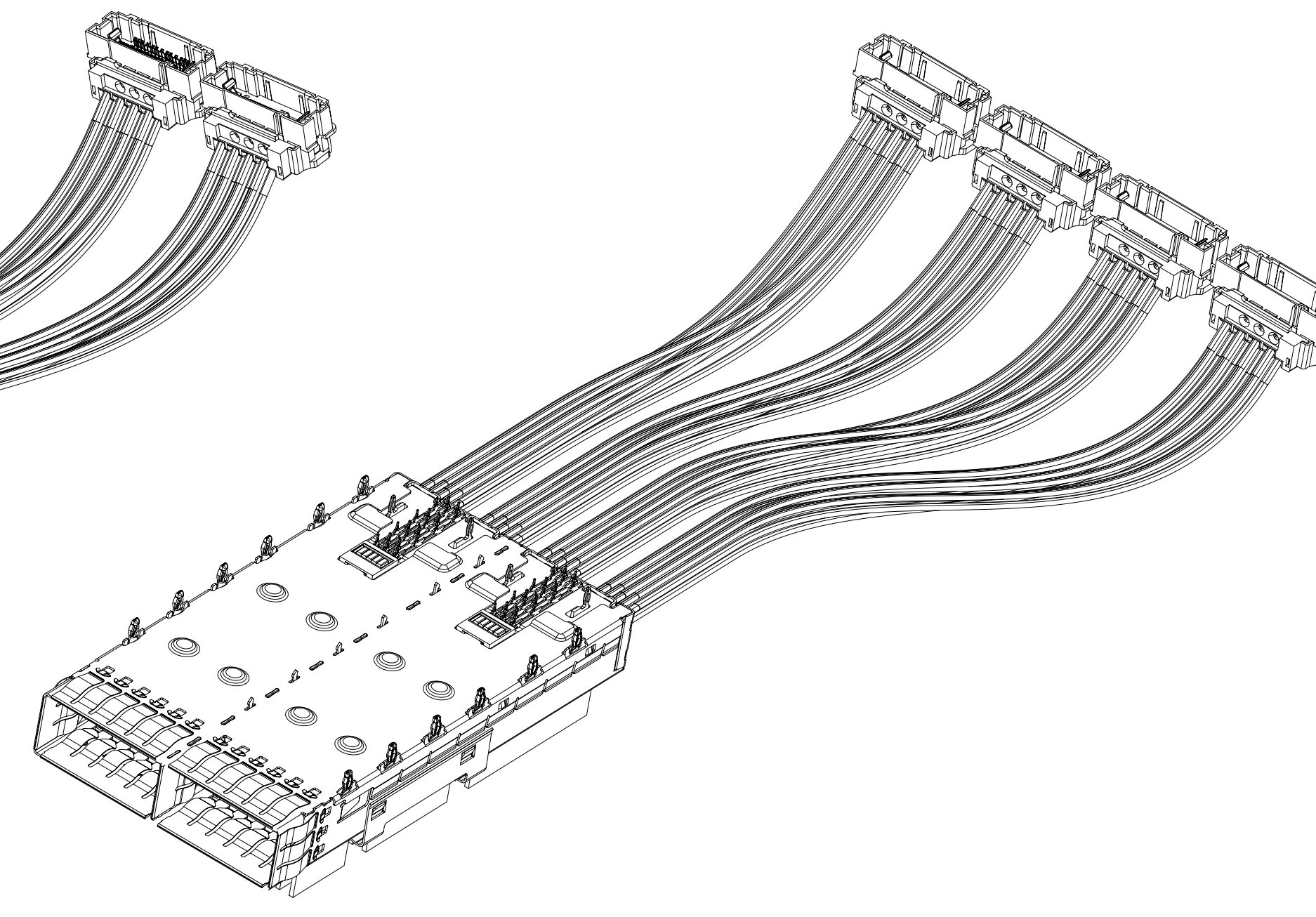
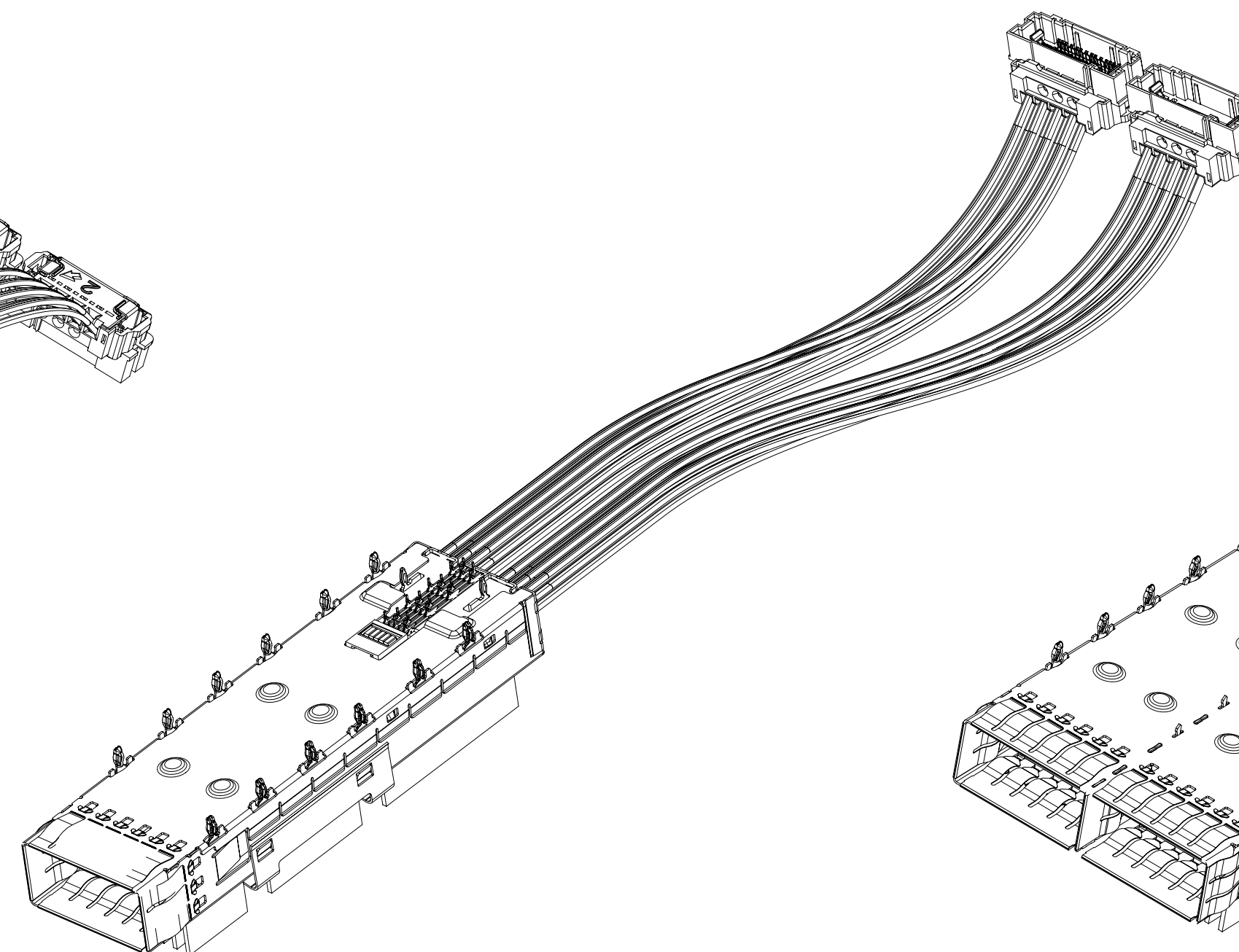
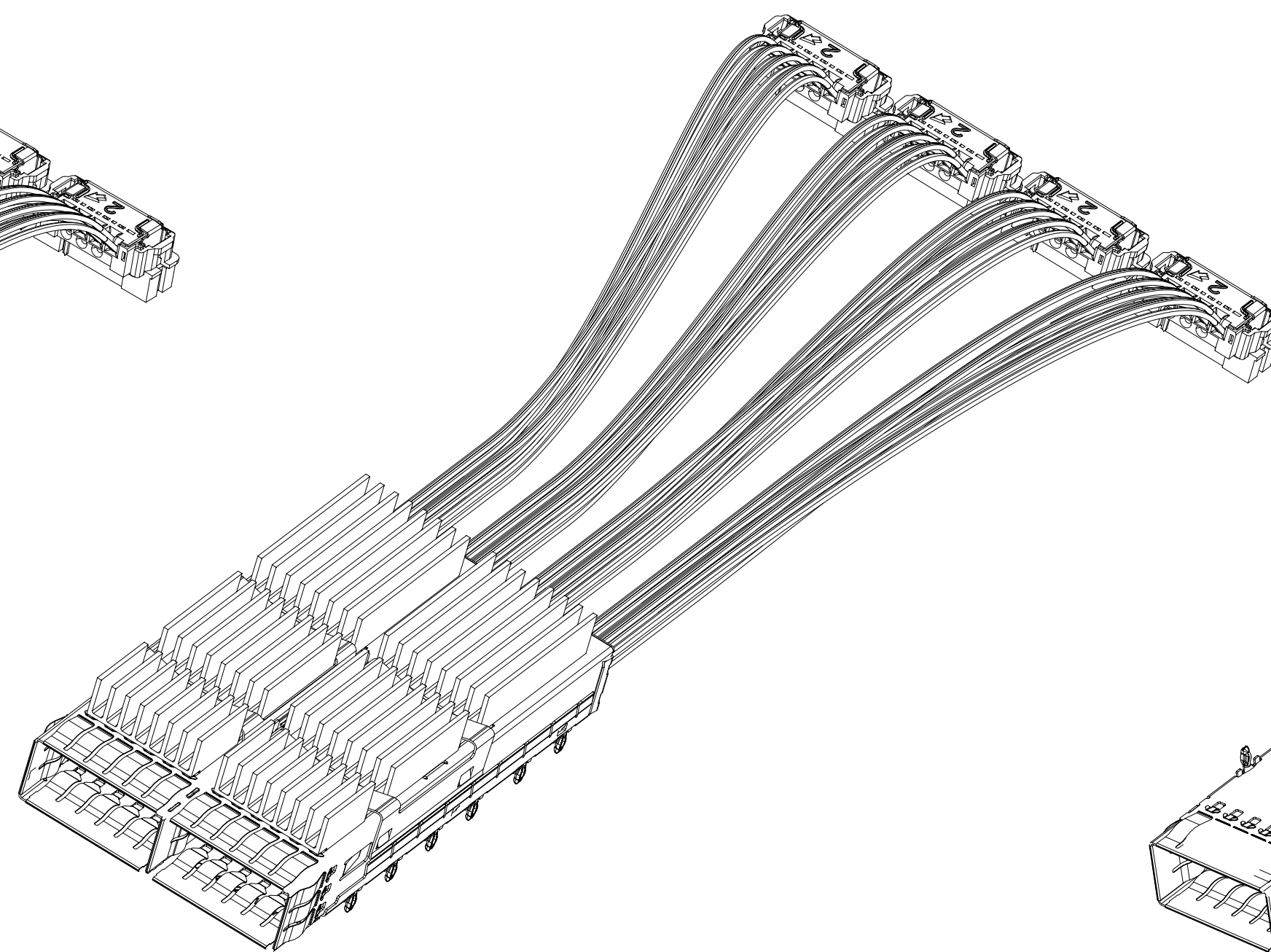
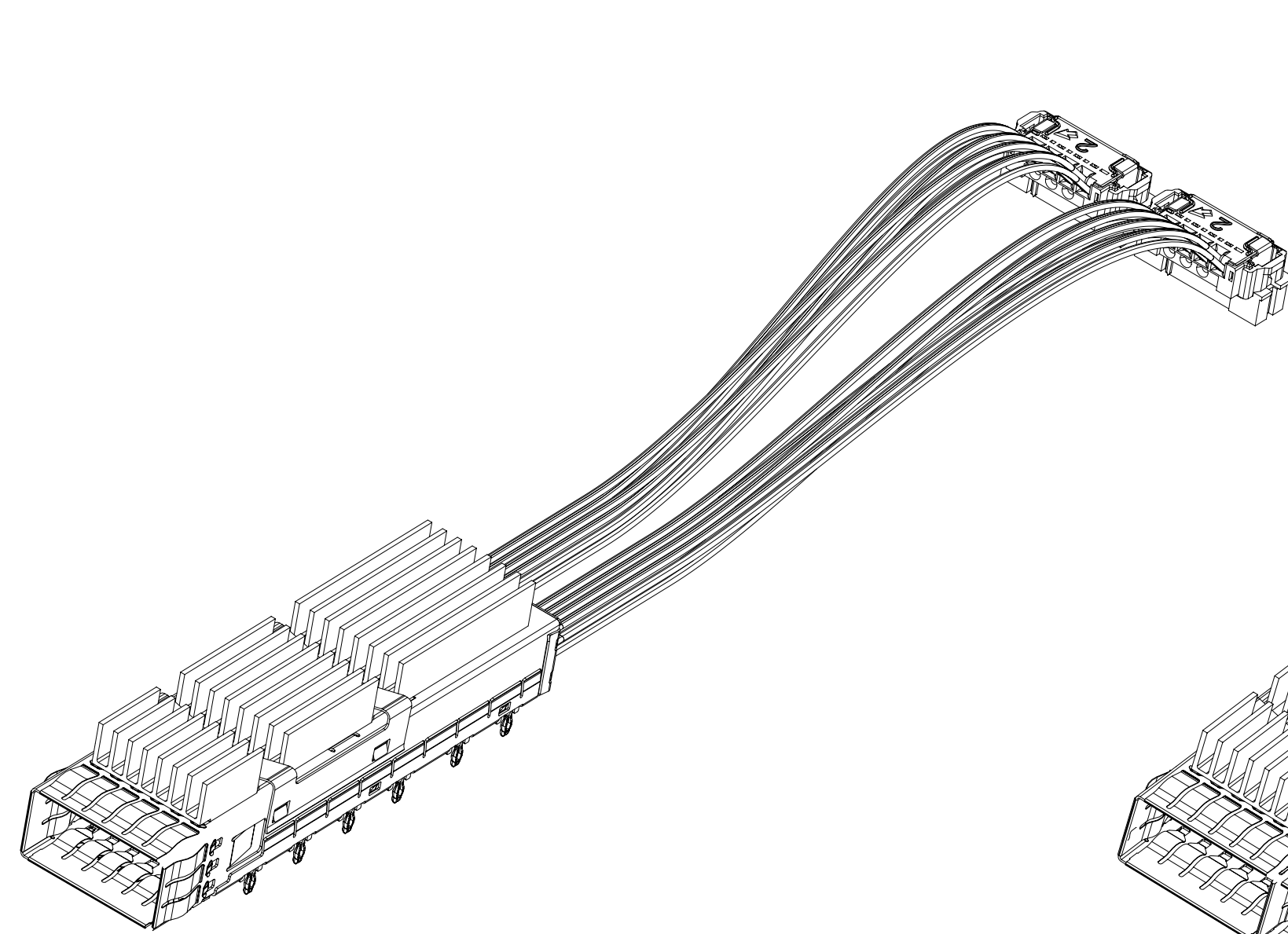


