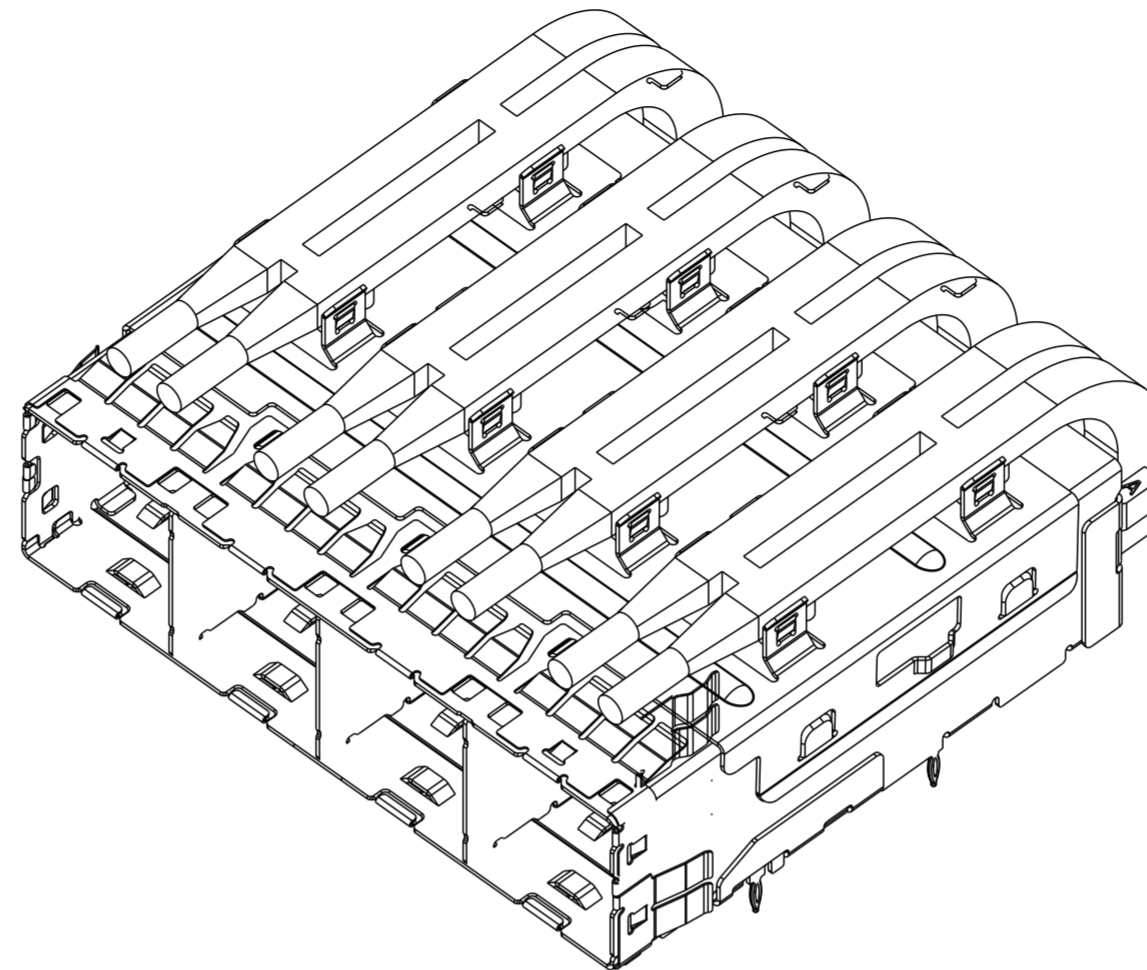
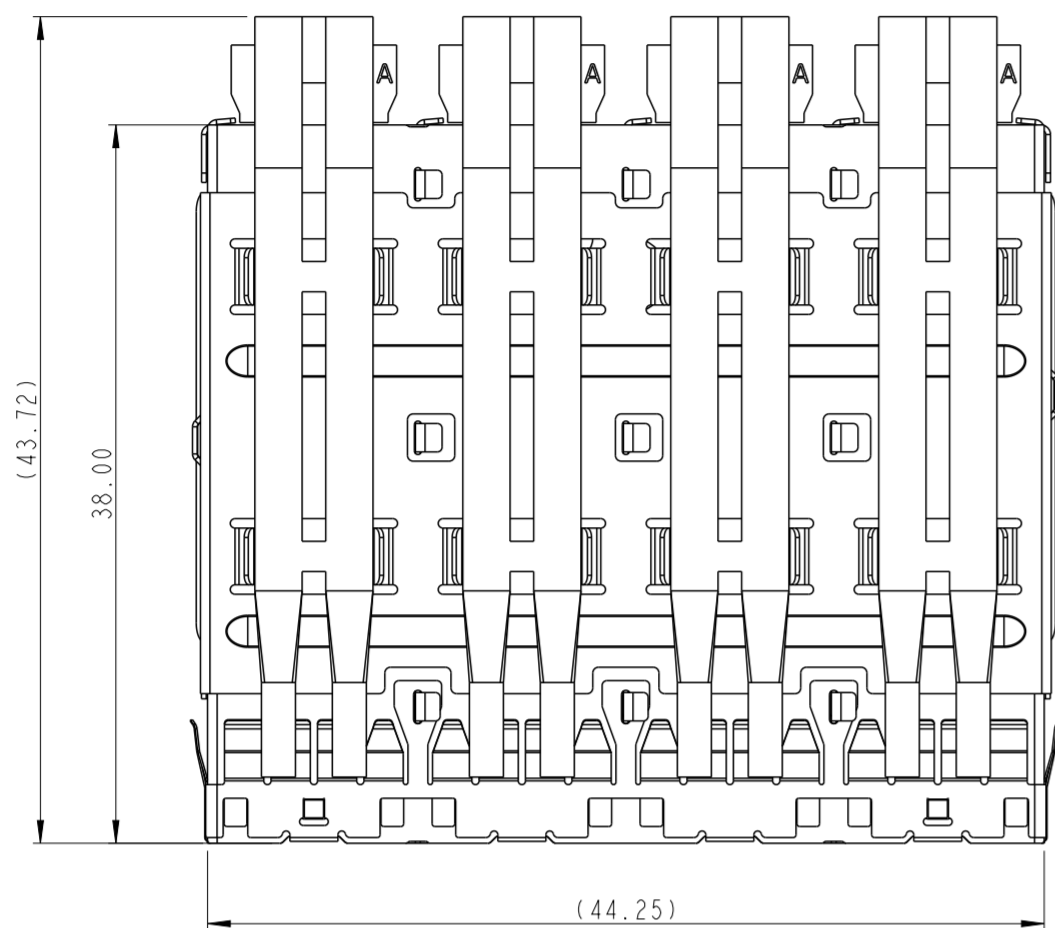


