF MOLEX COSMETIC SPEC PS-45499-002.
  - SEE SHEETS 2, 3 AND 4 FOR PCB LAYOUT AND MATED DIMENSIONS, AND ORTHOGONAL PIN MAPPING.
  - CONNECTORS ARE SUPPLIED WITH TWO 2-32 THREAD FORMING SCREWS.

MATERIAL NUMBER	NUMBER OF COLUMNS	NUMBER OF DIFFERENTIAL PAIRS	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	DIMENSION "D"	ORTHOGONAL ORIENTATION	MATING DC RAF NUMBER
173520-2825	8	64	22.8	14.00	24.0	1.42	270°	173540-7016
173520-2225	12	96	30.8	22.00	32.0	1.42	270°	173631-1016
173520-2425	14	112	34.8	26.00	36.0	1.42	270°	173620-1016

FUNCTIONAL SYMBOLS $\nabla_A = 0$ $\nabla_C = 0$ $\nabla_D = 0$ DIVISIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	DIMENSION UNITS: mm SCALE: 3:1	CURRENT REV DESC: ADD THE 12 COLUMN TO PART NUMBER TABLE			
	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL $\pm 0.5^\circ$	EC NO: 657979 DRWN: JMENDOZA01 2021/03/04 CHK'D: JMENDOZA01 2021/03/12 APPR: JMENDOZA01 2021/03/12	INITIAL REVISION: DRWN: TIBARRA 2019/07/29 APPR: JMENDOZA01 2019/08/02			
	4 PLACES $\pm$ 3 PLACES $\pm$ 2 PLACES $\pm 0.13$ 1 PLACE $\pm 0.25$ 0 PLACES $\pm$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING: D-SIZE SERIES: 173520	MATERIAL NUMBER: SEE TABLE CUSTOMER: GENERAL MARKET	SHEET NUMBER: 1 OF 4
	PRODUCT CUSTOMER DRAWING					



ORTHO DIRECT RAM HOLE PATTERN  
(CONNECTOR SIDE)  
12 COLUMN  
PART SHOWN



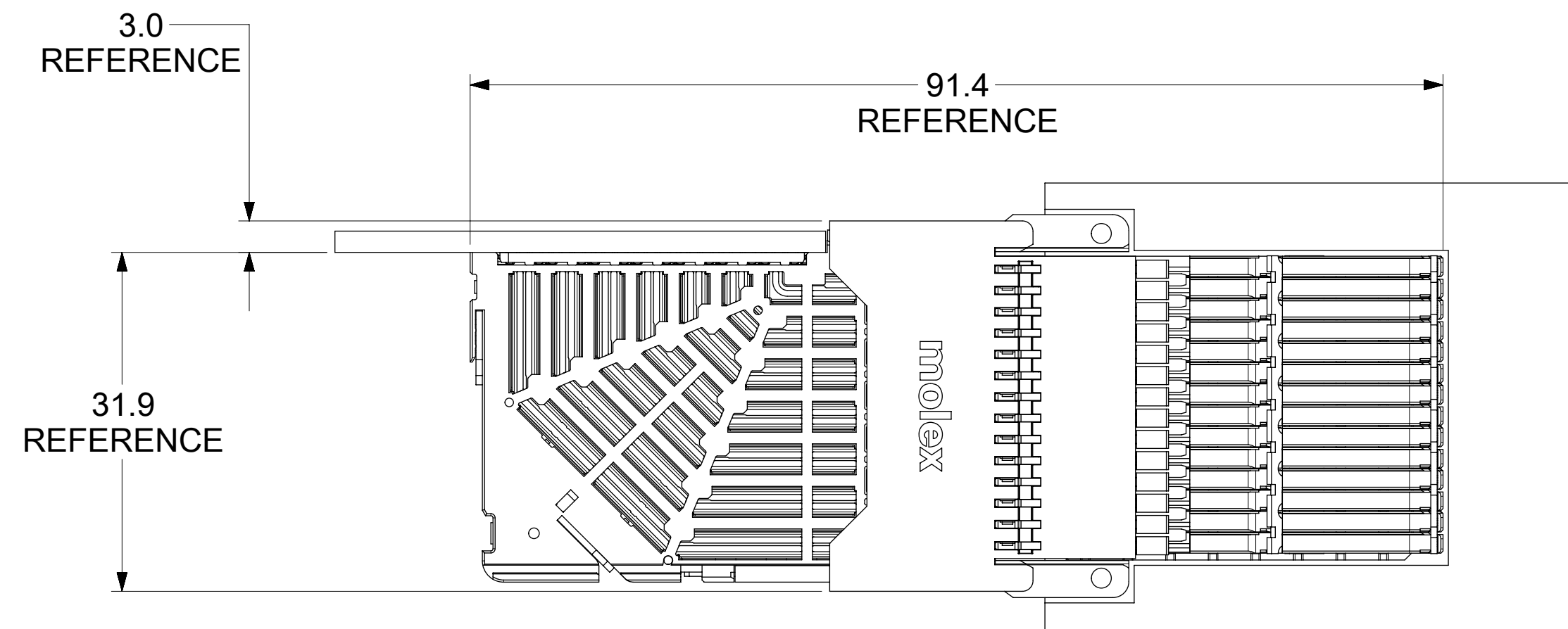
NOTES:  
1. THESE DIMENSIONS REPRESENT THE AREA NEEDED TO ACCOMMODATE CONNECTOR INSERTION AND REPAIR ON THE PCB. THIS IS REFERRED TO AS THE "CONNECTOR KEEP OUT ZONE" AND DOES NOT REPRESENT THE ACTUAL PERIMETER OF THE CONNECTOR.  
2. MINIMUM PCB THICKNESS: 1.0mm