STANDARD SINGLE SIDED SHOWN (20847310XX).
 BELLY TO BELLY APPLICATION USE (20847315XX),
 LOW SPEED SIGNAL PIN LOCATION IS REVERSED
 IN ORDER TO STAGGER PCB PIN HOLE FIELD
 SEE SHEET 9

- NOTES:
- CABLE LENGTH DEPENDS ON WIRE GAUGE, DATA RATE AND HOST BOARD DRIVER CAPABILITIES.
 - MATERIALS:
 CAGE - STAINLESS STEEL
 HEAT SINK - ALUMINUM - NICKEL PLATED
 SPRING FINGERS - STAINLESS STEEL
 HEAT SINK CLIP - STAINLESS STEEL
 - TWINAX CABLE (HIGH SPEED)
 SHIELD - ALUMINUM/POLYESTER FOIL WRAP
 SIGNAL PAIR - 34AWG SOLID SILVER PLATED COPPER
 DRAIN - 34AWG SOLID SILVER PLATER COPPER
 CONFORMS TO UL VW-1
 IMPEDENCE - 100 OHMS
 - P2 & P3: MOLEX PN 2042731000 (HOUSING) MATES WITH 203316 SERIES.
 - RoHS COMPLIANT. NO EXEMPTIONS.
 - MARK WITH PART NUMBER SERIAL NUMBER
 PART NUMBER: SEE PART NUMBER TABLE
 SERIAL NUMBER:
 YY - YEAR
 DDD - DAY OF THE YEAR
 L - MANUFACTURE LOCATION
 SSSS - SERIAL NUMBER (0001-9999)

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0					
▽ = 0		mm		1:1		EC NO: 653077 DRWN: LLI05 2021/02/25 CHK'D: MSTRACK 2021/02/26 APPR: BCHEN06 2021/03/02 INITIAL REVISION: DRWN: SVANG01 2019/01/31 APPR: SRATKOVIC 2019/02/20					
▽ = 0		GENERAL TOLERANCES (UNLESS SPECIFIED)									
▽ = 0		ANGULAR TOL ± °									
▽ = 0		4 PLACES ±									
▽ = 0		3 PLACES ±									
▽ = 0		2 PLACES ± 0.13				PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 2084731000 DOC TYPE: PSD DOC PART: 000 REVISION: H					
▽ = 0		1 PLACE ± 0.25									
▽ = 0		0 PLACES ±									
⊠ = 0		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER	
▽ = 0				D-SIZE		208473		2019/02/20		SEE P/N TABLE	
						GENERAL MARKET				SHEET NUMBER	
										1 OF 9	



1X1 STANDARD TOP OF BOARD	
PART NUMBER	NEARSTACK HIGH SPEED LENGTH (MM)
2084731002	150
2084731003	200
2084731004	300
2084731005	400
2084731006	450
2084731007	500

1X2 STANDARD TOP OF BOARD	
PART NUMBER	NEARSTACK HIGH SPEED LENGTH (MM)
2084732002	150
2084732003	200
2084732004	300
2084732005	400
2084732006	450
2084732007	500

1X1 BELLY TO BELLY BOTTOM OF BOARD	
PART NUMBER	NEARSTACK HIGH SPEED LENGTH (MM)
2084731502	150
2084731503	200
2084731504	300
2084731505	400
2084731506	450
2084731507	500

1X2 BELLY TO BELLY BOTTOM OF BOARD	
PART NUMBER	NEARSTACK HIGH SPEED LENGTH (MM)
2084732502	150
2084732503	200
2084732504	300
2084732505	400
2084732506	450
2084732507	500

NOTES:
 1. ALL CABLE PART NUMBERS LISTED ARE OF THE DDQ GEN 2.0 AND NEARSTACK GEN 2.0 DESIGN .
 2. CONTACT MOLEX FOR BIPASS ASSEMBLY PART NUMBERS AND AVAILABILITY FOR 1X3 THROUGH 1X6 CONFIGURATIONS .

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0
= 0	mm	1:1	EC NO: 653077 DRWN: LLI05 2021/02/25 CHK'D: MSTRACK 2021/02/26 APPR: BCHEN06 2021/03/02
= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
= 0	ANGULAR TOL	± °	INITIAL REVISION: DRWN: SVANG01 2019/01/31 APPR: SRATKOVIC 2019/02/20
= 0	4 PLACES	±	
= 0	3 PLACES	±	DOCUMENT NUMBER: 2084731000 DOC TYPE: PSD DOC PART: 000 REVISION: H
= 0	2 PLACES	± 0.13	
= 0	1 PLACE	± 0.25	MATERIAL NUMBER: SEE P/N TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 2 OF 9
= 0	0 PLACES	±	
= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	D-SIZE
= 0			SERIES: 208473