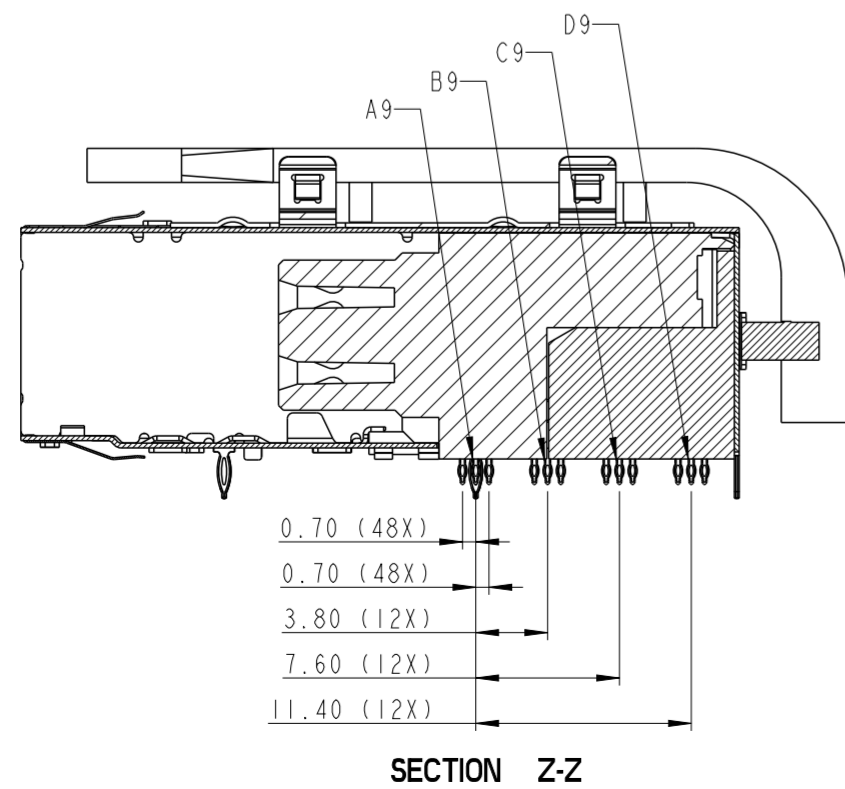
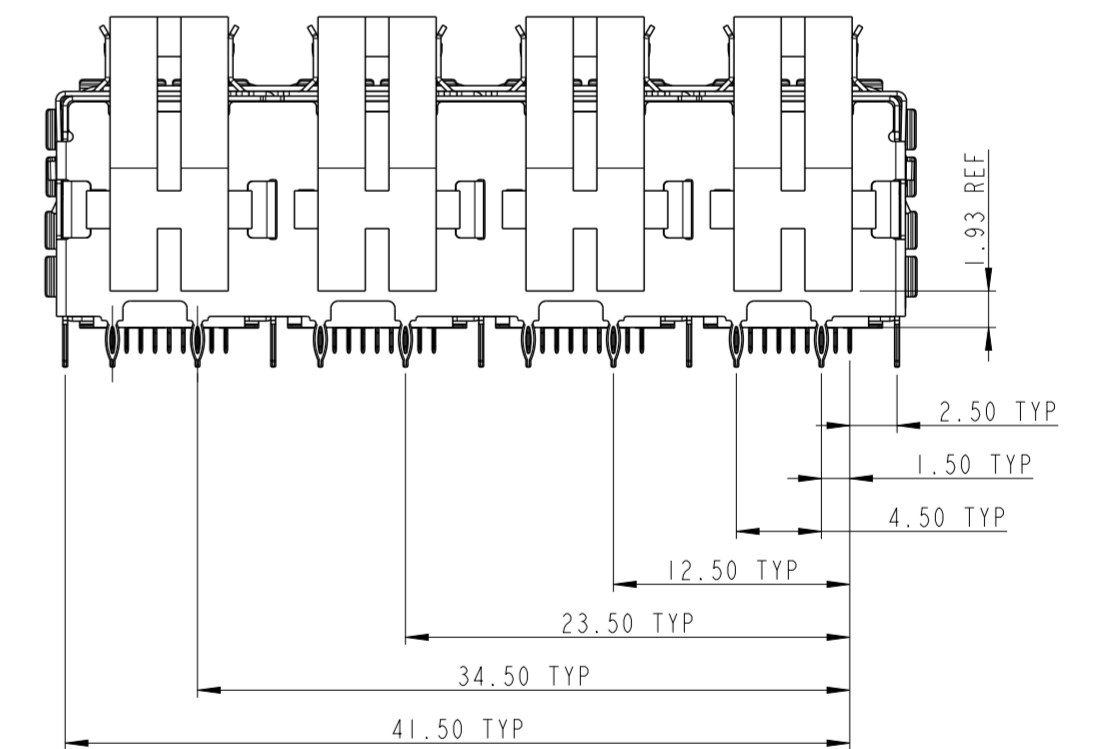
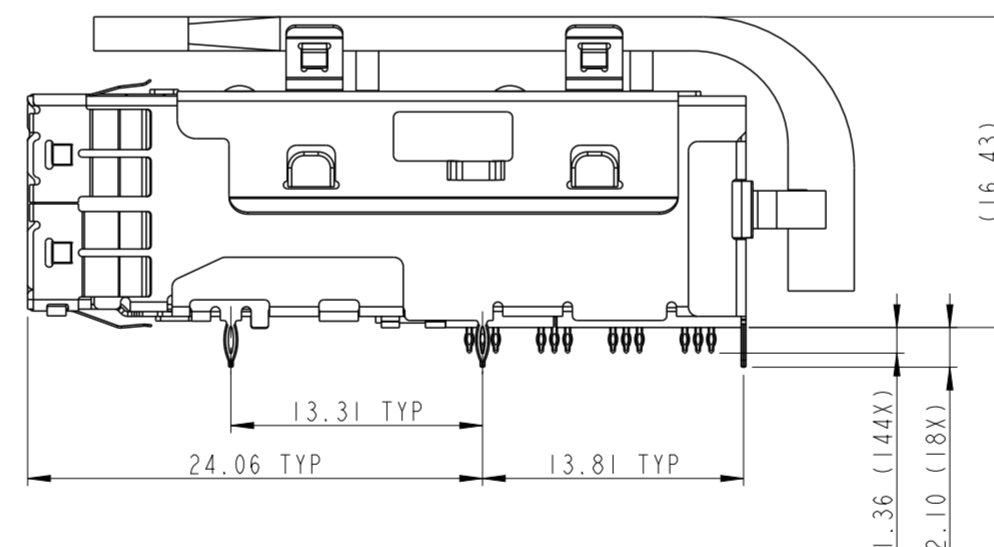
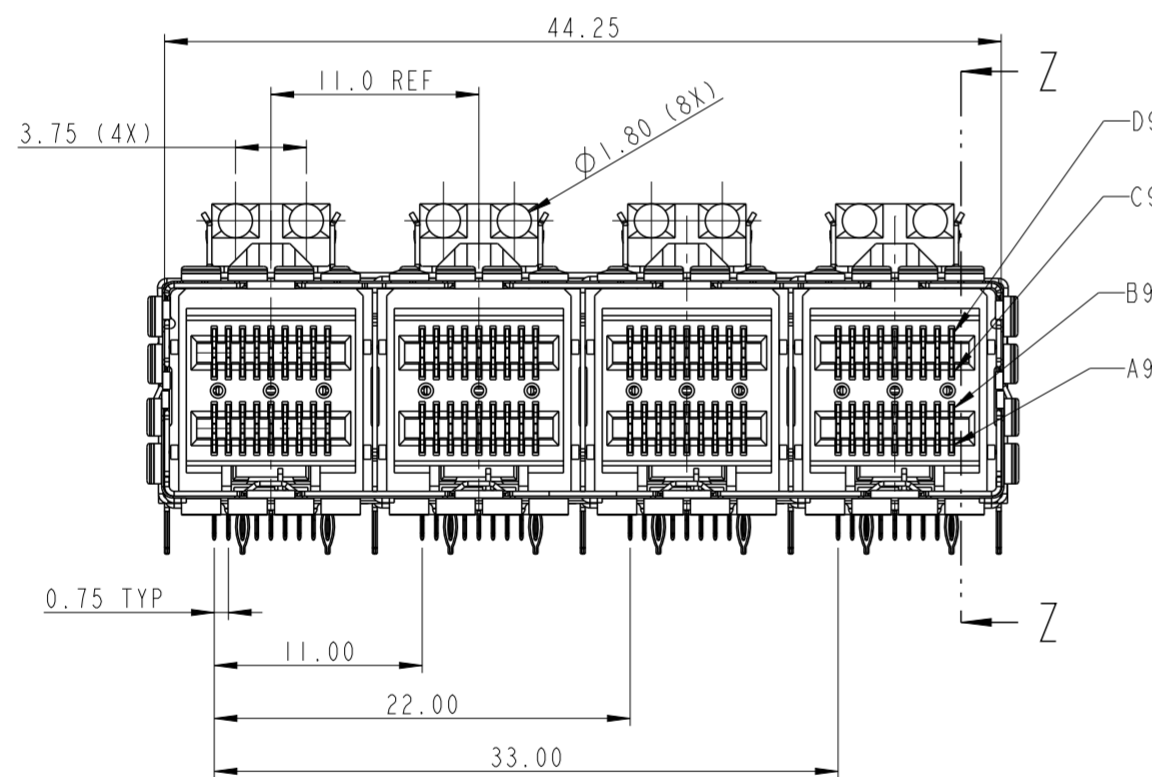
PRODUCT NUMBER	TAIL PLATING OPTION, SEE NOTE 2	1X4 EXTERNAL ASSEMBLY	1X4 LIGHT PIPE SUB-ASSEMBLY WITH MOUNTING CLIP	DESCRIPTION
10120728-101	OPTION 1	10112628-101	10121256-001LF	WITH SAME LENGTH LIGHT PIPES
10120728-101LF	OPTION 2	10112628-101LF		
10120728-102LF	OPTION 2	10112628-101LF	10121256-002LF	WITH DIFFERENT LENGTH LIGHT PIPES

NOTES:

- MATERIALS:
CONNECTOR HOUSING: HIGH TEMPERATURE THERMOPLASTIC
GLASS FILLED, UL 94V-0
EMI CAGE: NICKEL SILVER ALLOY
EMI FINGERS: COPPER ALLOY
TERMINALS: COPPER ALLOY
LIGHT PIPE CLIP: STAINLESS STEEL
LIGHT PIPE: POLYCARBONATE
- FINISHES:
EMI FINGERS: 0.50um MIN NICKEL
CONTACT AREA: 0.76um MIN GOLD OVER 2.54um MIN NICKEL
TAIL AREA:
OPTION 1: 0.76um - 1.52um TIN/LEAD (90/10) OVER 2.54um MIN NICKEL
OPTION 2: 0.76um - 1.52um TIN (LEAD FREE) OVER 2.54um MIN NICKEL
- PRODUCT SPECIFICATION: GS-12-651
- PRODUCT PACKING SPECIFICATION: GS-14-1490
EXTERNAL ASSEMBLY WILL BE IN ONE BOX.
LIGHT PIPE SUB-ASSEMBLY WITH MOUNTING CLIP WILL BE IN ONE BOX.
BOTH BOXES WILL BE IN A MASTER CARTON.
- APPLICATION SPECIFICATION: GS-20-0327
- MOUNTING HARDWARE: M2X0.4 BUTTON HEAD SCREW
MOUNTING SCREW LENGTH: BOARD THICKNESS + 1.4mm MAX (0.9mm MIN).
2 REQUIRED PER ASSEMBLY.
MOUNTING HARDWARE NOT SUPPLIED.
- THIS CONNECTOR IS DESIGNED TO MEET THE REQUIREMENTS OF INDUSTRY SPECIFICATION SFF-8644.
- LIGHT PIPE SUB-ASSEMBLY WITH MOUNTING CLIP FINAL ASSEMBLY AFTER EXTERNAL ASSEMBLY APPLIED TO PCB.
- A \triangle SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE THAT HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.