FUNCTIONAL SYMBOLS FA = 0 FC = 0 FD = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE	CURRENT REV DESC: ADD THE 12 COLUMN TO PART NUMBER TABLE			
		mm	3:1			
DIVISIONAL SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	ANGULAR TOL	± 0.5°	EC NO: 657979		
		4 PLACES	±	DRWN: JMENDOZA01	2021/03/04	
		3 PLACES	±	CHK'D: JMENDOZA01	2021/03/12	
		2 PLACES	± 0.13	APPR: JMENDOZA01	2021/03/12	
		1 PLACE	± 0.25	INITIAL REVISION:		
0 PLACES	±	DRWN: TIBARRA	2019/07/29	1735202000		
	APPR: JMENDOZA01	2019/08/02	1735202000		PSD 000 B4	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
		D-SIZE	173520	SEE TABLE	GENERAL MARKET	2 OF 4

## ORTHO PIN MAPPING (DC RAF - ORTHO DIRECT RAM)

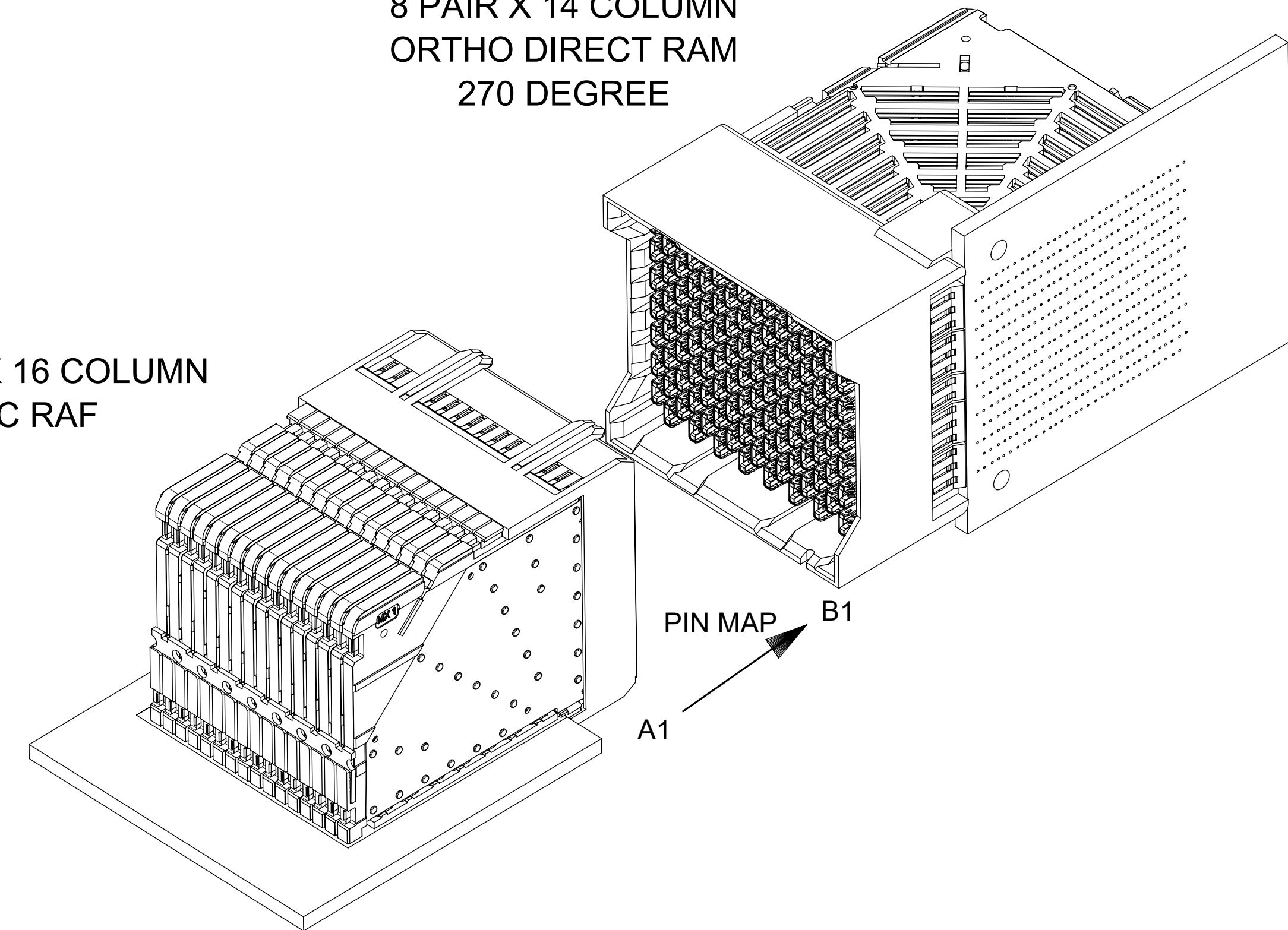
P1-A13	P2-B14	P3-C13	P4-D14	P5-E13	P6-F14	P7-G13	P8-H14	P9-J13	P10-K14	P11-L13	P12-M14	P13-N13	P14-P14	P15-R13	P16-T14
N1-B13	N2-A14	N3-D13	N4-C14	N5-F13	N6-E14	N7-H13	N8-G14	N9-K13	N10-J14	N11-M13	N12-L14	N13-P13	N14-N14	N15-T13	N16-R14
M1-A11	M2-B12	M3-C11	M4-D12	M5-E11	M6-F12	M7-G11	M8-H12	M9-J11	M10-K12	M11-L11	M12-M12	M13-N11	M14-P12	M15-R11	M16-T12