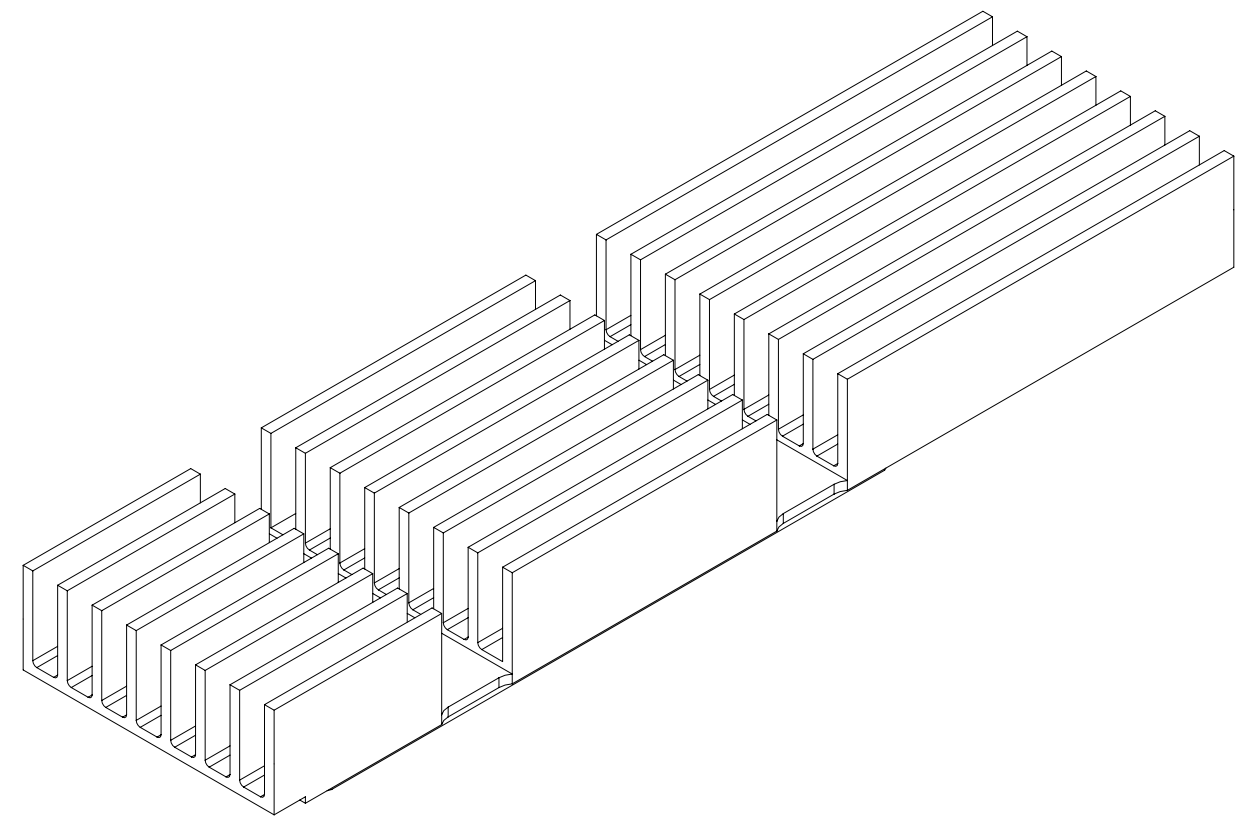
molex

DDQ BIPASS 1XN

PRODUCT CUSTOMER DRAWING

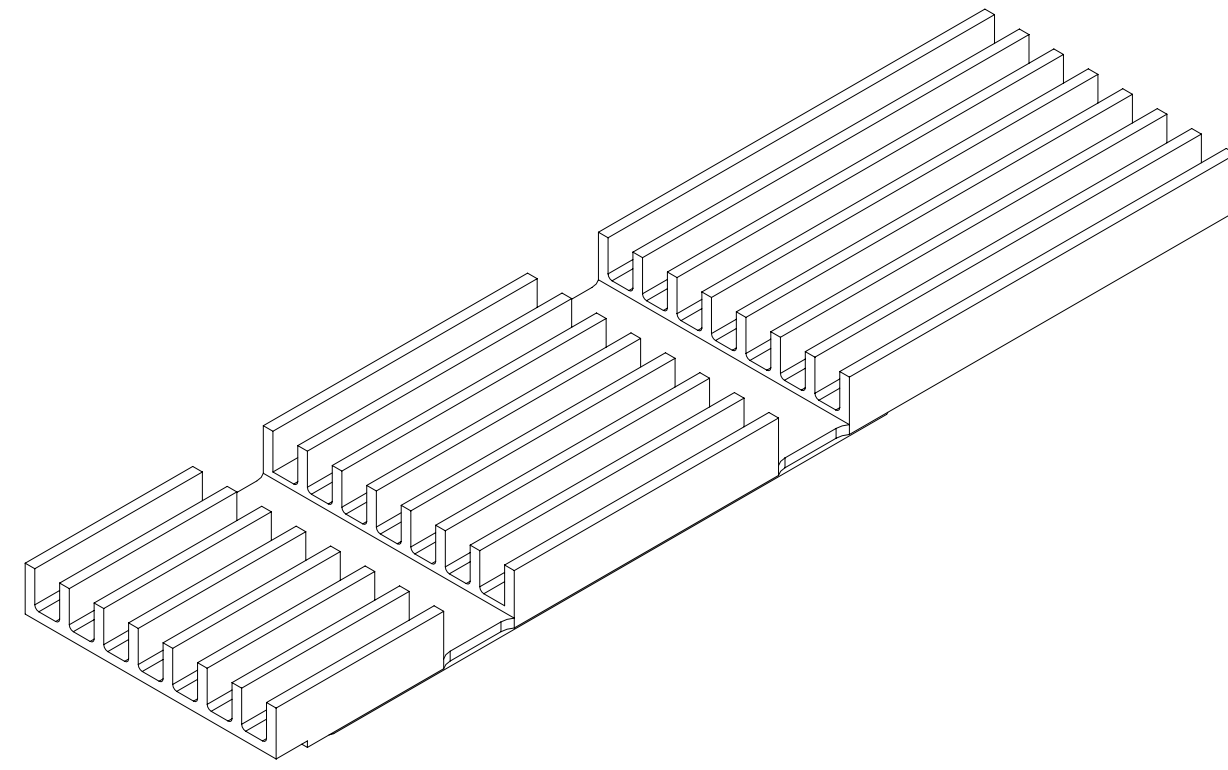
2084731000 PSD 000 H

STANDARD HEAT SINK
USED ON ASSEMBLIES SHOWN
IN THIS DRAWING

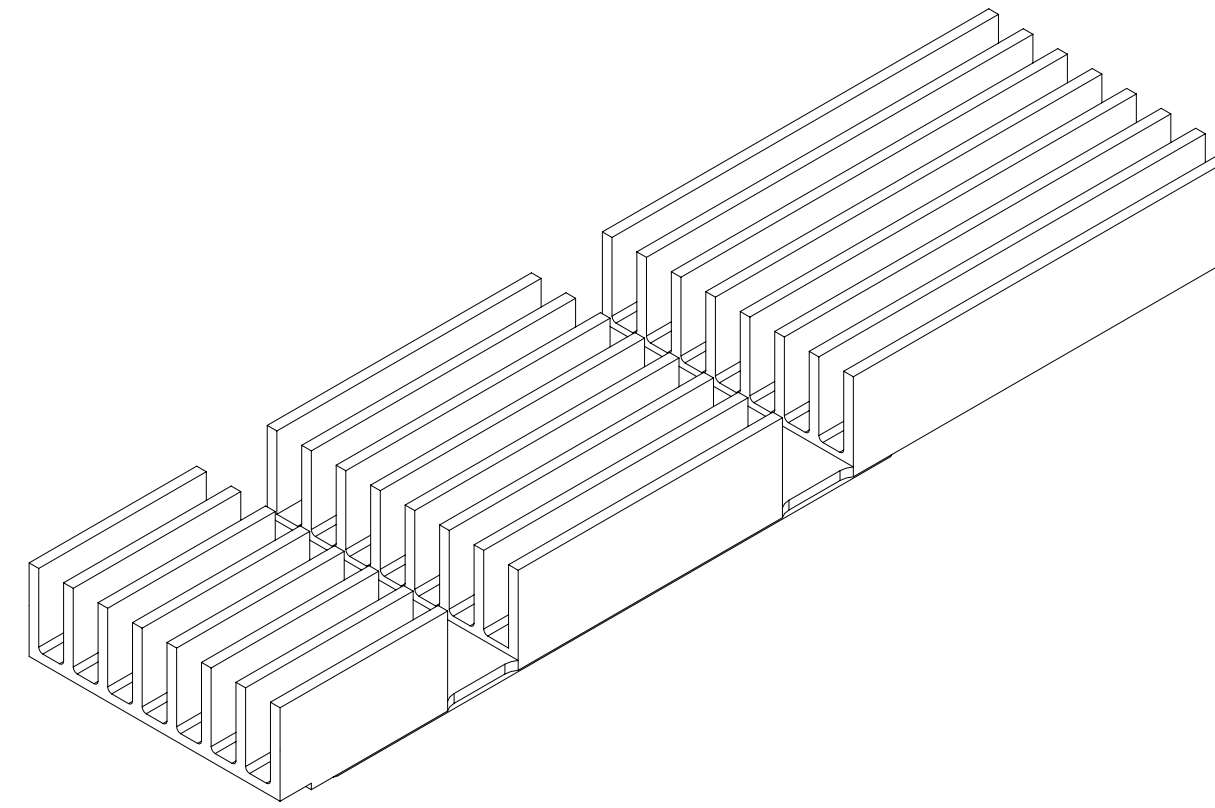


HEAT SINK FIN TYPE
HEIGHT = 6.0mm

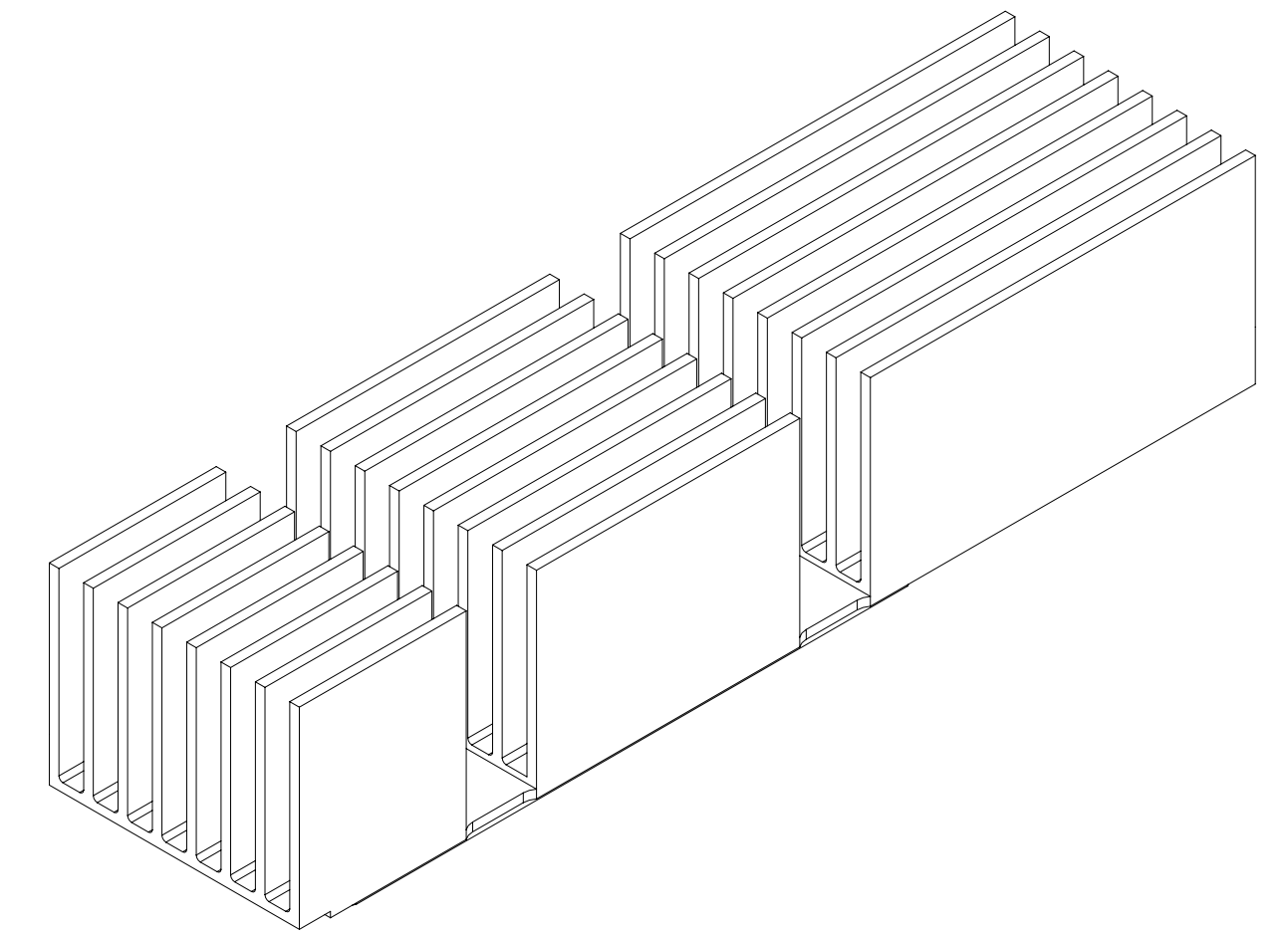
HEAT SINK OPTIONS



HEAT SINK FIN TYPE
HEIGHT = 3.1mm



HEAT SINK FIN TYPE
HEIGHT = 5.4mm

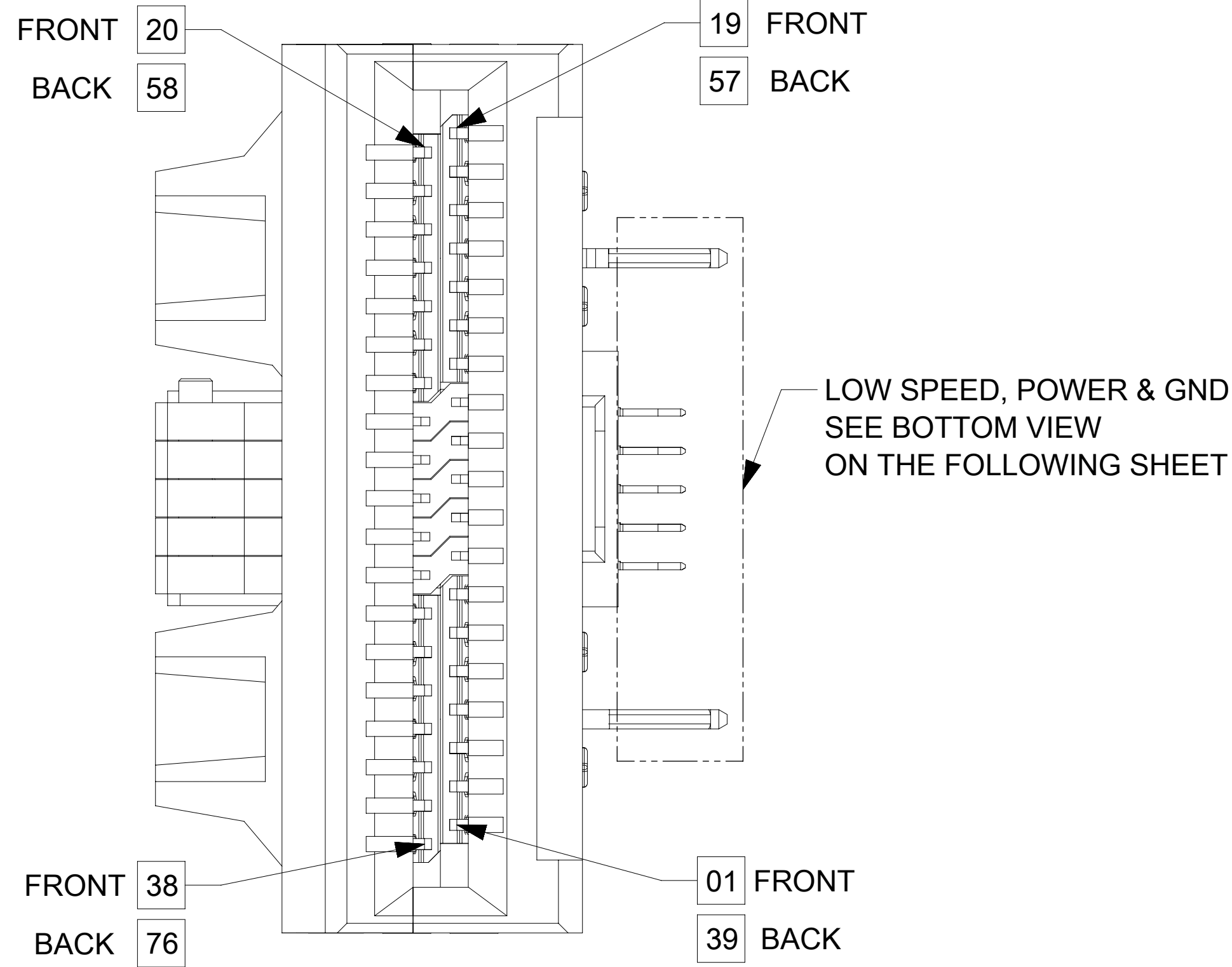


HEAT SINK FIN TYPE
HEIGHT = 12.4mm

CONTACT MOLEX FOR BiPASS ASSEMBLY PART NUMBER AND AVAILABILITY

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	DIMENSION UNITS	SCALE	CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0	
▽ = 0	mm	2:1	molex DDQ BIPASS 1XN PRODUCT CUSTOMER DRAWING	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			
▽ = 0	ANGULAR TOL ± °			
▽ = 0	4 PLACES	±		
▽ = 0	3 PLACES	±		
▽ = 0	2 PLACES	± 0.13		
▽ = 0	1 PLACE	± 0.25	EC NO: 653077 DRWN: LLI05 2021/02/25 CHK'D: MSTRACK 2021/02/26 APPR: BCHEN06 2021/03/02	
☒ = 0	0 PLACES	±	INITIAL REVISION: DRWN: SVANG01 2019/01/31 APPR: SRATKOVIC 2019/02/20	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES
▽ = 0			D-SIZE	208473
DOCUMENT STATUS		P1	RELEASE DATE	2021/03/02 05:30:24
DOCUMENT NUMBER		2084731000	DOC TYPE	PSD
DOC PART		000	REVISION	H
MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
		GENERAL MARKET		3 OF 9

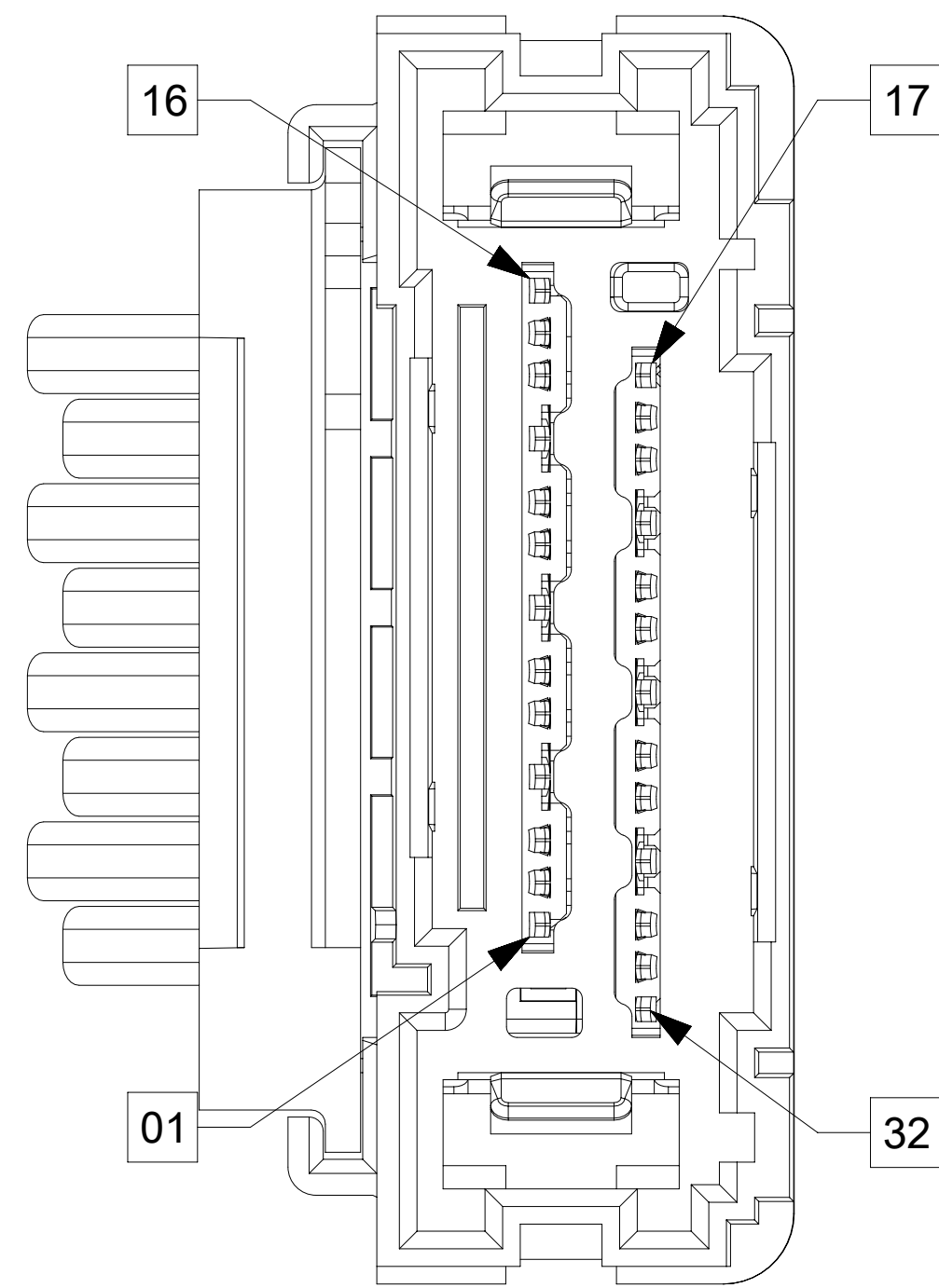
P1 QSFP-DD



HIGH SPEED WIRING DIAGRAM			
P1 END - QSFP-DD		P3 END - NEARSTACK	
PIN	SIGNAL	PIN	SIGNAL
01	GND (TX)	09	GND (TX)
02	TX2n	11	TX2n
03	TX2p	10	TX2p
04	GND	12,13	GND
05	TX4n	15	TX4n
06	TX4p	14	TX4p
07	GND (TX)	16	GND
32	GND (TX)	17	GND
33	TX3p	18	TX3p
34	TX3n	19	TX3n
35	GND (TX)	20,21	GND
36	TX1p	22	TX1p
37	TX1n	23	TX1n
38	GND (TX)	24	GND
39	GND (TX)	01	GND (TX)
40	TX6n	03	TX6n
41	TX6p	02	TX6p
42	GND	04,05	GND
43	TX8n	07	TX8n
44	TX8p	06	TX8p
45	GND (TX)	08	GND
70	GND (TX)	25	GND
71	TX7p	26	TX7p
72	TX7n	27	TX7n
73	GND (TX)	28,29	GND
74	TX5p	30	TX5p
75	TX5n	31	TX5n
76	GND (TX)	32	GND