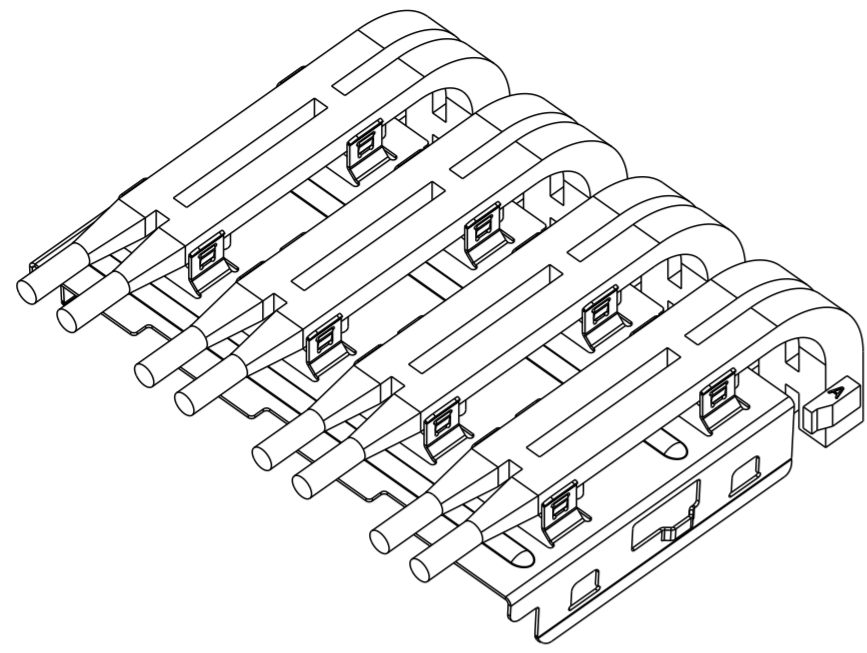
10120728-101 & 101LF SHOWN WITH SAME LENGTH LIGHT PIPES SCALE 2500



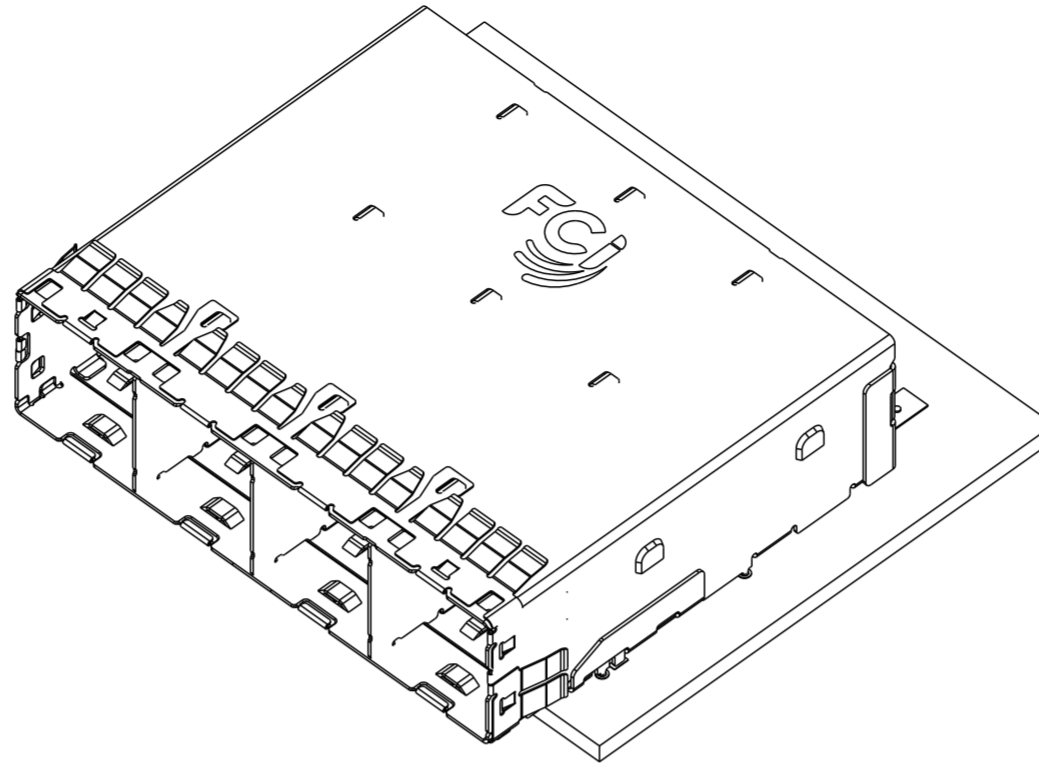
MATES WITH MINI-SAS HD ENDS IN:

10112041 SERIES (4X)
10117771 SERIES (4X)
10117946 SERIES (4X)
10117949 SERIES (4X)
10117947 SERIES (8X)
10112359 SERIES (8X)
10117950 SERIES (8X)
10117948 SERIES (8X)

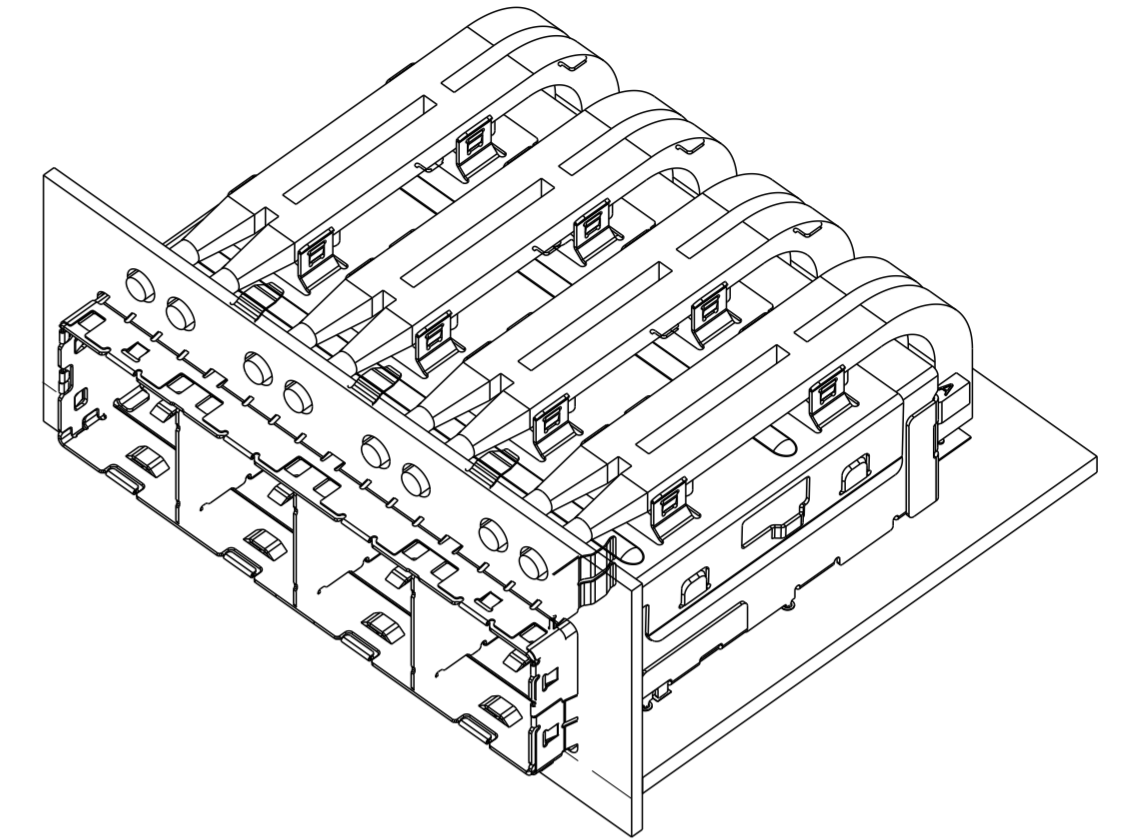
spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	2.500	
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15			ecn no	ELX-DG-28824-1	rel level	Released	
surface	-	chr	Stone Li	2018/01/15							product family
	ISO 1302	appr	Heaven Cen	2018/01/18	Amphenol FCI		title	1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE		rev	B
					linear	0.X	±0.5	www.fci.com		cat. no.	-
					0.XX	±0.3	Product - Customer Drw		sheet 1 of 7		
					0.XXX	±	STATUS: Released				
					angular	0°	±3°	Printed: Jan 18, 2018			



