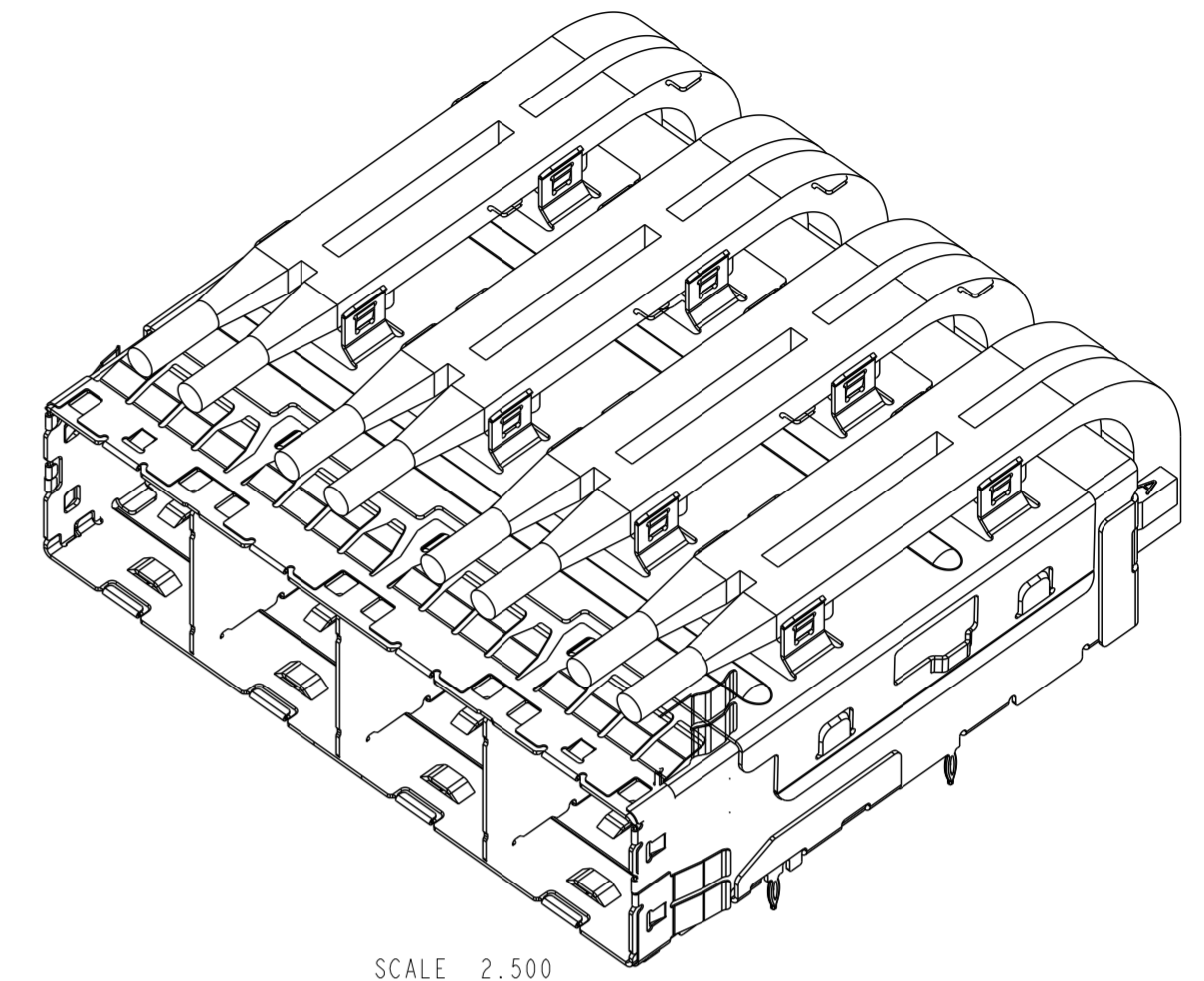
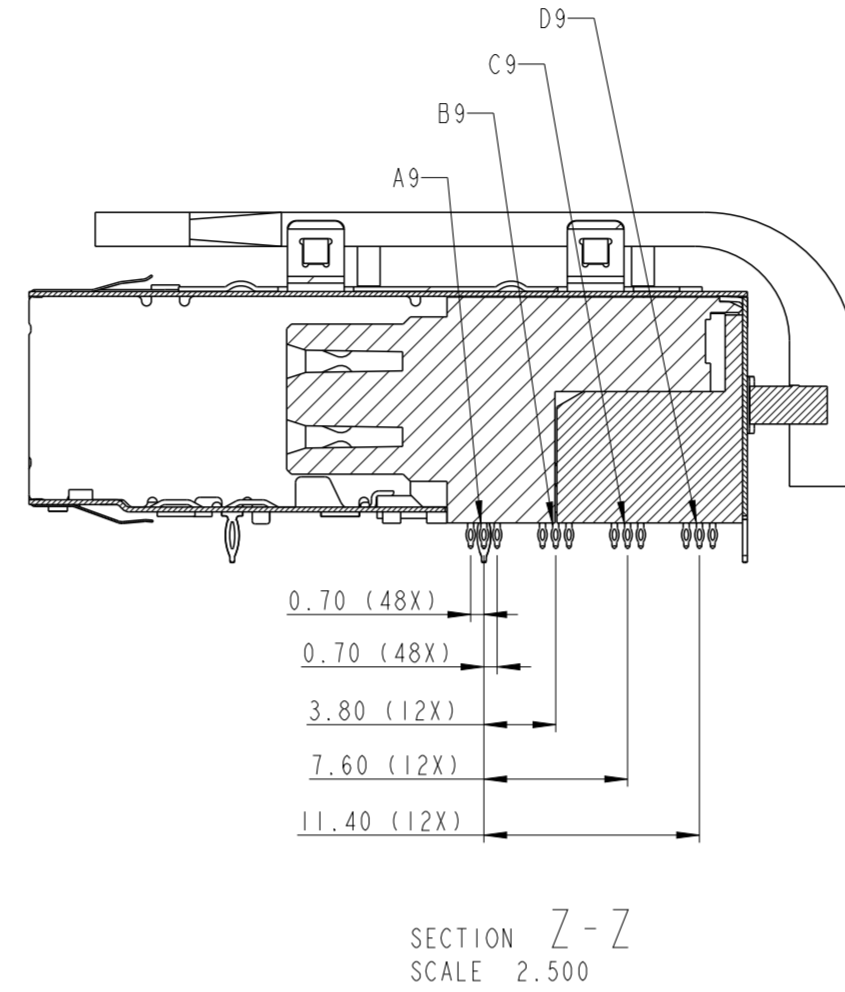
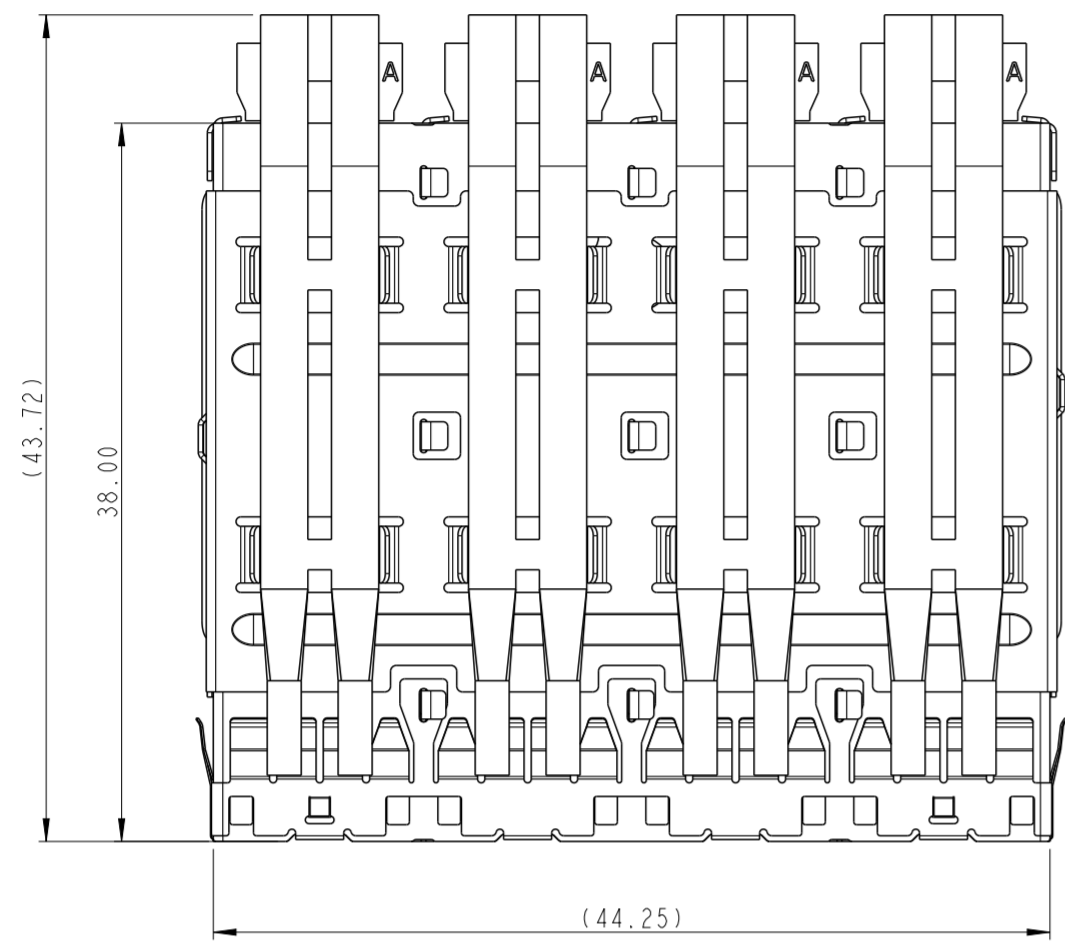
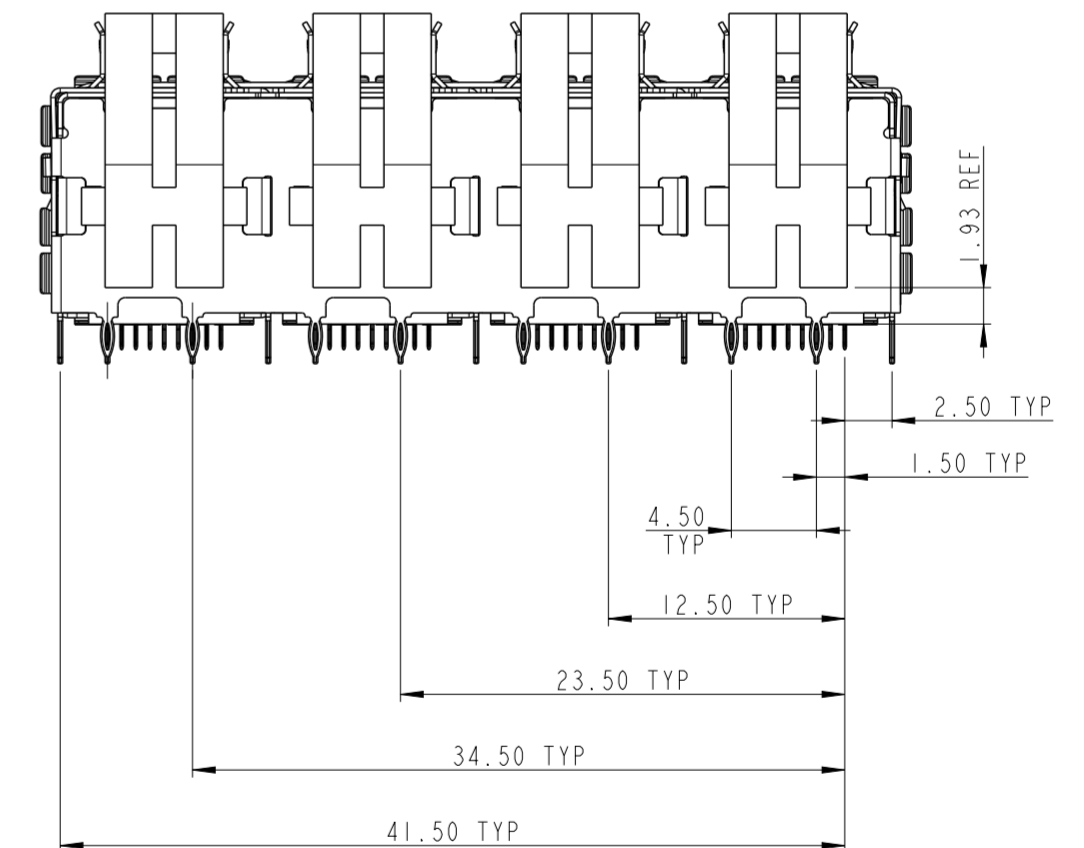