L1-B11	L2-A12	L3-D11	L4-C12	L5-F11	L6-E12	L7-H11	L8-G12	L9-K11	L10-J12	L11-M11	L12-L12	L13-P11	L14-N12	L15-T11	L16-R12
K1-A9	K2-B10	K3-C9	K4-D10	K5-E9	K6-F10	K7-G9	K8-H10	K9-J9	K10-K10	K11-L9	K12-M10	K13-N9	K14-P10	K15-R9	K16-T10
J1-B9	J2-A10	J3-D9	J4-C10	J5-F9	J6-E10	J7-H9	J8-G10	J9-K9	J10-J10	J11-M9	J12-L10	J13-P9	J14-N10	J15-T9	J16-R10
H1-A7	H2-B8	H3-C7	H4-D8	H5-E7	H6-F8	H7-G7	H8-H8	H9-J7	H10-K8	H11-L7	H12-M8	H13-N7	H14-P8	H15-R7	H16-T8
G1-B7	G2-A8	G3-D7	G4-C8	G5-F7	G6-E8	G7-H7	G8-G8	G9-K7	G10-J8	G11-M7	G12-L8	G13-P7	G14-N8	G15-T7	G16-R8
F1-A5	F2-B6	F3-C5	F4-D6	F5-E5	F6-F6	F7-G5	F8-H6	F9-J5	F10-K6	F11-L5	F12-M6	F13-N5	F14-P6	F15-R5	F16-T6
E1-B5	E2-A6	E3-D5	E4-C6	E5-F5	E6-E6	E7-H5	E8-G6	E9-K5	E10-J6	E11-M5	E12-L6	E13-P5	E14-N6	E15-T5	E16-R6
D1-A3	D2-B4	D3-C3	D4-D4	D5-E3	D6-F4	D7-G3	D8-H4	D9-J3	D10-K4	D11-L3	D12-M4	D13-N3	D14-P4	D15-R3	D16-T4
C1-B3	C2-A4	C3-D3	C4-C4	C5-F3	C6-E4	C7-H3	C8-G4	C9-K3	C10-J4	C11-M3	C12-L4	C13-P3	C14-N4	C15-T3	C16-R4
B1-A1	B2-B2	B3-C1	B4-D2	B5-E1	B6-F2	B7-G1	B8-H2	B9-J1	B10-K2	B11-L1	B12-M2	B13-N1	B14-P2	B15-R1	B16-T2
A1-B1	A2-A2	A3-D1	A4-C2	A5-F1	A6-E2	A7-H1	A8-G2	A9-K1	A10-J2	A11-M1	A12-L2	A13-P1	A14-N2	A15-T1	A16-R2