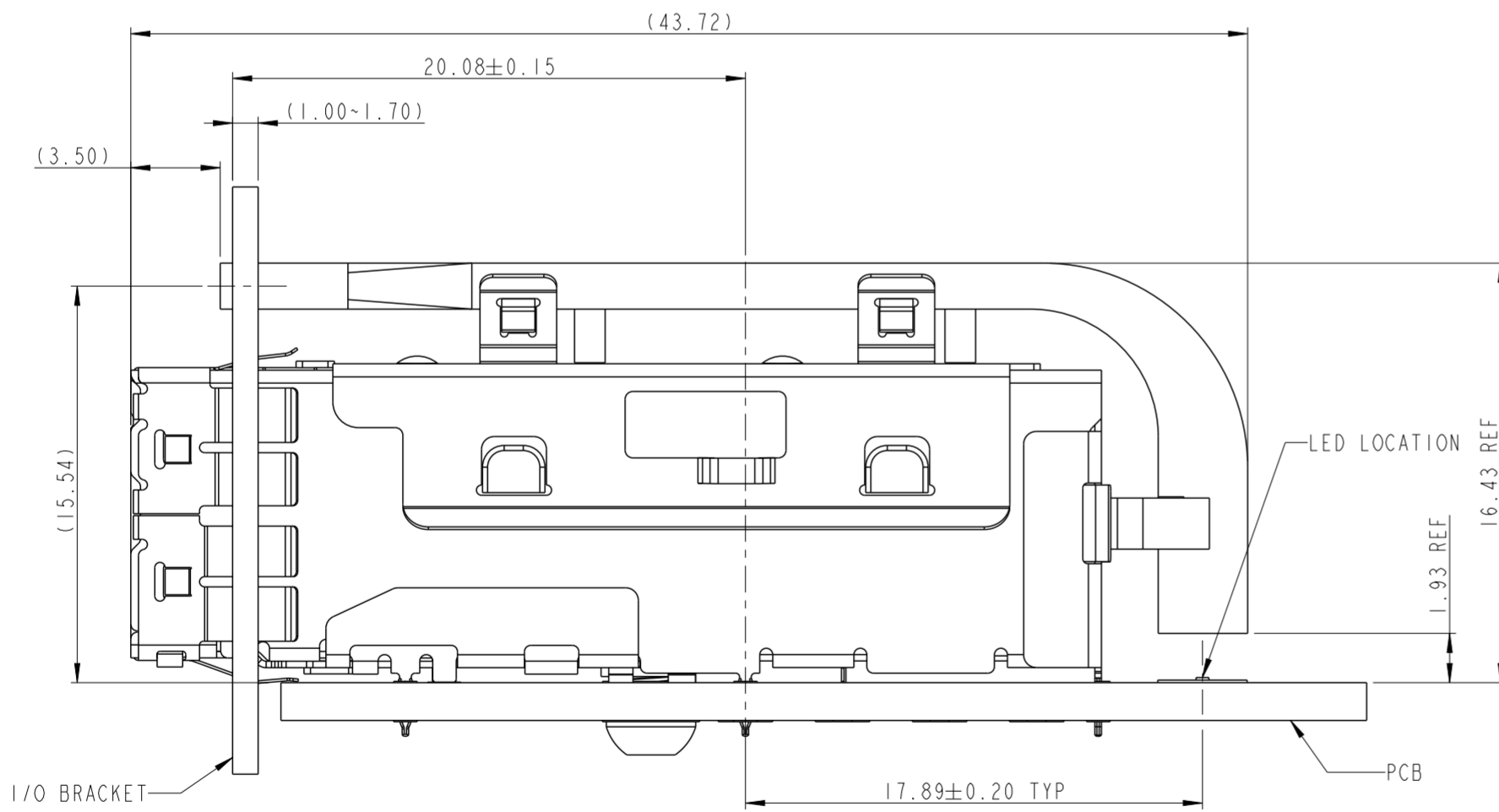
1X4 LIGHT PIPE SUB-ASSEMBLY
WITH MOUNTING CLIP
10121256-001LF SHOWN



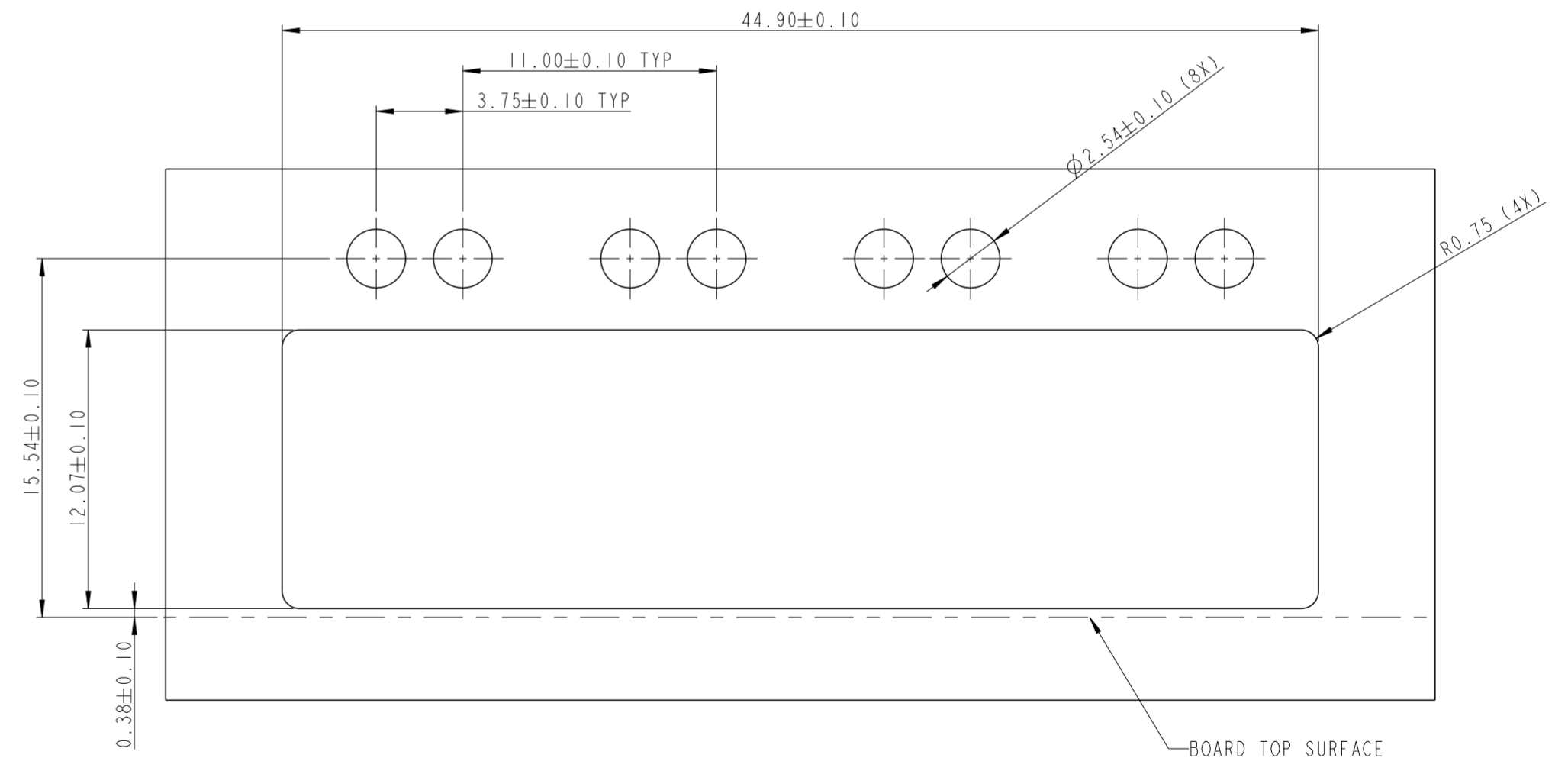
1X4 EXTERNAL ASSEMBLY
APPLIED TO PCB
10112628-101 & 101LF SHOWN



1X4 LIGHT PIPE SUB-ASSEMBLY
APPLIED TO CONNECTOR
10120728-101 & 101LF SHOWN
(LIGHT PIPE SUB-ASSEMBLY
FINAL ASSEMBLY BY CUSTOMER)