HIGH SPEED WIRING DIAGRAM			
P1 END - QSFP-DD		P2 END - NEARSTACK	
PIN	SIGNAL	PIN	SIGNAL
13	GND (RX)	01	GND
14	RX3p	03	RX3p
15	RX3n	02	RX3n
16	GND (RX)	04,05	GND
17	RX1p	07	RX1p
18	RX1n	06	RX1n
19	GND (RX)	08	GND
20	GND (RX)	25	GND
21	RX2n	26	RX2n
22	RX2p	27	RX2p
23	GND (RX)	28,29	GND
24	RX4n	30	RX4n
25	RX4p	31	RX4p
26	GND (RX)	32	GND
51	GND (RX)	09	GND
52	RX7p	11	RX7p
53	RX7n	10	RX7n
54	GND (RX)	12,13	GND
55	RX5p	15	RX5p
56	RX5n	14	RX5n
57	GND (RX)	16	GND
58	GND (RX)	17	GND
59	RX6n	18	RX6n
60	RX6p	19	RX6p
61	GND (RX)	20,21	GND
62	RX8n	22	RX8n
63	RX8p	23	RX8p
64	GND (RX)	24	GND

**P2 & P3 NEARSTACK
HIGHSPEED**

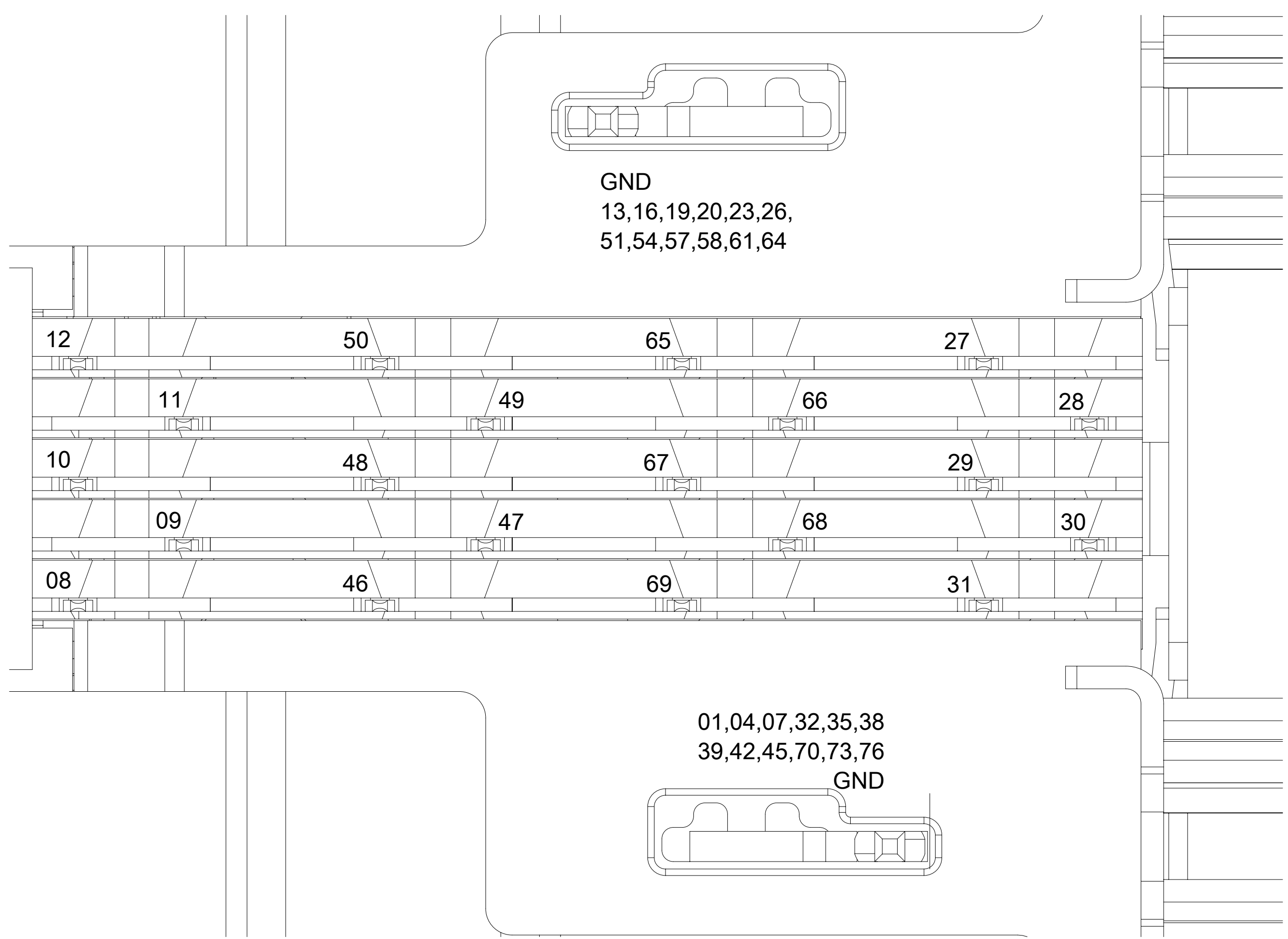


COMMON INTERNAL DIGITAL GROUNDS	
END	PINS
P1	01,04,07,32,35,38 39,42,45,70,73,76
P1	13,16,19,20, 23,26 51,54,57,58,61,64
P2	01,04,05,08,09,12,13,16
P2	17,20,21,24,25,28,29,32
P3	01,04,05,08,09,12,13,16
P3	17,20,21,24,25,28,29,32

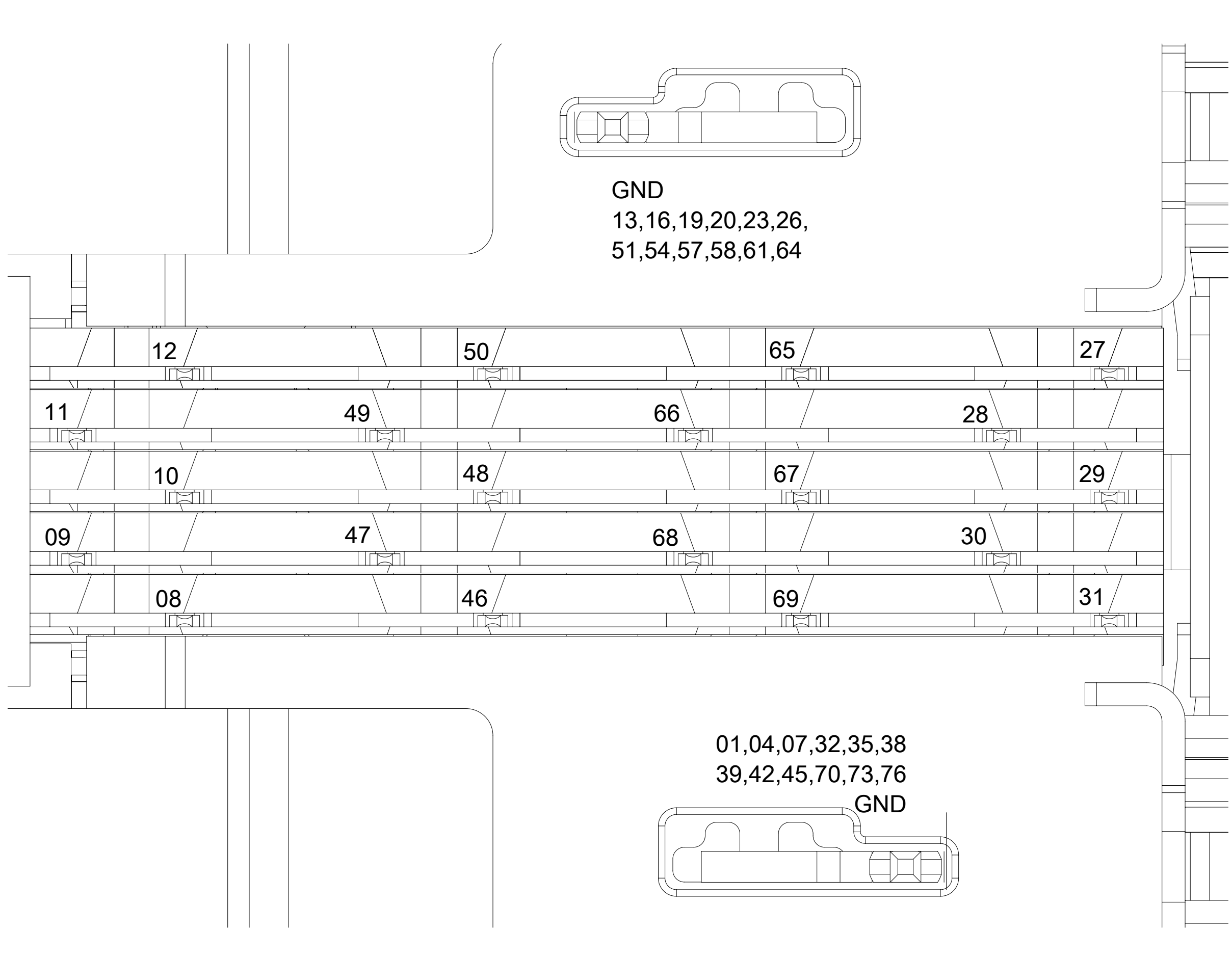
NOTE:
 -THE DIGITAL GROUND SERVES AS A CURRENT RETURN PATH FOR DIGITAL SIGNALS.
 -THE CHASSIS GROUND CONNECTS TO THE CAGE PRESS FIT PINS.
 -THE CHASSIS GROUND SHOULD NOT BE CONNECTED TO THE DIGITAL GROUND.

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0		molex
	DIMENSION UNITS	SCALE			
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▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		2019/02/26	000	
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▽ = 0	4 PLACES	±	2021/03/02		
▽ = 0	3 PLACES	±	INITIAL REVISION:		2084731000
▽ = 0	2 PLACES	± 0.13	DRWN: SVANG01	2019/01/31	
▽ = 0	1 PLACE	± 0.25	APP: SRATKOVIC	2019/02/20	
▽ = 0	0 PLACES	±			
☒ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
▽ = 0			⊕	D-SIZE	208473
					SEE P/N TABLE
					GENERAL MARKET
					SHEET NUMBER
					4 OF 9