### MATED DIMENSIONS



### 8 PAIR X 14 COLUMN ORTHO DIRECT RAM 270 DEGREE

### 7 PAIR X 16 COLUMN DC RAF



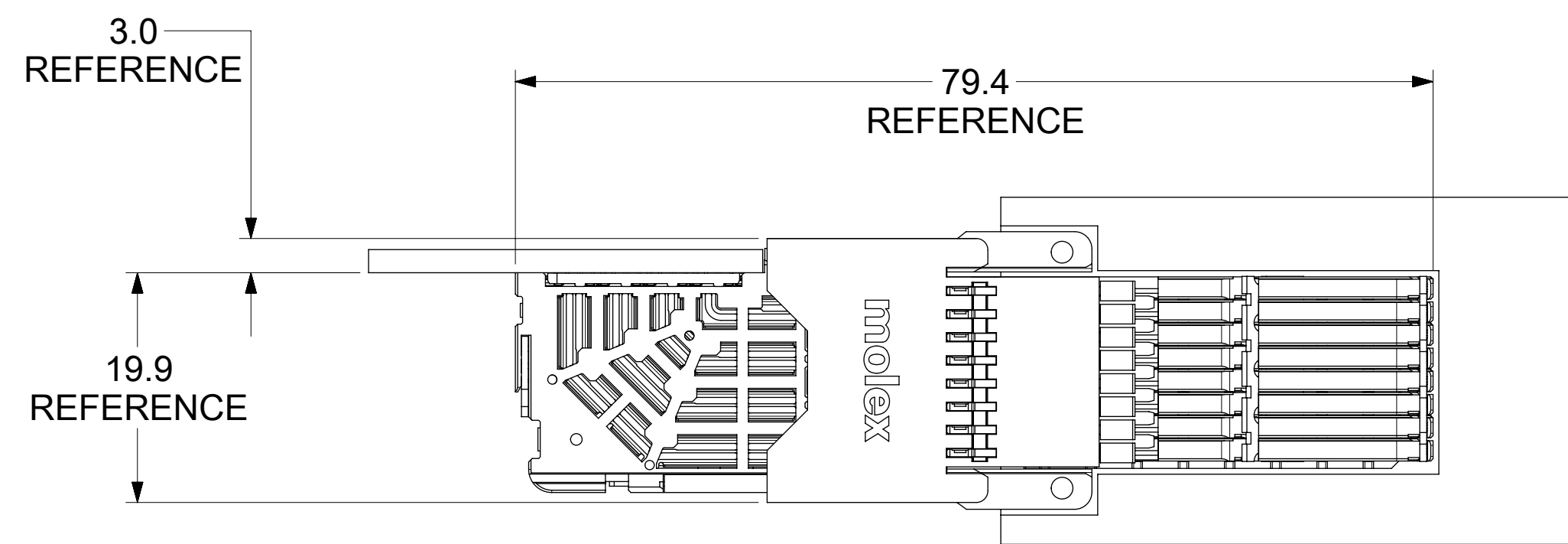
THIS SHEET IS FOR  
112 DIFFERENTIAL PAIRS ONLY