10120728-101 & 101LF ASSEMBLED VIEW
WITH SAME LENGTH LIGHT PIPES
SCALE 4.000



I/O BRACKET CUT OUT
(BRACKET NOT SUPPLIED)
SCALE 4.000

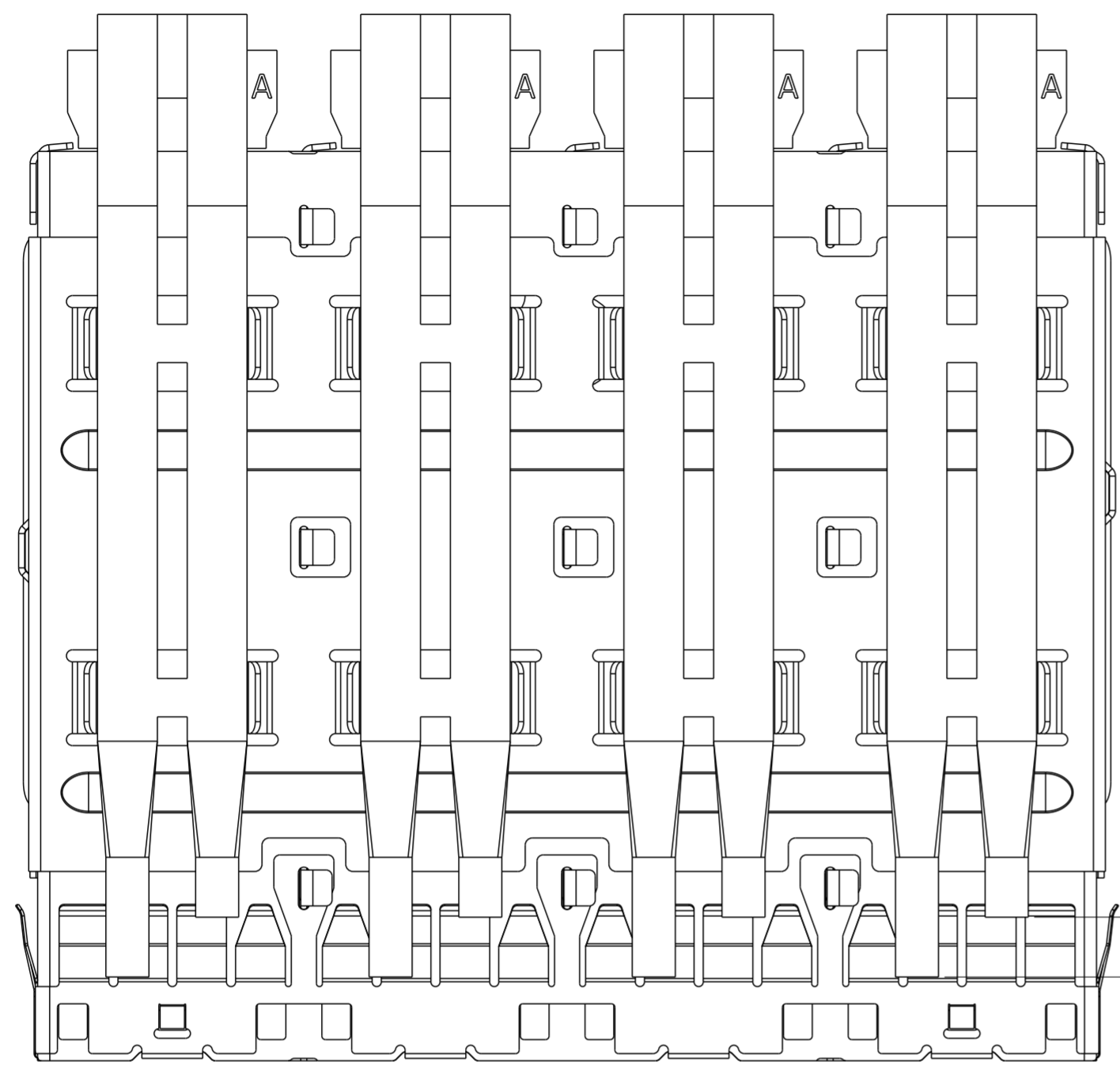
Amphenol
FCi

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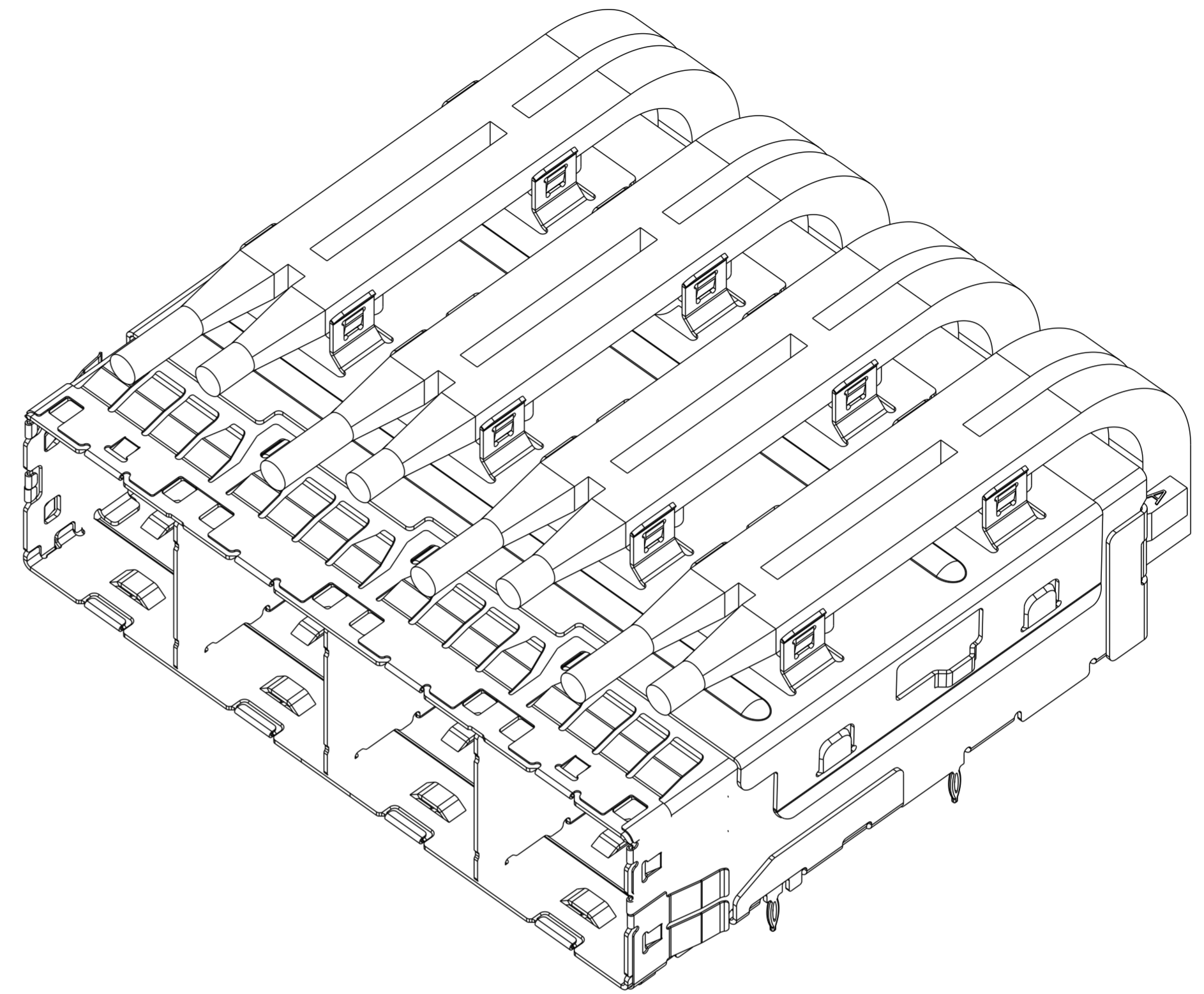
spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	2.500
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15			ecn no	ELX-DG-28824-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Stone Li	2018/01/15			rel level	Released		
surface	-	appr	Heaven Cen	2018/01/18	product family	-	rel level	Released		
linear	0.X ±0.5 0.XX ±0.3 0.XXX ±-	Amphenol FCI www.fci.com		title 1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD	dwg no 10120728	rev B	Product - Customer Drw sheet 2 of 7			
angular	0° ±3°			cat. no.						

1 2 3 4 5 6 7 8

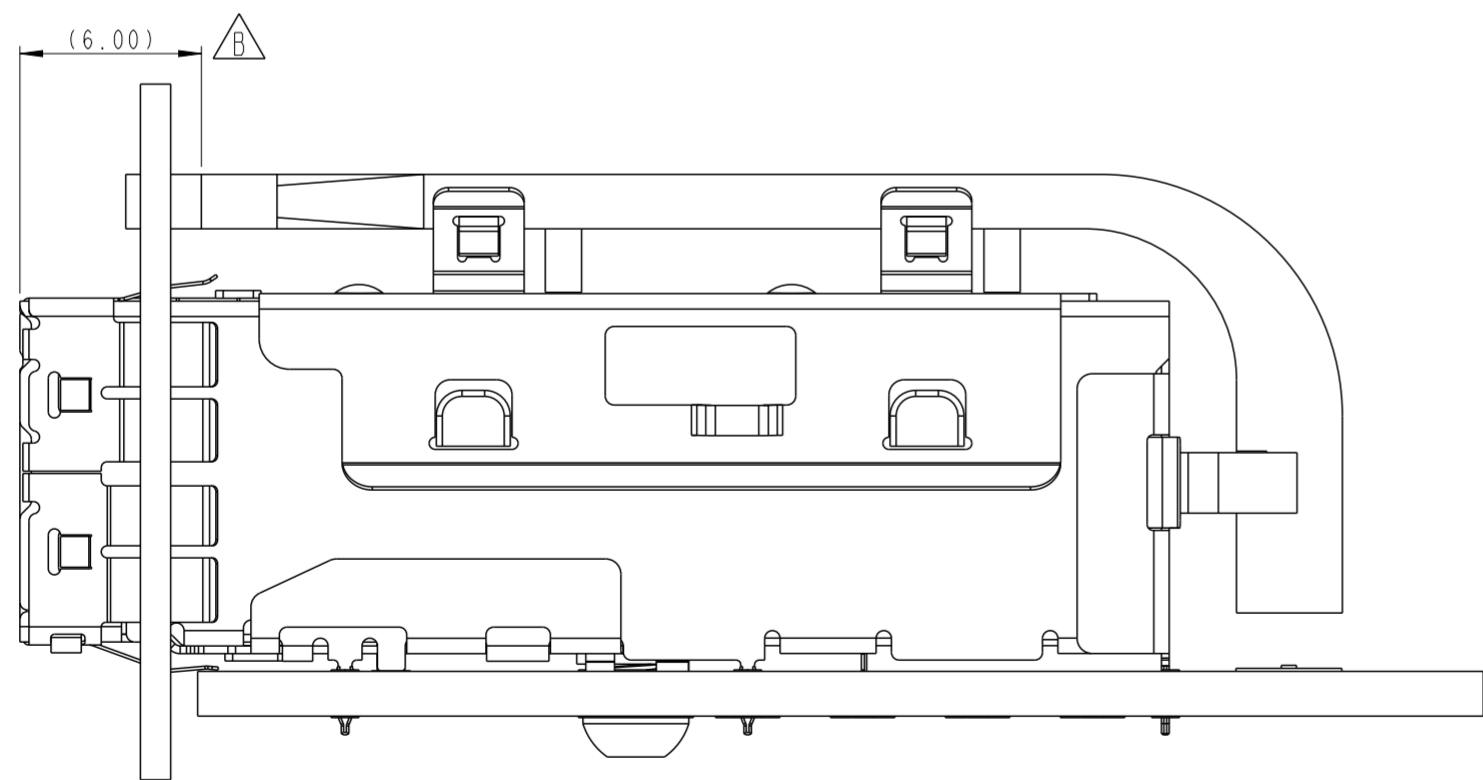
A B C D E F



(2.50) THE DISTANCE OF TWO SURFACES.