P1 QSFP-DD - STANDARD (TOP OF BOARD)
BOTTOM VIEW
POWER, LOW SPEED, GND



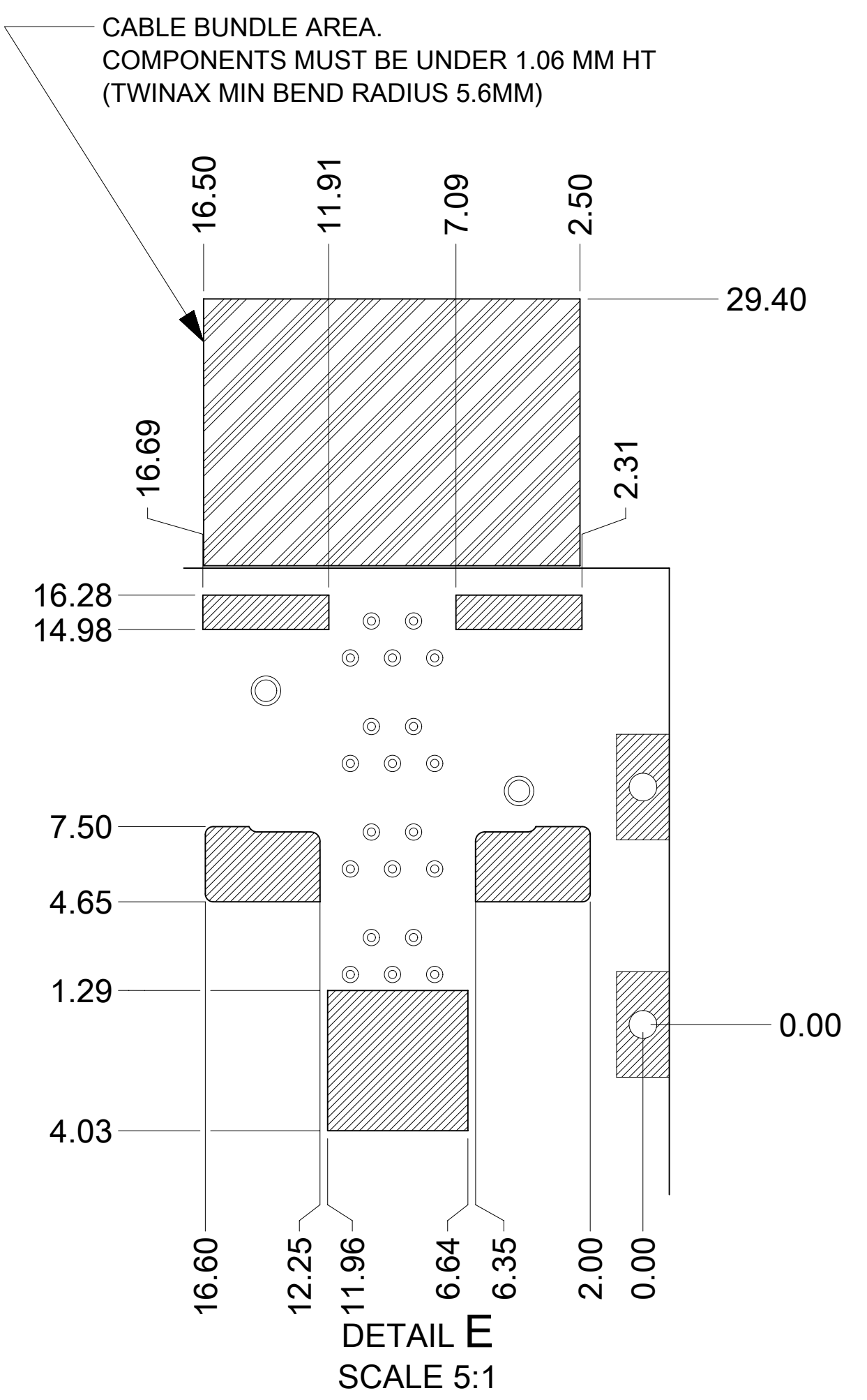
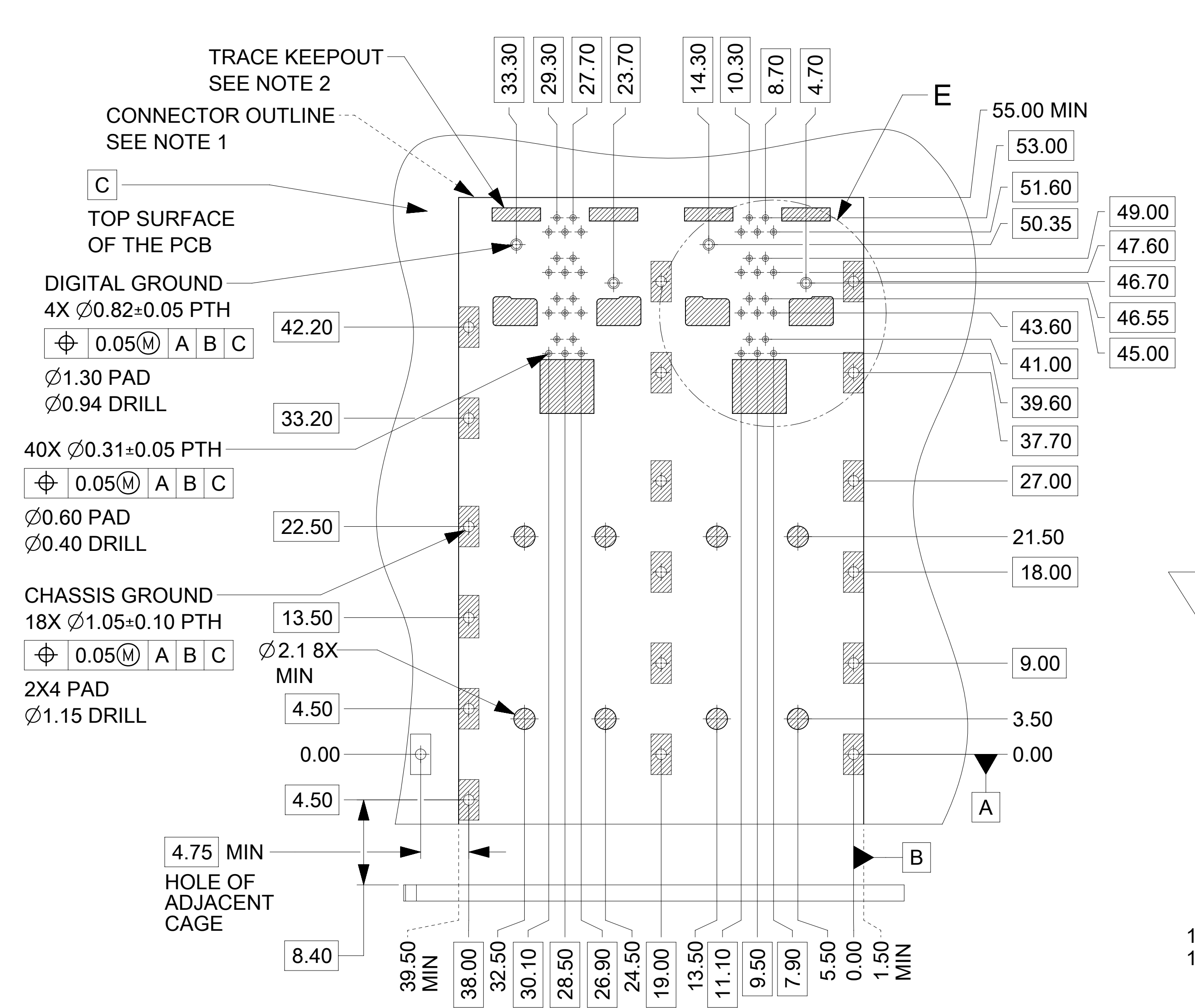
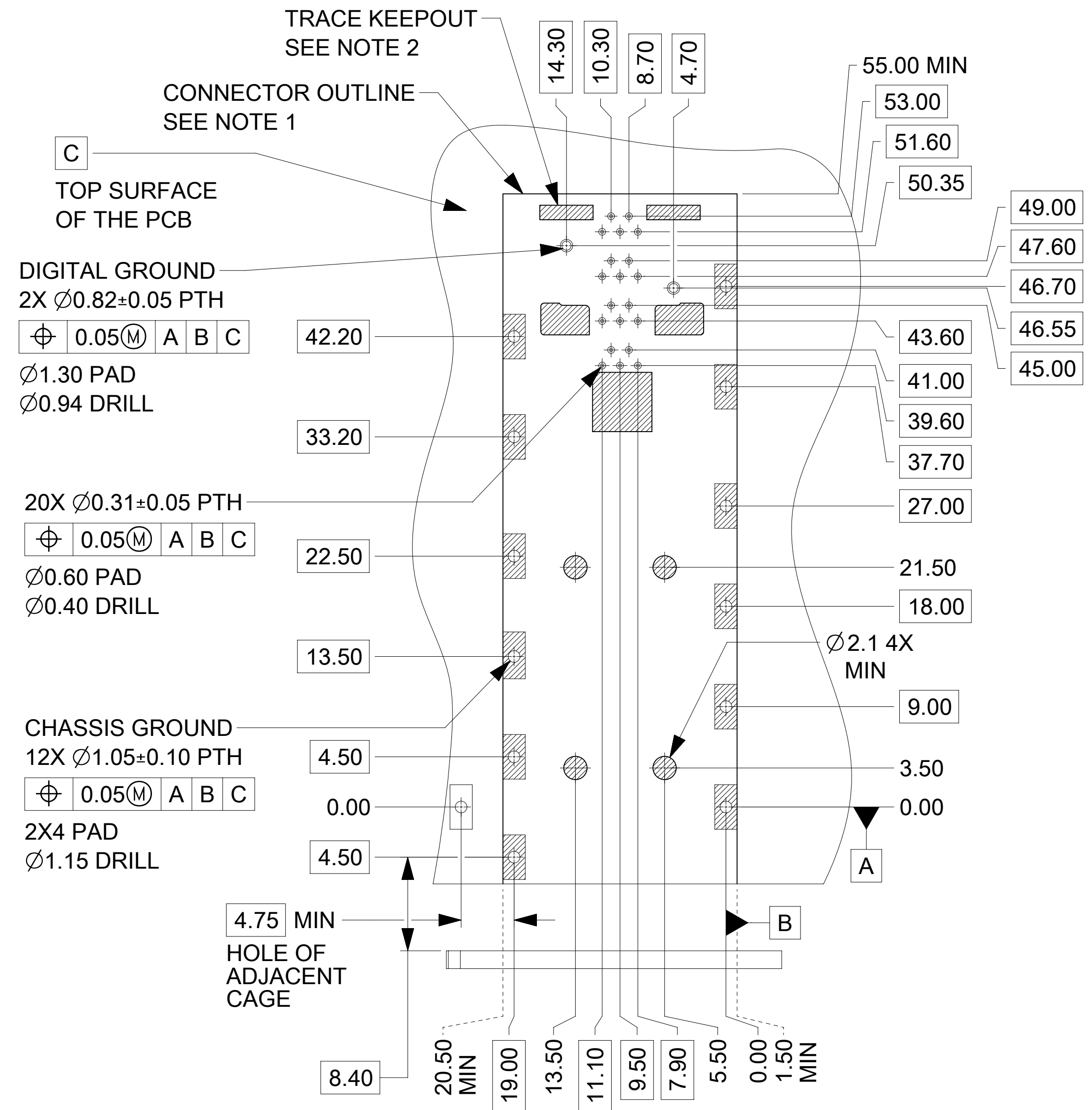
P1 QSFP-DD - BELLY TO BELLY (BOTTOM OF BOARD)
BOTTOM VIEW
POWER, LOW SPEED, GND



POWER & LOW SPEED SIGNALS	
P1 END	
PIN	SIGNAL
8	ModSelL
9	ResetL
10	VccRx
11	SCL
12	SDA
27	ModPrsL
28	IntL
29	VccTx
30	Vcc1
31	InitMode
46	RESERVED
47	VS1
48	VccRx1
49	VS2
50	VS3
65	RESERVED
66	RESERVED
67	VccTx1
68	Vcc2
69	RESERVED

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
SYMBOLS	DIMENSION UNITS	SCALE	CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0			molex			
▽ = 0	mm	1:1	EC NO: 653077 DRWN: LLI05 2021/02/25 CHK'D: MSTRACK 2021/02/26 APPR: BCHEN06 2021/03/02			DDQ BIPASS 1XN			
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)								
▽ = 0	ANGULAR TOL ± °					DOCUMENT NUMBER: 2084731000 DOC TYPE: PSD DOC PART: 000 REVISION: H			
▽ = 0	4 PLACES ±								
▽ = 0	3 PLACES ±		MATERIAL NUMBER: SEE P/N TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 5 OF 9						
▽ = 0	2 PLACES ± 0.13						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
▽ = 0	1 PLACE ± 0.25		THIRD ANGLE PROJECTION						
▽ = 0	0 PLACES ±						D-SIZE 208473		
☒ = 0			SERIES: 208473						
■ = 0							SEE P/N TABLE		
▽ = 0			GENERAL MARKET						