<b>FUNCTIONAL SYMBOLS</b> FA = 0 FC = 0 FP = 0 <b>DIVISIONAL SYMBOLS</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: ADD THE 12 COLUMN TO PART NUMBER TABLE		molex
	DIMENSION UNITS	SCALE	GENERAL TOLERANCES (UNLESS SPECIFIED)		
	4 PLACES	±	ANGULAR TOL ± 0.5°		
	3 PLACES	±	EC NO: 657979		
2 PLACES	± 0.13	DRWN: JMENDOZA01 2021/03/04		IMPULSE 8 PAIR ORTHO DIRECT RAM - 270° - 2MM UNGUIDED	
1 PLACE	± 0.25	CHK'D: JMENDOZA01 2021/03/12			
0 PLACES	±	APPR: JMENDOZA01 2021/03/12		PRODUCT CUSTOMER DRAWING	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	DOCUMENT NUMBER
			D-SIZE	173520	1735202000
				MATERIAL NUMBER	DOC TYPE
				CUSTOMER	DOC PART
				SEE TABLE	REVISION
				GENERAL MARKET	PSD 000 B4
				SHEET NUMBER	3 OF 4

## ORTHO PIN MAPPING (DC RAF - ORTHO DIRECT RAM)

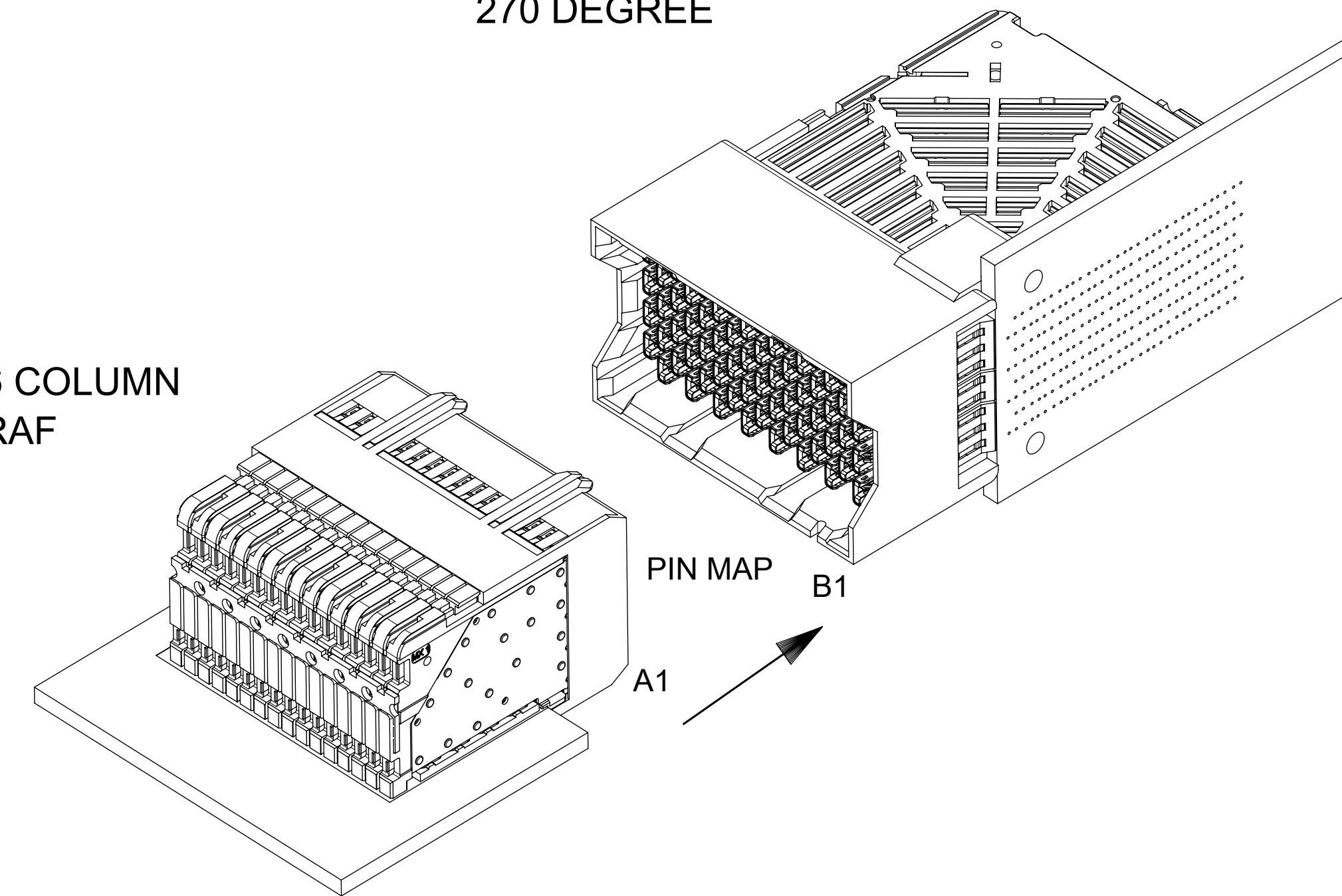
H1-A7	H2-B8	H3-C7	H4-D8	H5-E7	H6-F8	H7-G7	H8-H8	H9-J7	H10-K8	H11-L7	H12-M8	H13-N7	H14-P8	H15-R7	H16-T8
G1-B7	G2-A8	G3-D7	G4-C8	G5-F7	G6-E8	G7-H7	G8-G8	G9-K7	G10-J8	G11-M7	G12-L8	G13-P7	G14-N8	G15-T7	G16-R8
F1-A5	F2-B6	F3-C5	F4-D6	F5-E5	F6-F6	F7-G5	F8-H6	F9-J5	F10-K6	F11-L5	F12-M6	F13-N5	F14-P6	F15-R5	F16-T6
E1-B5	E2-A6	E3-D5	E4-C6	E5-F5	E6-E6	E7-H5	E8-G6	E9-K5	E10-J6	E11-M5	E12-L6	E13-P5	E14-N6	E15-T5	E16-R6
D1-A3	D2-B4	D3-C3	D4-D4	D5-E3	D6-F4	D7-G3	D8-H4	D9-J3	D10-K4	D11-L3	D12-M4	D13-N3	D14-P4	D15-R3	D16-T4
C1-B3	C2-A4	C3-D3	C4-C4	C5-F3	C6-E4	C7-H3	C8-G4	C9-K3	C10-J4	C11-M3	C12-L4	C13-P3	C14-N4	C15-T3	C16-R4
B1-A1	B2-B2	B3-C1	B4-D2	B5-E1	B6-F2	B7-G1	B8-H2	B9-J1	B10-K2	B11-L1	B12-M2	B13-N1	B14-P2	B15-R1	B16-T2
A1-B1	A2-A2	A3-D1	A4-C2	A5-F1	A6-E2	A7-H1	A8-G2	A9-K1	A10-J2	A11-M1	A12-L2	A13-P1	A14-N2	A15-T1	A16-R2