10120728-102LF SHOWN WITH DIFFERENT LENGTH LIGHT PIPES SCALE 4.000



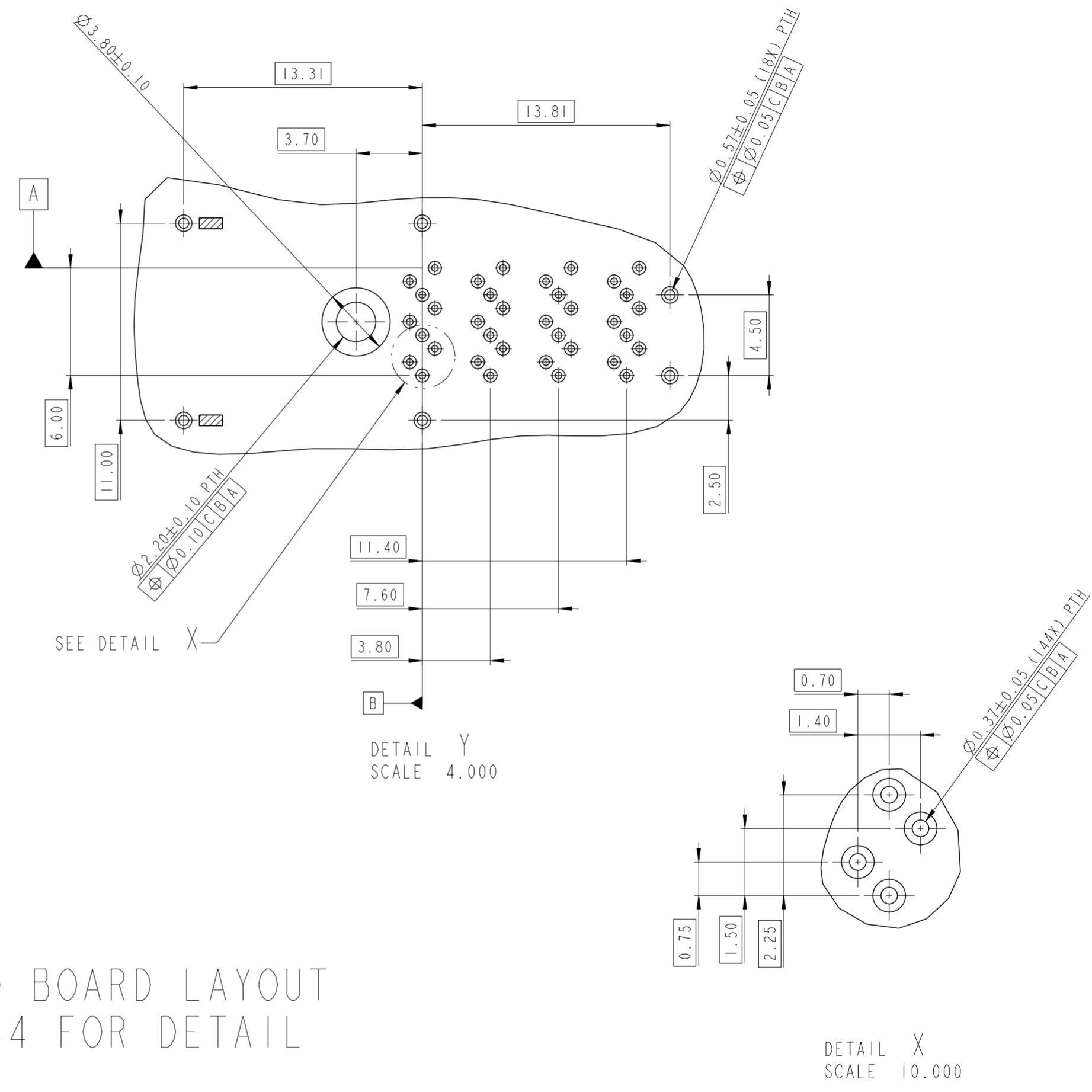
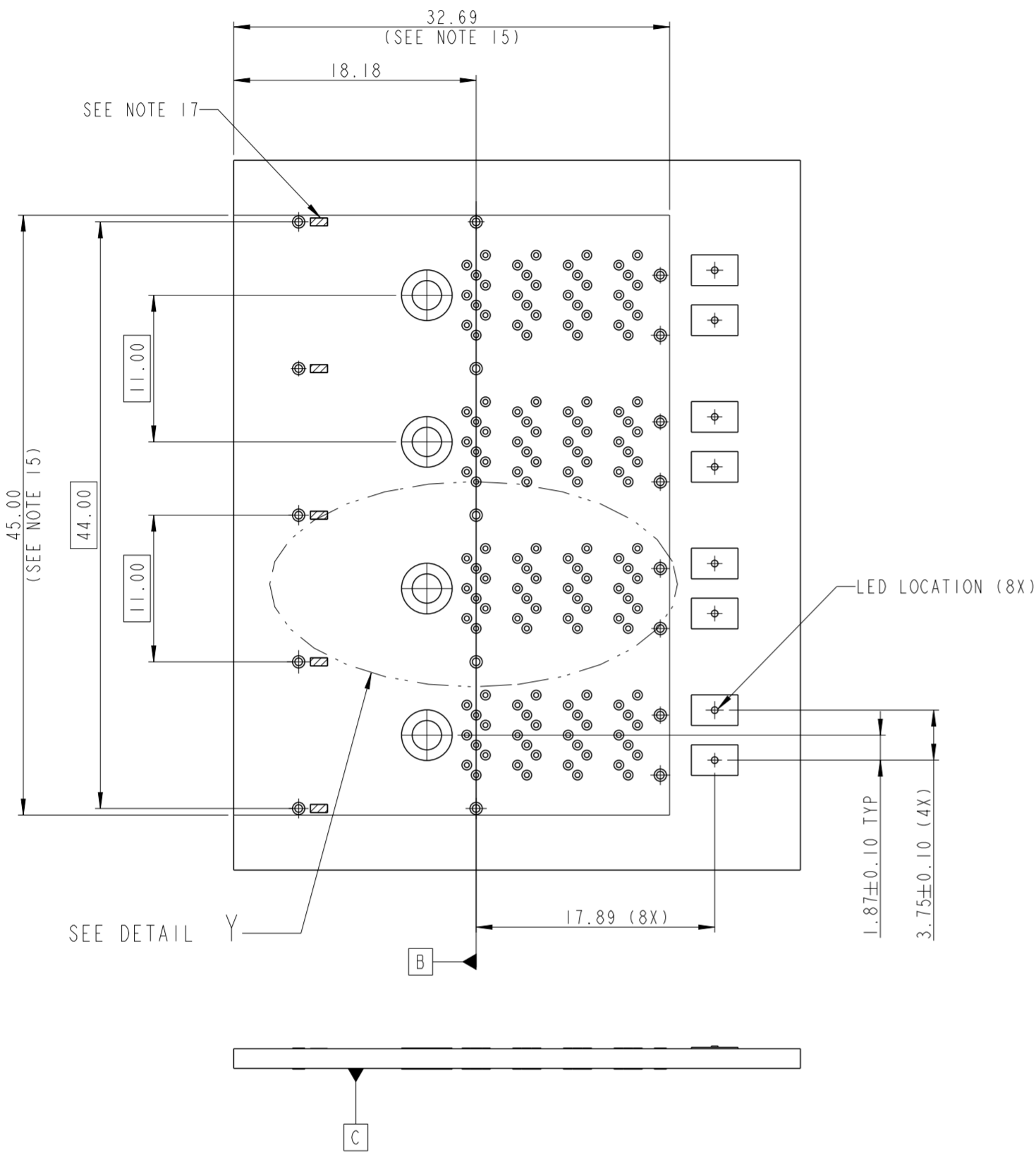
10120728-102LF ASSEMBLED VIEW WITH DIFFERENT LENGTH LIGHT PIPES SCALE 4.000

ALL DIMENSIONS ARE SAME AS 10120728-101LF EXCEPT AS SHOWN.

spec ref	-	dr	Qin De-Feng	2012/11/21	projection		MM	size	A2	scale	4.000
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15	product family	MINI-SAS HD		ecn no	ELX-DG-28824-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Stone Li	2018/01/15		rel level	Released				
surface	-	appr	Heaven Cen	2018/01/18	MINI-SAS HD		rel level	Released			
ISO 1302	linear	0.X	±0.5	Amphenol FCi	1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE		dwg no	10120728		rev	B
		0.XX	±0.3		MINI-SAS HD						
		0.XXX	±								
	angular	0°	±3°	www.fci.com	cat. no.	-	Product - Customer Drw	sheet 3 of 7			

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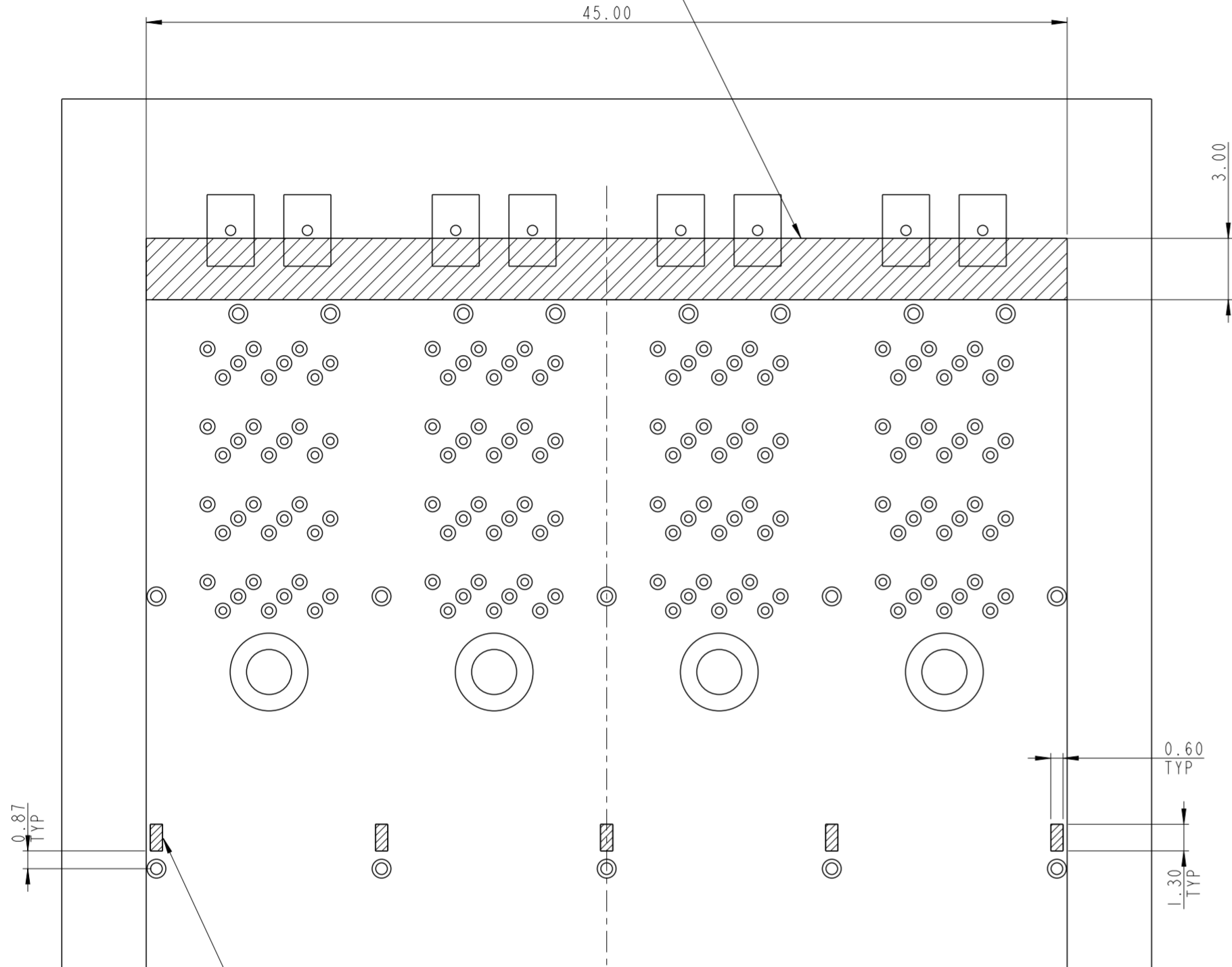
RECOMMENDED BOARD LAYOUT
SEE SFF-8644 FOR DETAIL