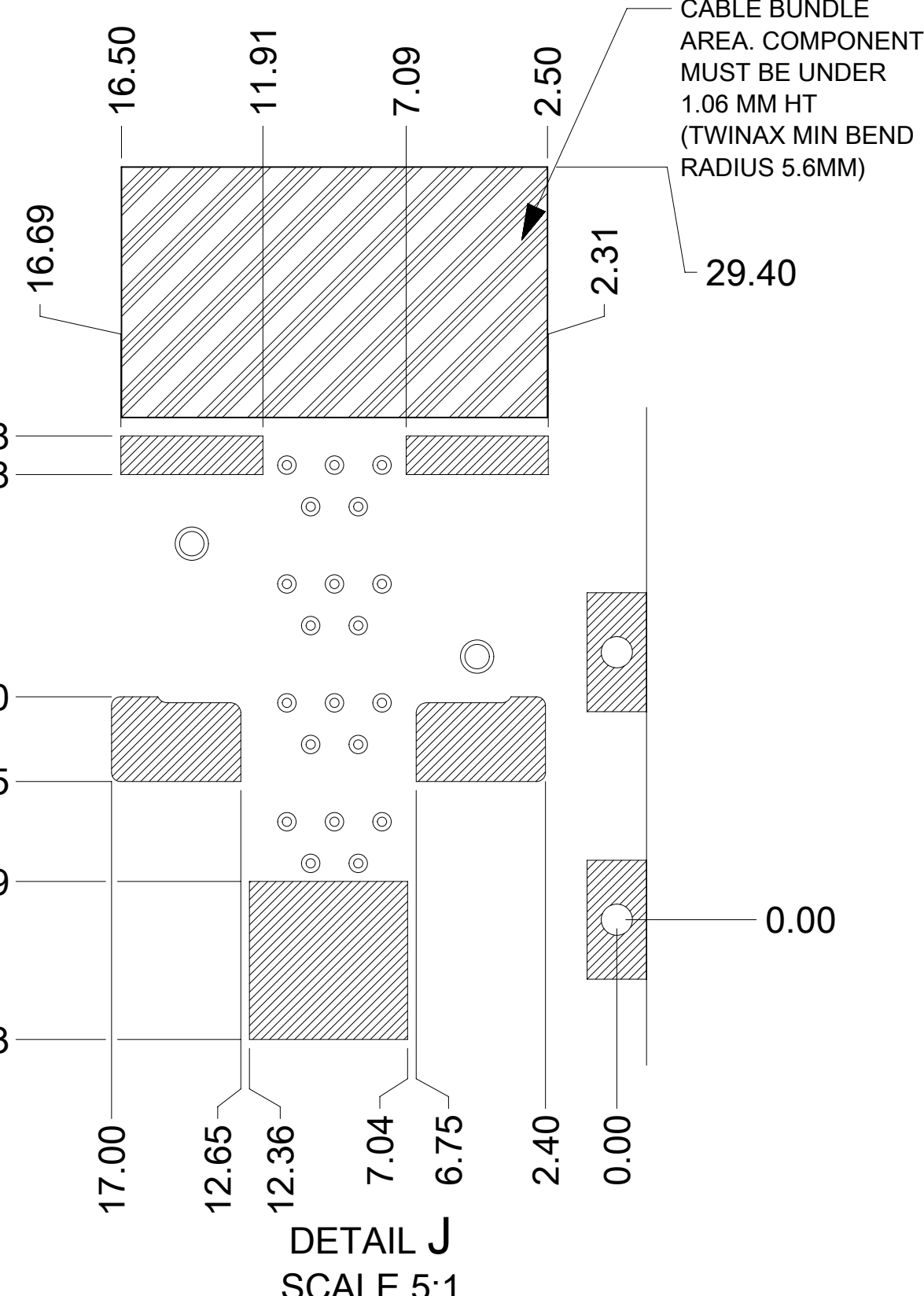
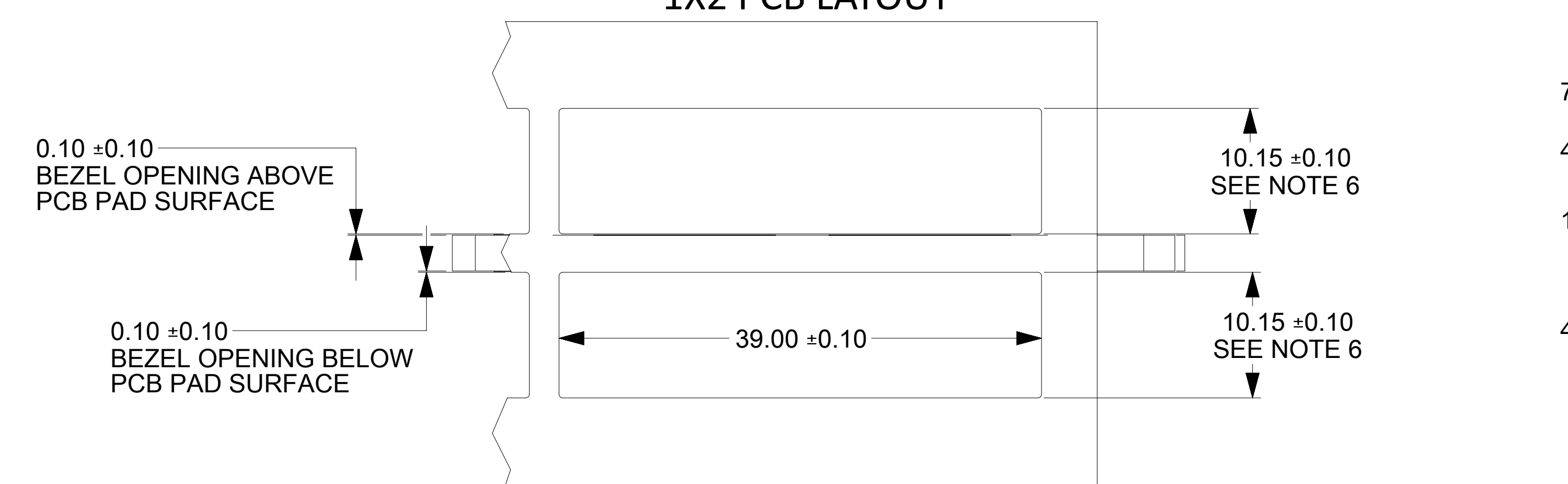
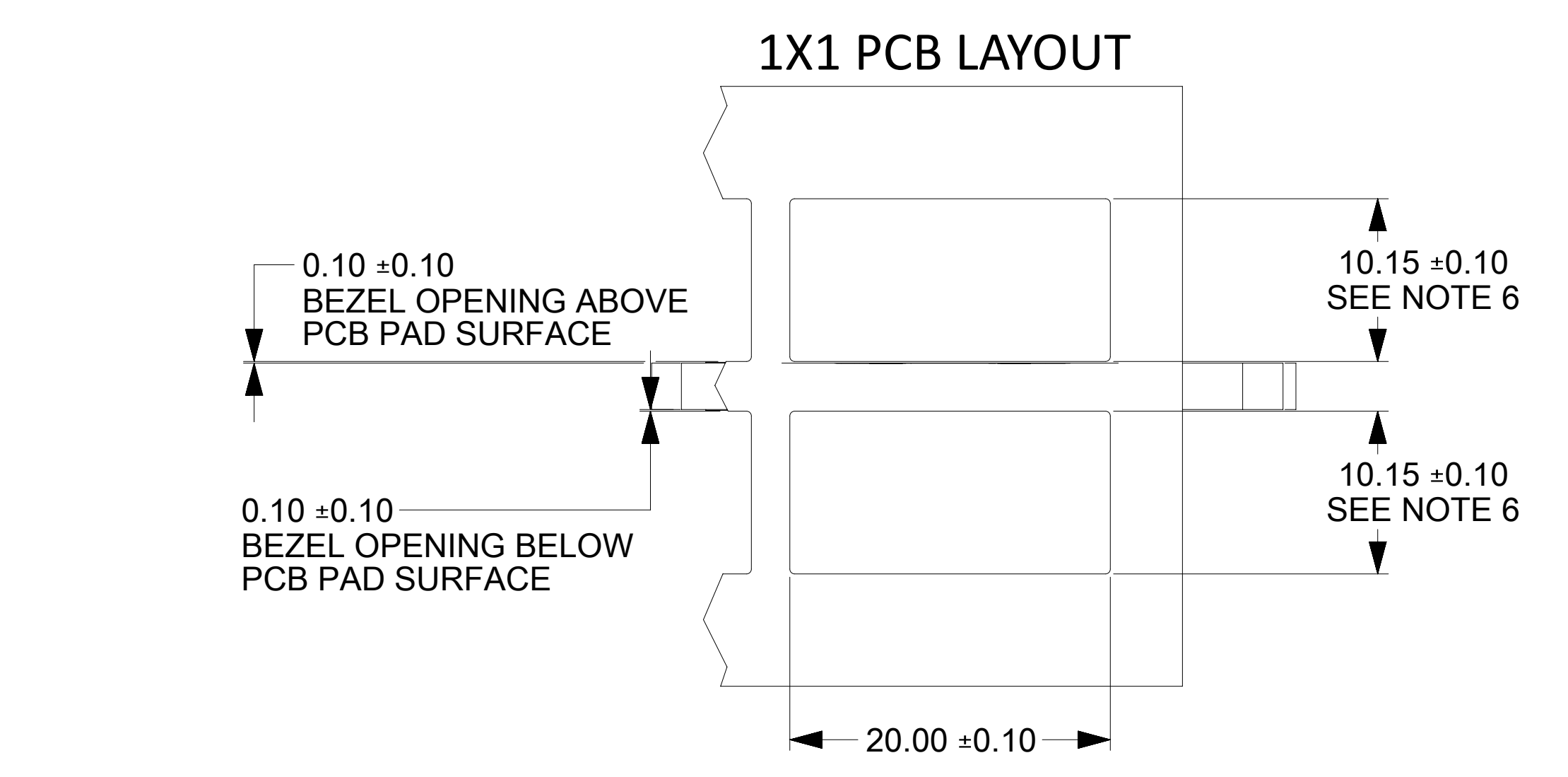
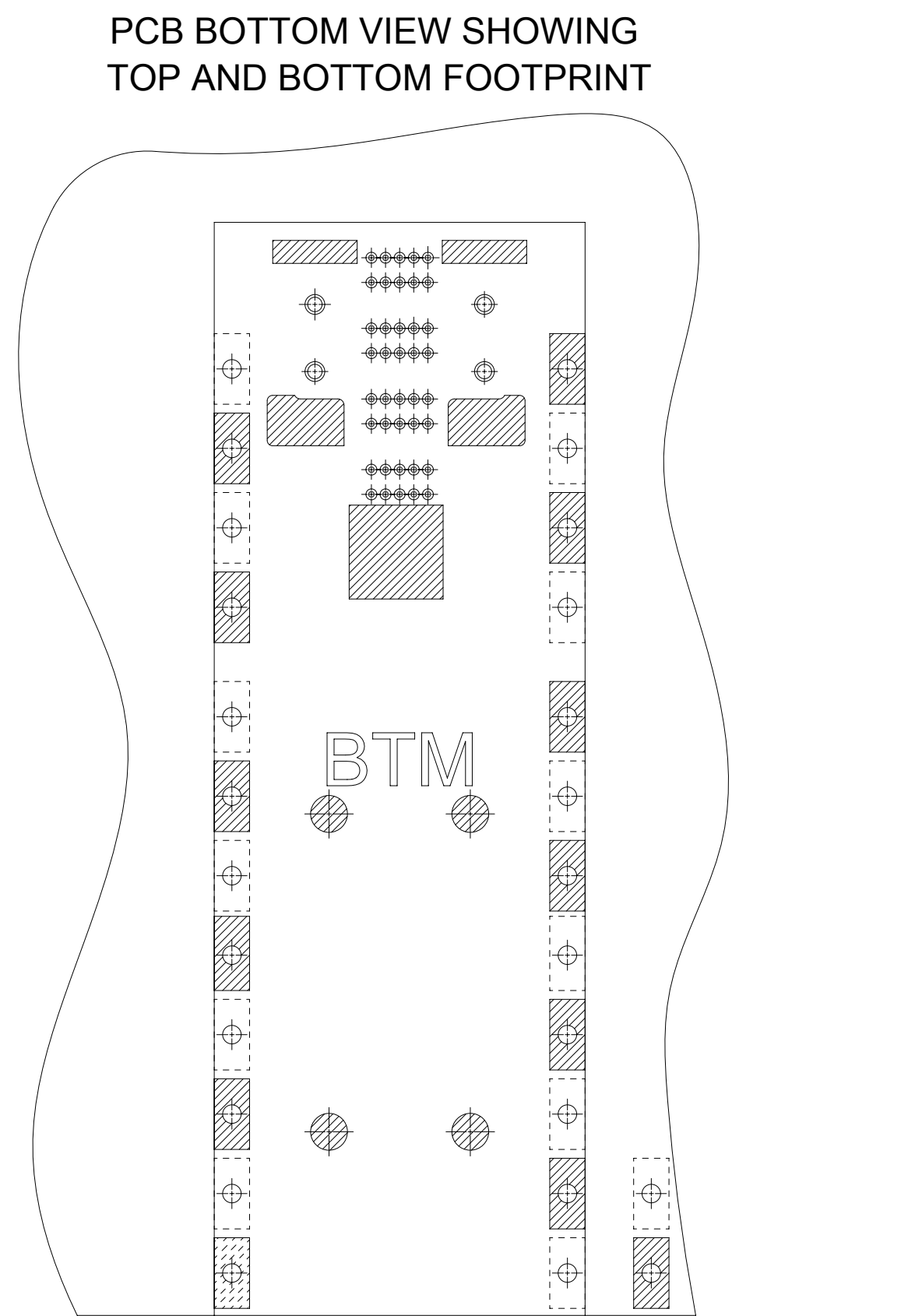
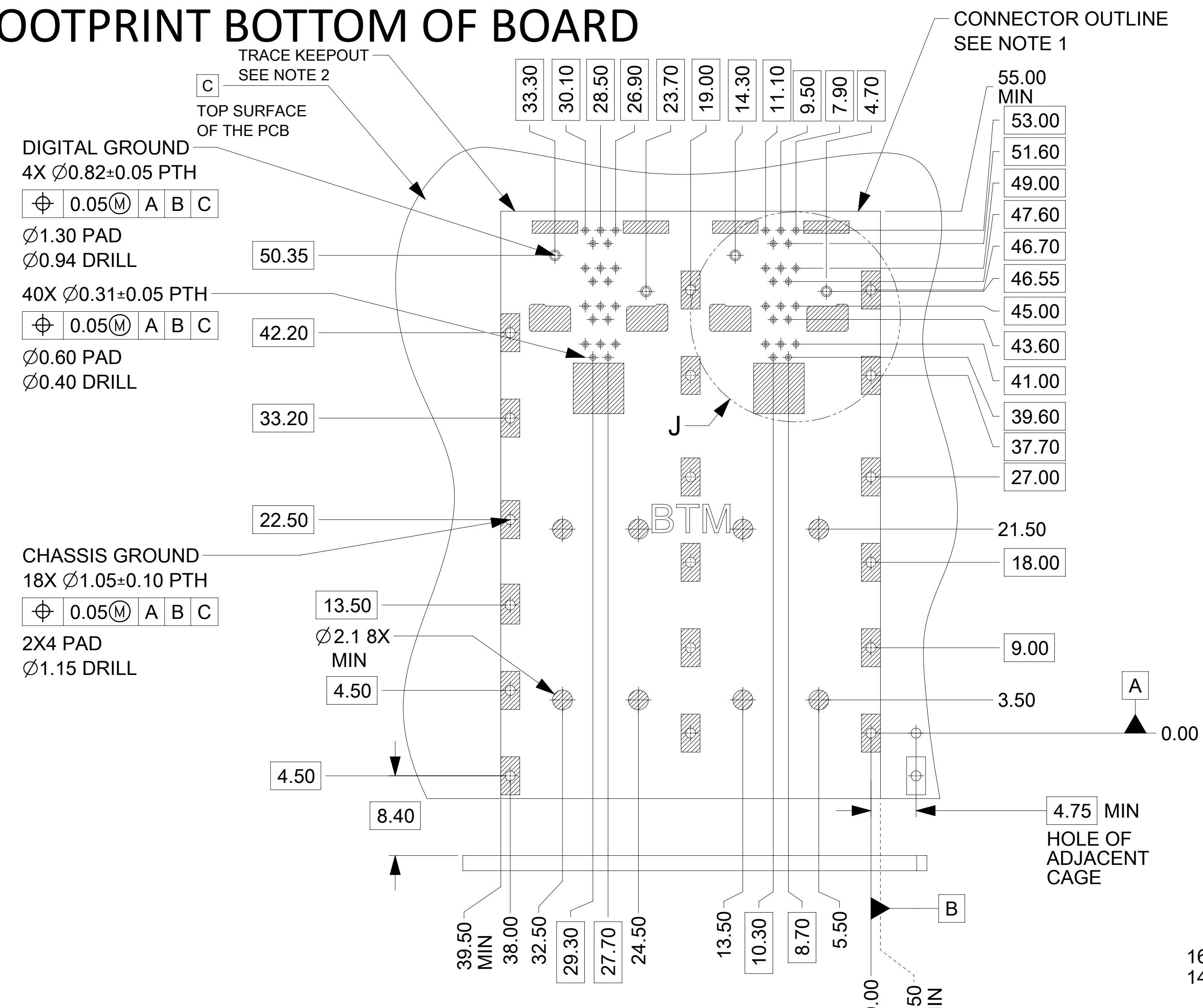
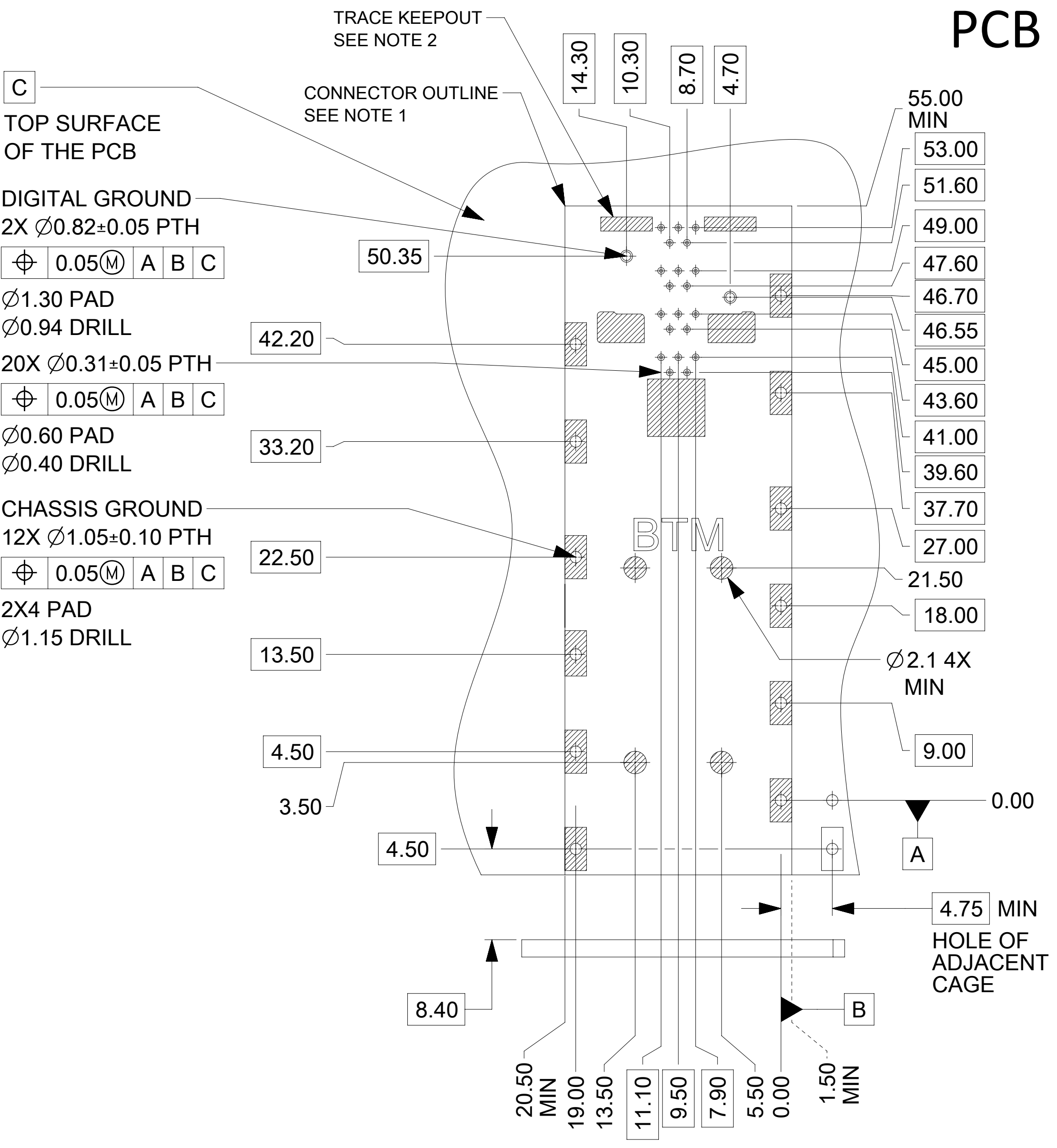
PCB FOOTPRINT TOP OF BOARD