### MATED DIMENSIONS



8 PAIR X 8 COLUMN  
ORTHO DIRECT RAM  
270 DEGREE

4 PAIR X 16 COLUMN  
DC RAF



THIS SHEET IS FOR  
64 DIFFERENTIAL PAIRS ONLY

<b>FUNCTIONAL SYMBOLS</b> $\nabla_A = 0$ $\nabla_C = 0$ $\nabla_P = 0$ <b>DIVISIONAL SYMBOLS</b>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE <b>2:1</b>	CURRENT REV DESC: ADD THE 12 COLUMN TO PART NUMBER TABLE	molex		
	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 657979	IMPULSE 8 PAIR ORTHO DIRECT RAM - 270° - 2MM UNGUIDED		
	ANGULAR TOL $\pm 0.5^\circ$		DRWN: JMENDOZA01 2021/03/04	PRODUCT CUSTOMER DRAWING		
	4 PLACES $\pm$		CHK'D: JMENDOZA01 2021/03/12	DOCUMENT NUMBER    DOC TYPE    DOC PART    REVISION		
3 PLACES $\pm$		APPR: JMENDOZA01 2021/03/12	1735202000    PSD    000    B4			
2 PLACES $\pm 0.13$		INITIAL REVISION:	MATERIAL NUMBER    CUSTOMER    SHEET NUMBER			
1 PLACE $\pm 0.25$		DRWN: TIBARRA 2019/07/29	SEE TABLE    GENERAL MARKET    4 OF 4			
0 PLACES $\pm$		APPR: JMENDOZA01 2019/08/02				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES			
		<b>D-SIZE</b>	<b>173520</b>			