- NOTES:
10. RECOMMENDED DRILL SIZE FOR $\varnothing 0.37$ FINISHED PTH IS $\varnothing 0.457$.
 11. RECOMMENDED ANNULAR RING AROUND $\varnothing 0.37$ FINISHED PTH IS $\varnothing 0.73$.
 12. RECOMMENDED DRILL SIZE FOR $\varnothing 0.57$ FINISHED PTH IS $\varnothing 0.68$.
 13. RECOMMENDED ANNULAR RING AROUND $\varnothing 0.57$ FINISHED PTH IS $\varnothing 0.93$.
 14. MINIMUM RECOMMENDED CENTER TO CENTER SPACING BETWEEN ADJACENT CONNECTORS: 47.00mm.
 15. CONNECTOR KEEP OUT AREA.
 16. MINIMUM PCB THICKNESS: 1.57mm.
 17. CAGE STAND OFF AREA, NO TRACES ON SURFACE OF PCB IN THE AREAS.

spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	2.500		
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15			ecn no	ELX-DG-28824-1				
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Stone Li	2018/01/15				rel level	Released			
surface	-	appr	Heaven Cen	2018/01/18	product family	-	rel level	Released				
linear	0.X ±0.5 0.XX ±0.3 0.XXX ±-			Amphenol FCI		title	1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD		dwg no	10120728	rev	B
angular	0° ±3°	www.fci.com		cat. no.	-	Product - Customer Drw	sheet 4 of 7					

RECOMMENDED KEEP OUT AREAS

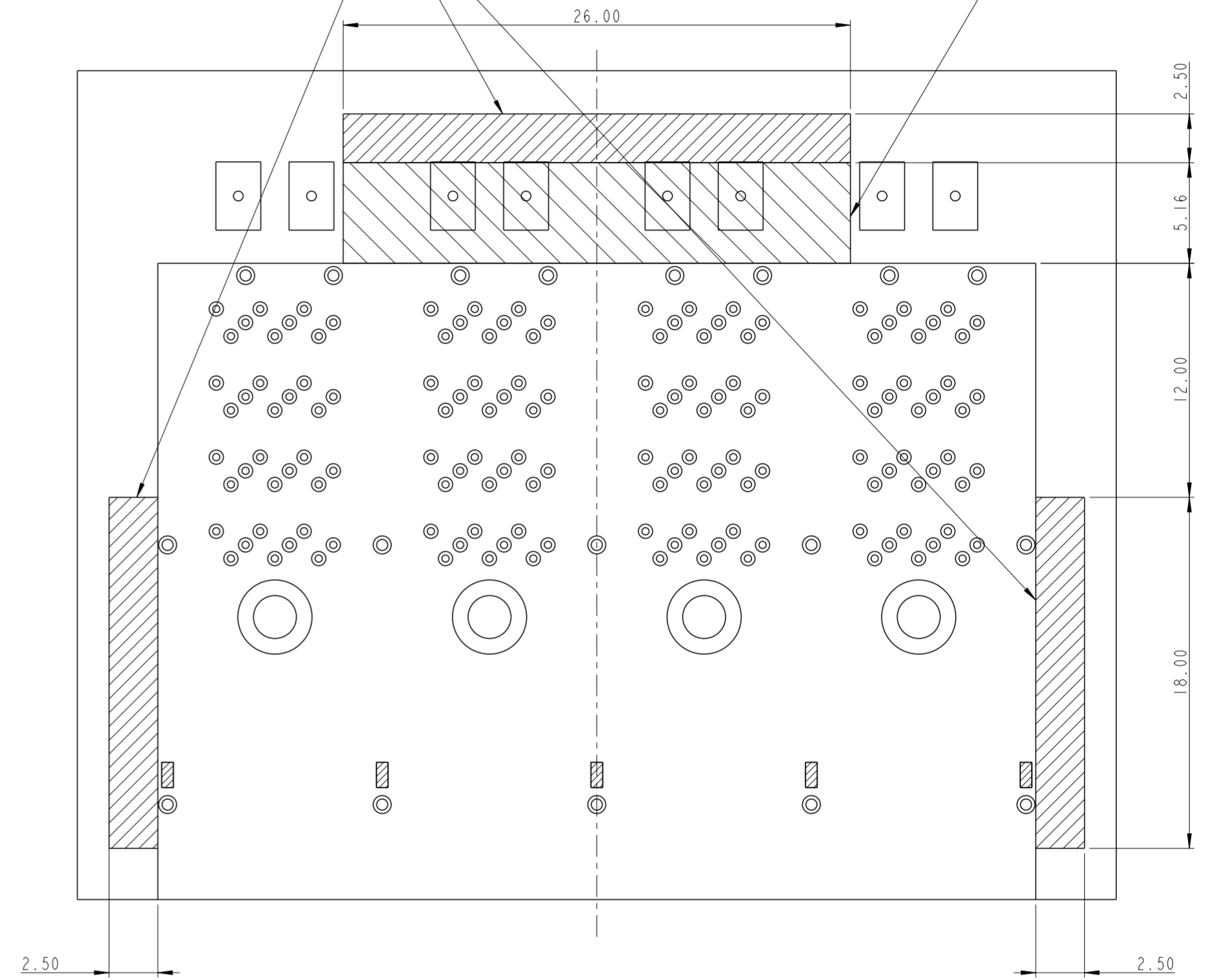
RECOMMENDED INSERTION TOOL
KEEP OUT AREA
NO COMPONENTS IN THIS AREA
MORE THAN 7.50mm TALL



CAGE STAND OFF KEEP OUT AREA

RECOMMENDED EXTRACTION TOOL
KEEP OUT AREA
NO COMPONENTS IN THESE AREAS

RECOMMENDED EXTRACTION TOOL
KEEP OUT AREA
NO COMPONENTS IN THESE AREAS



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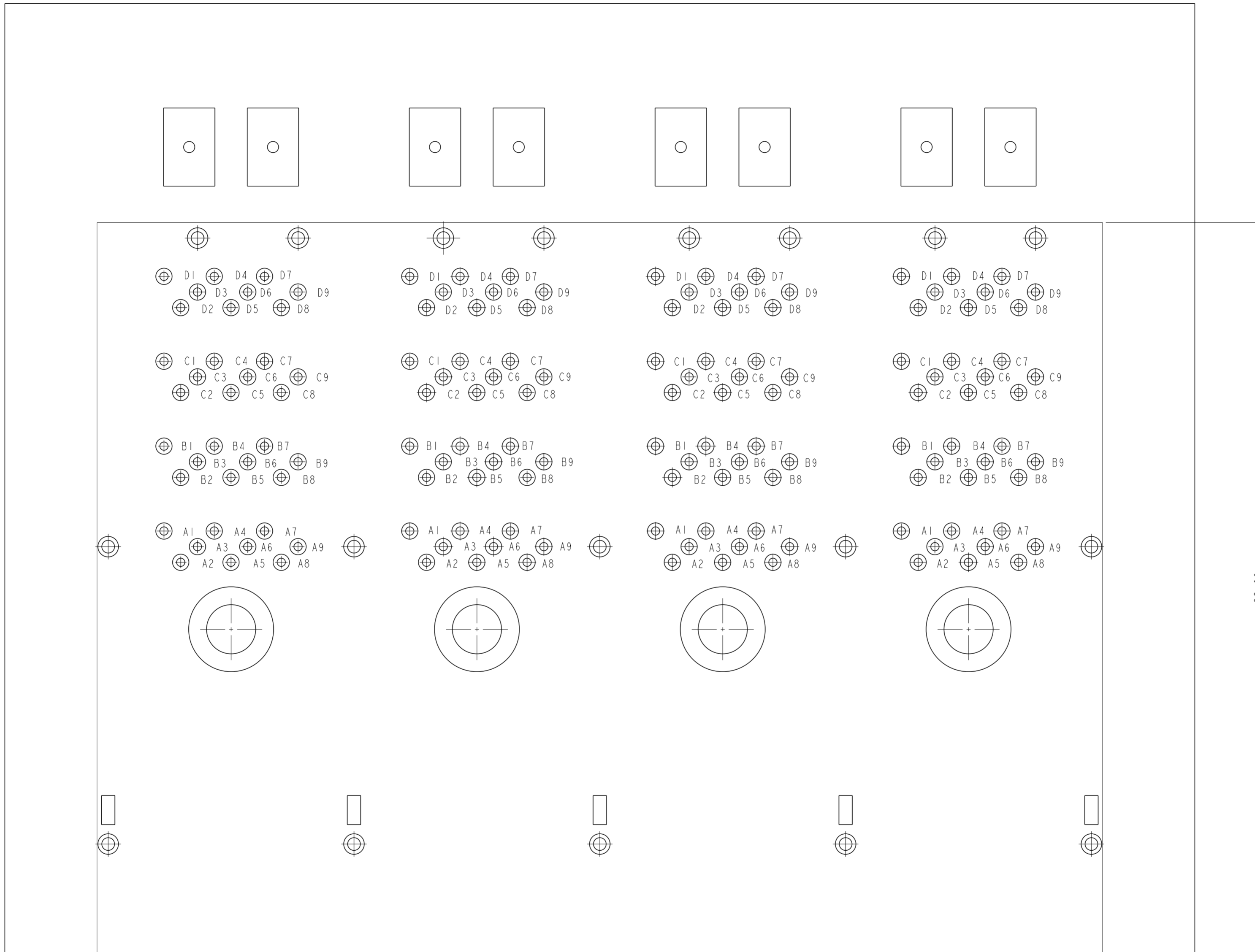
spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	4.000		
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15			ecn no	ELX-DG-28824-1				
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Stone Li	2018/01/15			rel level	Released				
surface	-	appr	Heaven Cen	2018/01/18	product family	-	rel level	Released				
ISO 1302	linear	0.X	±0.5		title		1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE		dwg no 10120728	rev B		
		0.XX	±0.3		www.fci.com		cat. no.				Product - Customer Drw	
	angular	0°	±3°		sheet 5 of 7							