- NOTES:**
1. LINES NOTED INDICATE THE CONNECTOR OUTLINE, THIS AREA IS A COMPONENT KEEP-OUT ZONE.
 2. CROSS HATCHED AREAS DENOTE WHERE CAGE OR CONNECTOR HOUSINGS CAN CONTACT THE BOARD. THESE AREAS ARE TRACE KEEP-OUT ZONES.
 3. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION Au, Ag OR Sn.
 4. 1.57 [0.062] MINIMUM PCB THICKNESS FOR SINGLE SIDED USE.
 5. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING, SIZE AND LOCATION.

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0			molex		
	DIMENSION UNITS	SCALE						
▽ = 0	mm	5:1	EC NO: 653077			DDQ BIPASS 1XN		
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: LLI05 2021/02/25			PRODUCT CUSTOMER DRAWING		
▽ = 0	ANGULAR TOL ± °		CHK'D: MSTRACK 2021/02/26			DOCUMENT NUMBER		
▽ = 0	4 PLACES ±		APPR: BCHEN06 2021/03/02			2084731000		
▽ = 0	3 PLACES ±		INITIAL REVISION:			DOC TYPE		
▽ = 0	2 PLACES ± 0.13		DRWN: SVANG01 2019/01/31			PSD		
▽ = 0	1 PLACE ± 0.25		APPR: SRATKOVIC 2019/02/20			000		
▽ = 0	0 PLACES ±		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			H		
⊕	THIRD ANGLE PROJECTION		DRAWING			SHEET NUMBER		
⊕	D-SIZE		SERIES			GENERAL MARKET		
⊕	208473		MATERIAL NUMBER			6 OF 9		

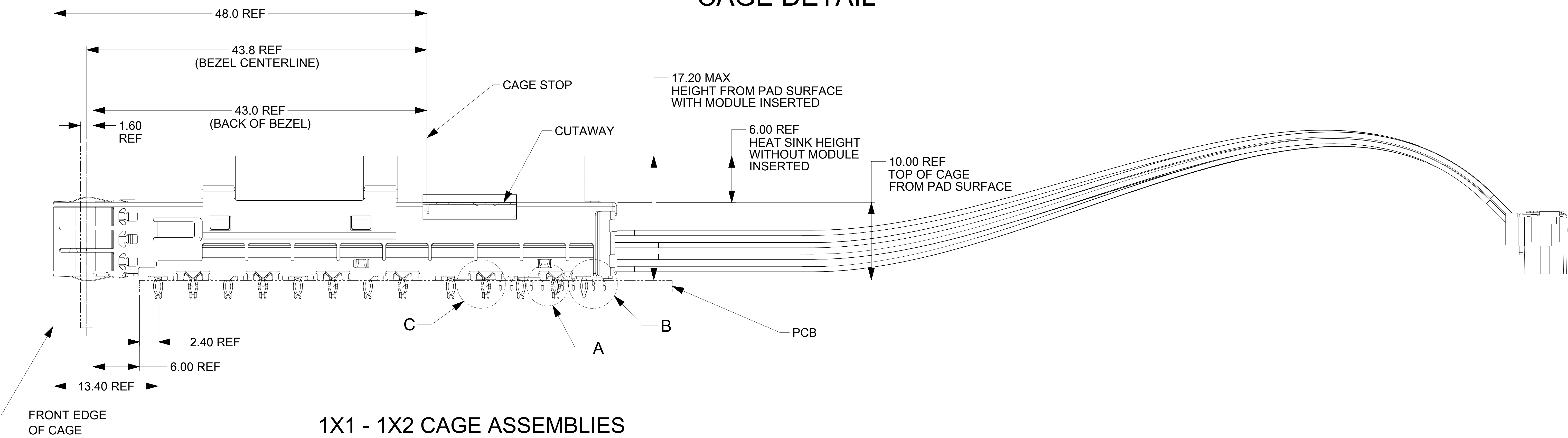
PCB FOOTPRINT BOTTOM OF BOARD



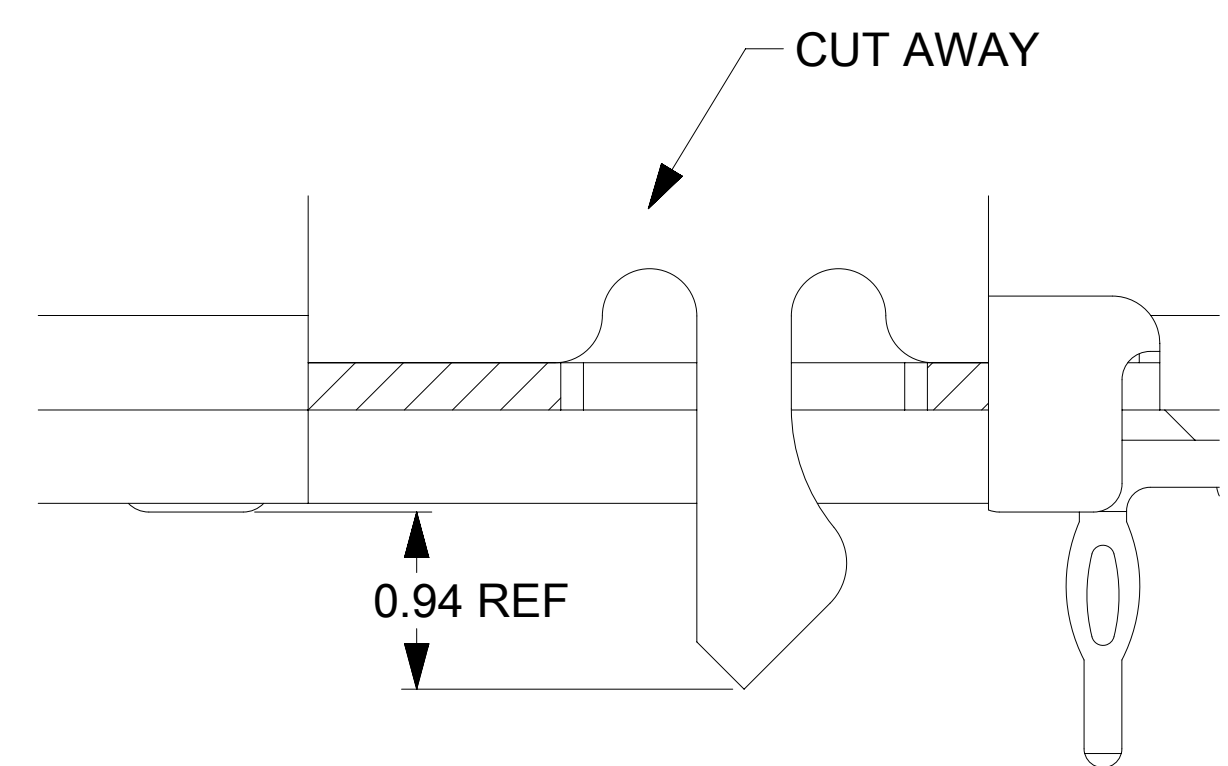
- NOTES:**
1. LINES NOTED INDICATE THE CONNECTOR OUTLINE, THIS AREA IS A COMPONENT KEEP-OUT ZONE.
 2. CROSS HATCHED AREAS DENOTE WHERE CAGE OR CONNECTOR HOUSINGS CAN CONTACT THE BOARD. THESE ARE TRACE KEEP-OUT ZONES.
 3. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION Au, Ag OR Sn.
 4. 2.36 [0.093] MINIMUM PCB THICKNESS FOR BELLY TO BELLY USE.
 5. PCB THICKNESS VARIATION MUST BE CONSIDERED WHEN DETERMINING BEZEL OPENING, SIZE AND LOCATION.

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0
$\nabla = 0$	mm	3:1	
$\nabla = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		
$\nabla = 0$	ANGULAR TOL	\pm	$^{\circ}$
$\nabla = 0$	4 PLACES	\pm	
$\nabla = 0$	3 PLACES	\pm	
$\nabla = 0$	2 PLACES	\pm	0.13
$\nabla = 0$	1 PLACE	\pm	0.25
$\nabla = 0$	0 PLACES	\pm	
$\blacksquare = 0$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		
$\nabla = 0$	THIRD ANGLE PROJECTION	DRAWING	SERIES
		D-SIZE	208473
EC NO: 653077		DRWN: LLI05	2021/02/25
DRWN: SVANG01		2019/01/31	2019/02/20
CHK'D: MSTRACK		2021/02/26	
APPR: BCHEN06		2021/03/02	
INITIAL REVISION:			
APPR: SRATKOVIC			
DOCUMENT NUMBER		DOC TYPE	DOC PART
2084731000		PSD	000
REVISION		H	
MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
GENERAL MARKET		7 OF 9	

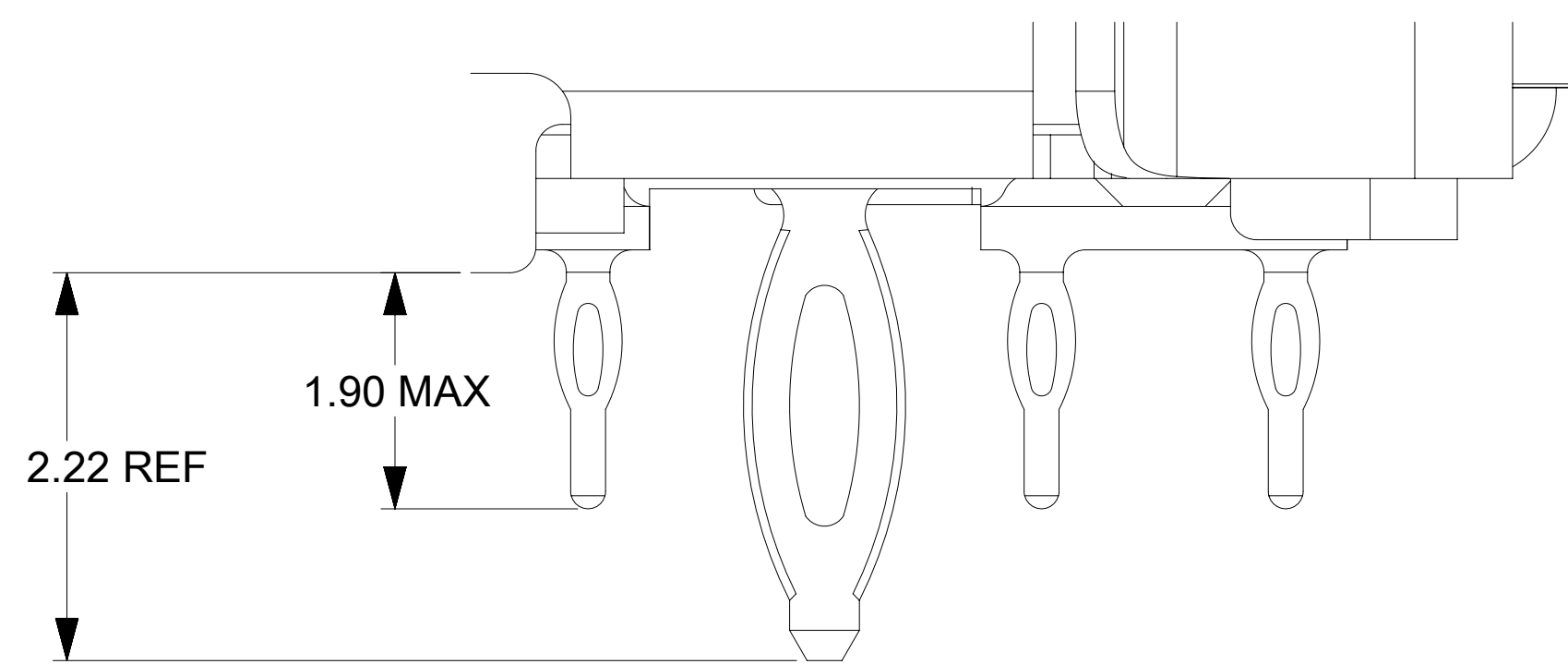
CAGE DETAIL



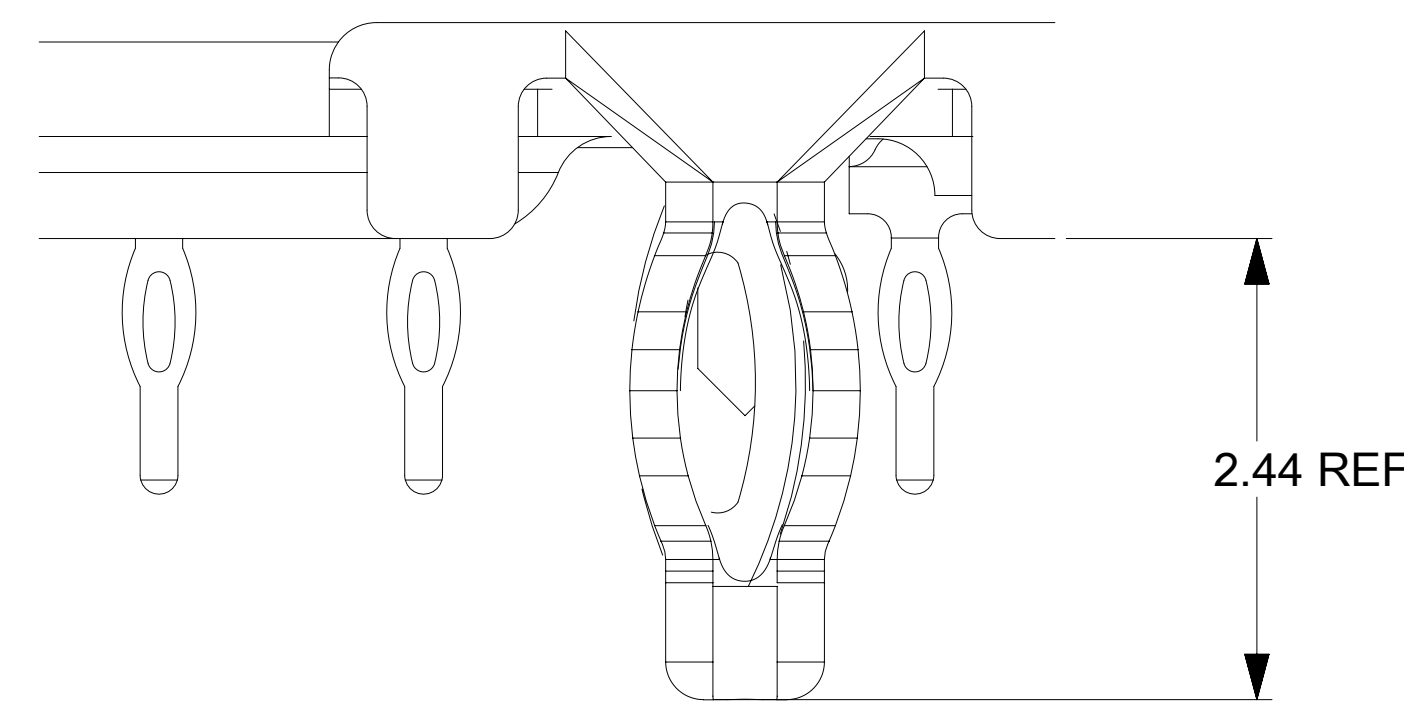
1X1 - 1X2 CAGE ASSEMBLIES



1X2 CENTER ROW FEET
DETAIL C
SCALE 25:1



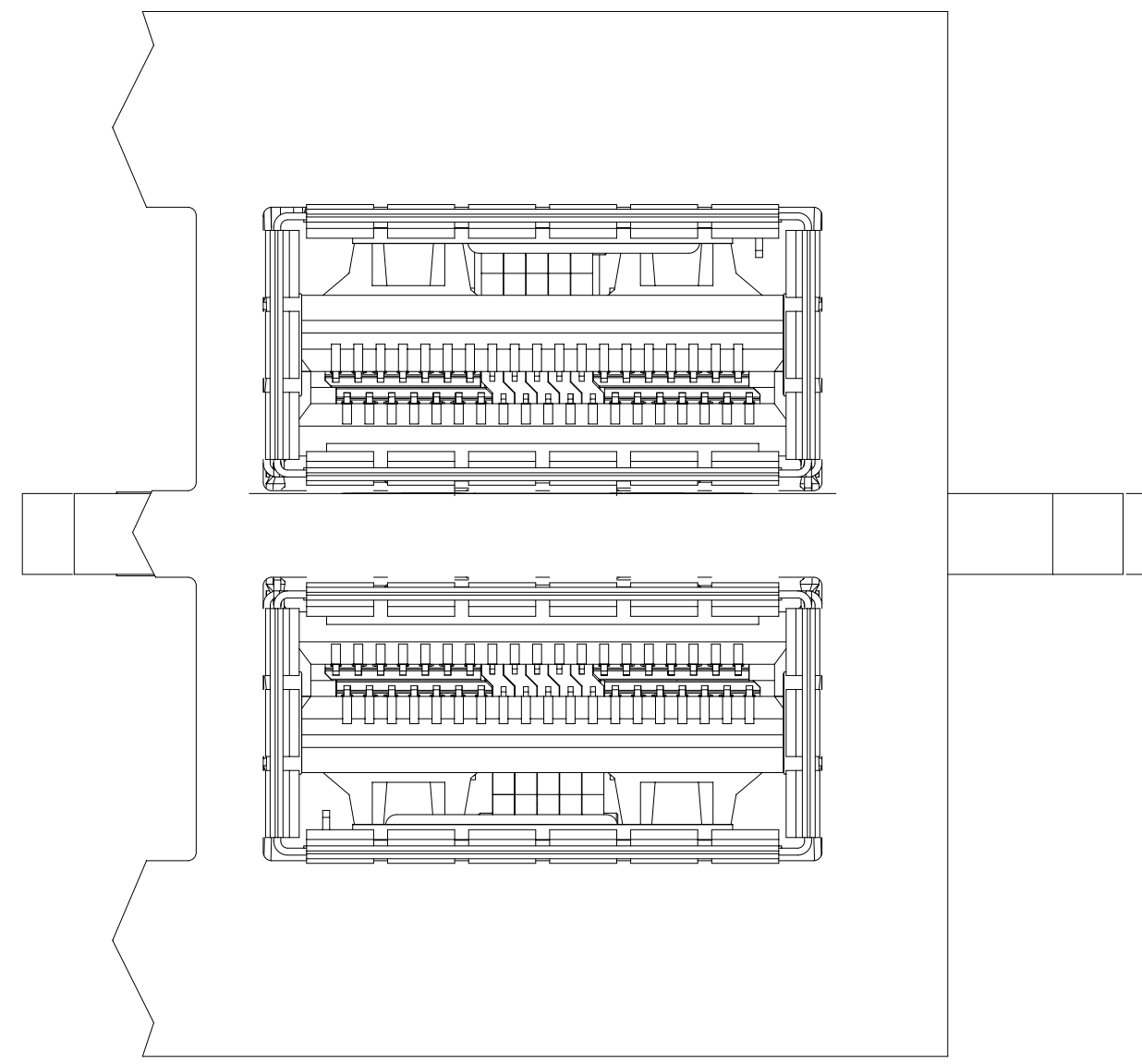
POWER, LOW SPEED SIGNAL, AND GROUND PIN
DETAIL B
SCALE 25:1



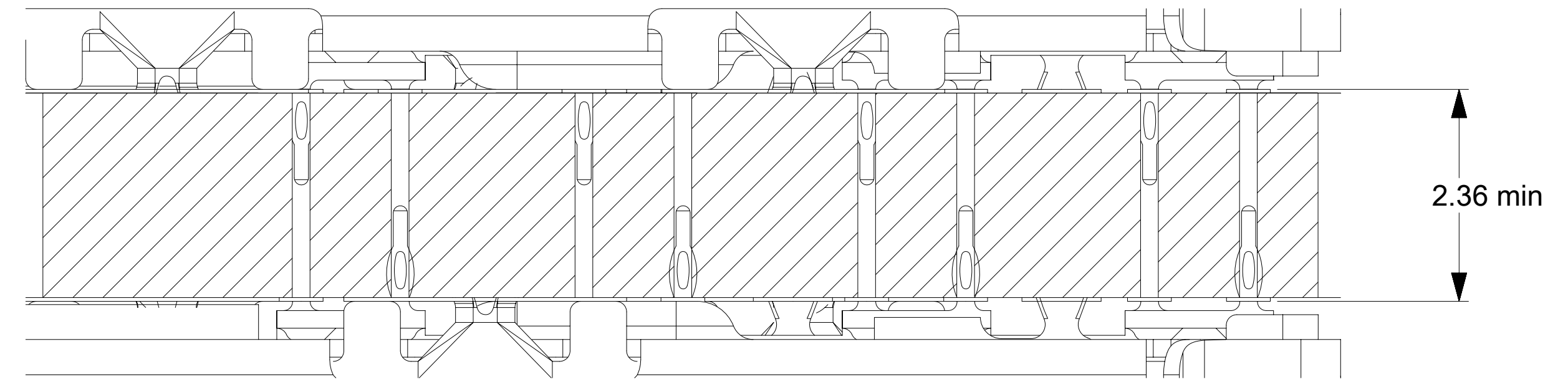
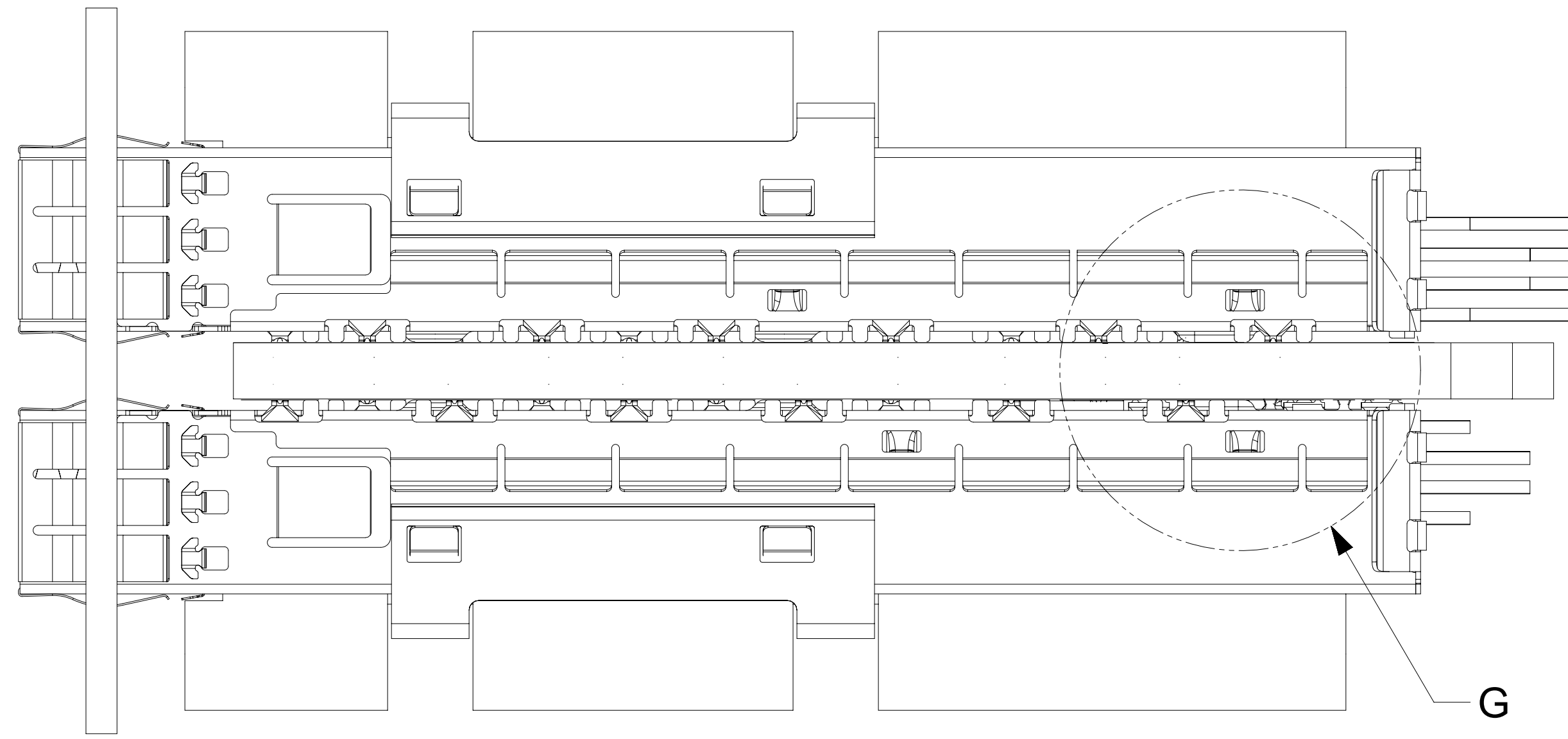
CAGE ASSEMBLY 1X1 AND 1X2 USE 3D FEET
DETAIL A
SCALE 25:1

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0
▽ = 0	mm	4:1	EC NO: 653077 DRWN: LLI05 2021/02/25 CHK'D: MSTRACK 2021/02/26 APPR: BCHEN06 2021/03/02 INITIAL REVISION: DRWN: SVANG01 2019/01/31 APPR: SRATKOVIC 2019/02/20
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
▽ = 0	ANGULAR TOL	± °	
▽ = 0	4 PLACES	±	
▽ = 0	3 PLACES	±	
▽ = 0	2 PLACES	± 0.13	
▽ = 0	1 PLACE	± 0.25	
▽ = 0	0 PLACES	±	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	SERIES
▽ = 0			D-SIZE 208473
DOCUMENT NUMBER		DOC TYPE	DOC PART
2084731000		PSD	000
REVISION		REVISION	
H		H	
MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
SEE P/N TABLE		GENERAL MARKET	8 OF 9

TOP OF BOARD
PN# 20847310**



BOTTOM OF BOARD
PN# 20847315**



DETAIL G
CUTAWAY DOWN TO SIGNAL PINS
SCALE 15:1

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
	DIMENSION UNITS	SCALE	CURRENT REV DESC: DDQ AND NS CHANGED TO GEN 2.0
▽ = 0	mm	1:1	molex DDQ BIPASS 1XN PRODUCT CUSTOMER DRAWING
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		
▽ = 0	ANGULAR TOL ± °		
▽ = 0	4 PLACES	±	
▽ = 0	3 PLACES	±	
▽ = 0	2 PLACES	± 0.13	EC NO: 653077 DRWN: LLI05 2021/02/25 CHK'D: MSTRACK 2021/02/26 APPR: BCHEN06 2021/03/02
▽ = 0	1 PLACE	± 0.25	INITIAL REVISION: DRWN: SVANG01 2019/01/31 APPR: SRATKOVIC 2019/02/20
▽ = 0	0 PLACES	±	DOCUMENT NUMBER: 2084731000 DOC TYPE: PSD DOC PART: 000 REVISION: H
▣ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING: D-SIZE SERIES: 208473 MATERIAL NUMBER: SEE P/N TABLE CUSTOMER: GENERAL MARKET SHEET NUMBER: 9 OF 9