PDS: Rev :B

STATUS:Released

Printed: Jan 18, 2018

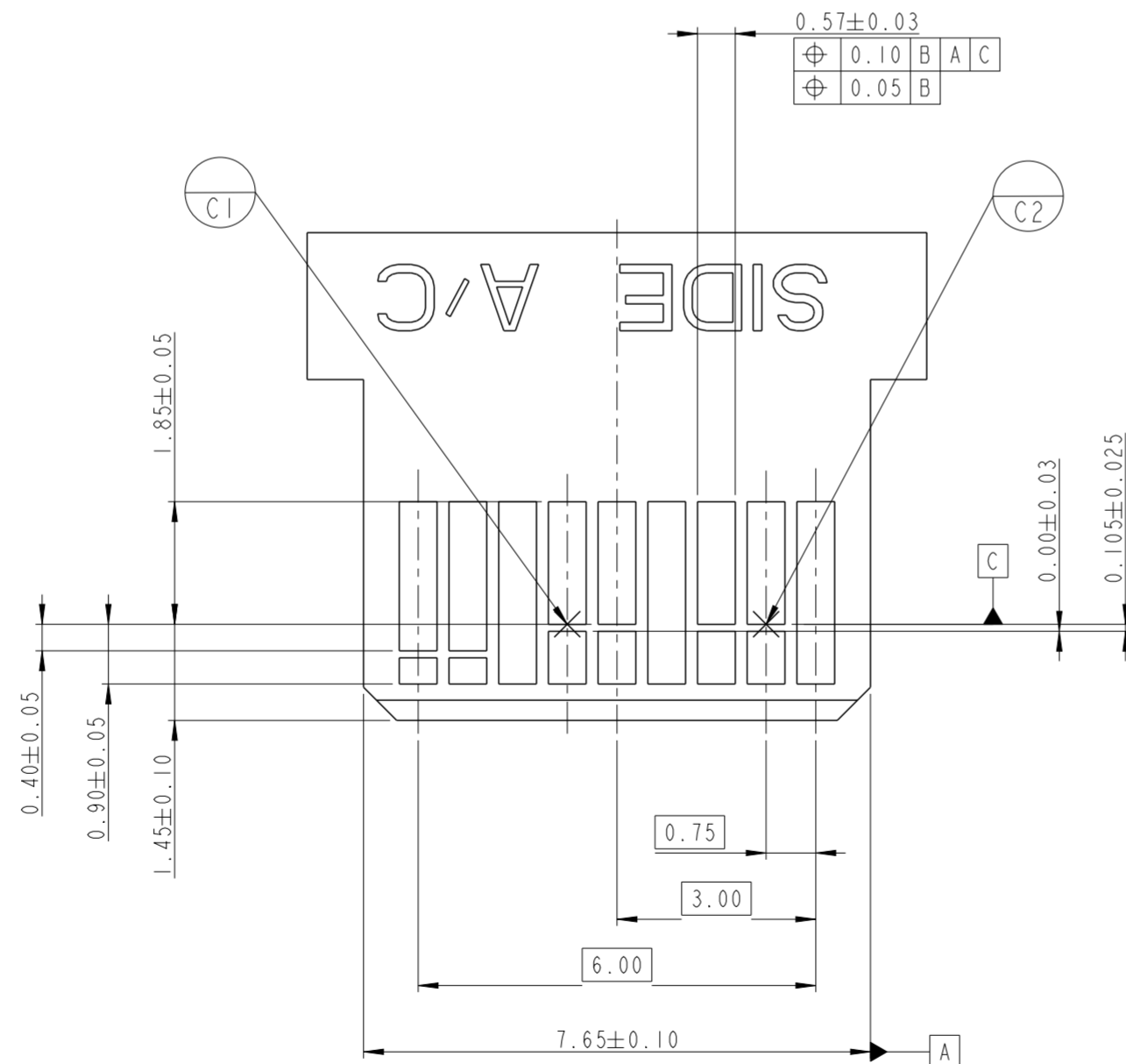
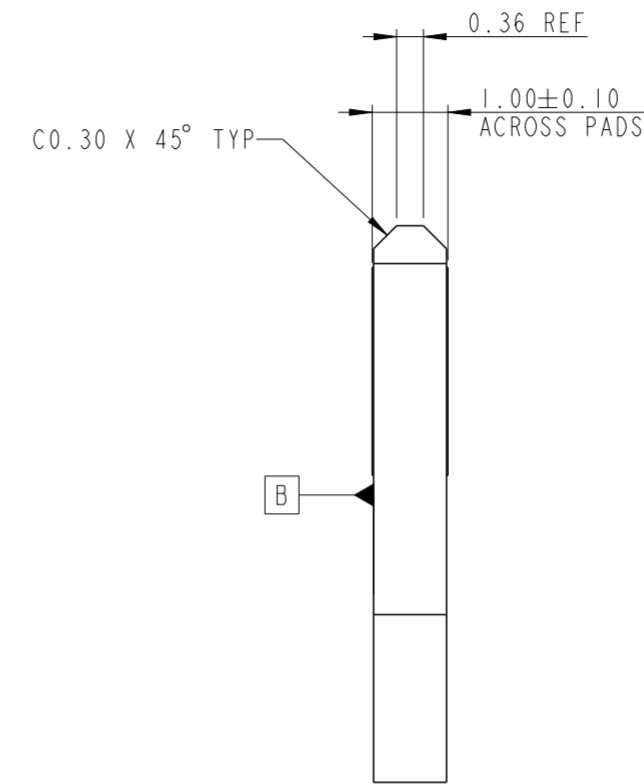
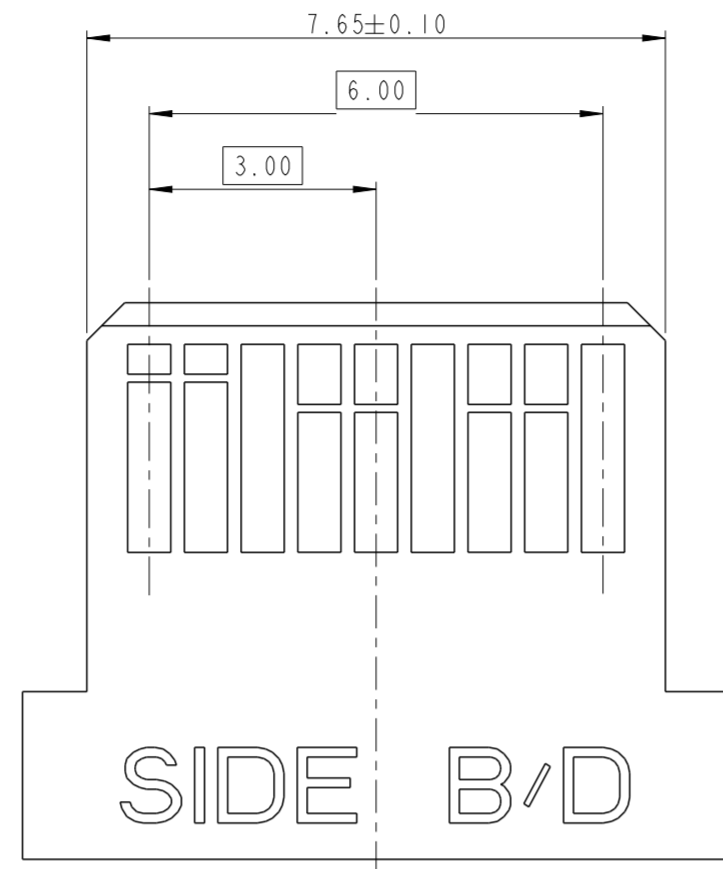
PIN OUT DESIGNATIONS



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spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	7.000							
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15			ecn no	ELX-DG-28824-1									
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Stone Li	2018/01/15			rel level	Released									
surface	-	appr	Heaven Cen	2018/01/18	product family	-	cat. no.	10120728									
ISO 1302	<table border="1"> <tr> <td>linear</td> <td>0.X</td> <td>±0.5</td> </tr> <tr> <td></td> <td>0.XX</td> <td>±0.3</td> </tr> <tr> <td></td> <td>0.XXX</td> <td>±-</td> </tr> <tr> <td>angular</td> <td>0°</td> <td>±3°</td> </tr> </table>	linear	0.X	±0.5		0.XX	±0.3		0.XXX	±-	angular	0°	±3°	Amphenol FCI www.fci.com	title 1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD	rev B	Product - Customer Drw sheet 6 of 7
linear	0.X	±0.5															
	0.XX	±0.3															
	0.XXX	±-															
angular	0°	±3°															



RECOMMENDED PLUG PADDLE CARD
SEE SFF-8644 FOR DETAIL

- NOTES:
- 0.05 MINIMUM KEEP OUT FOR SOLDER MASK AROUND ALL PADS.
 - DATUM C TARGETS ARE DEFINED BY THE RESPECTIVE PAD CENTER LINES AND THE LEADING EDGE OF THE TARGET PADS.

spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	10.000
tolerance std	ISO 406 ISO 1101	eng	Jerry Zhang	2018/01/15			ecn no	ELX-DG-28824-1		
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Stone Li	2018/01/15			rel level	Released		
surface	-	appr	Heaven Cen	2018/01/18	product family	-	rel level	Released		
linear	0.X ±0.5 0.XX ±0.3 0.XXX ±-			title 1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD		dwg no 10120728	rev B			
angular	0° ±3°	www.fci.com		cat. no.	Product - Customer Drw	sheet 7 of 7				