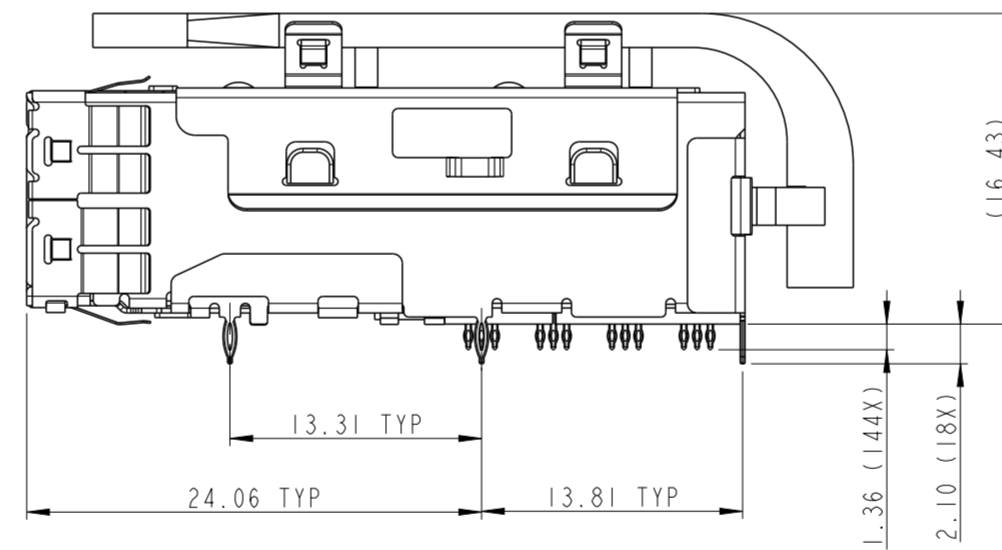
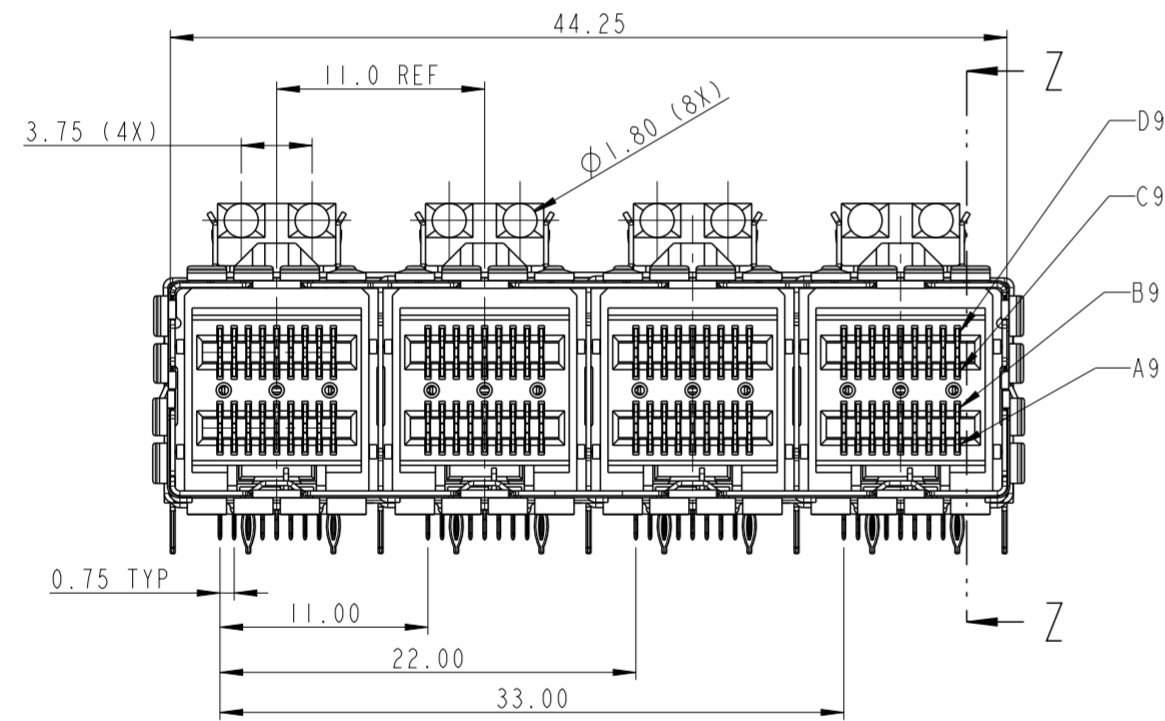


PRODUCT NUMBER	TAIL PLATING OPTION, SEE NOTE 2	1X4 EXTERNAL ASSEMBLY	1X4 LIGHT PIPE SUB-ASSEMBLY WITH MOUNTING CLIP
10120728-101	OPTION 1	10112628-101	10121256-001LF
10120728-101LF	OPTION 2	10112628-101LF	



SCALE 2.500

10120728-101 & 101LF  
WITH 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).  
4 REQUIRED PER ASSEMBLY.  
MOUNTING HARDWARE NOT SUPPLIED.

7. THIS CONNECTOR IS DESIGNED TO MEET THE REQUIREMENTS OF INDUSTRY SPECIFICATION SFF-8644.

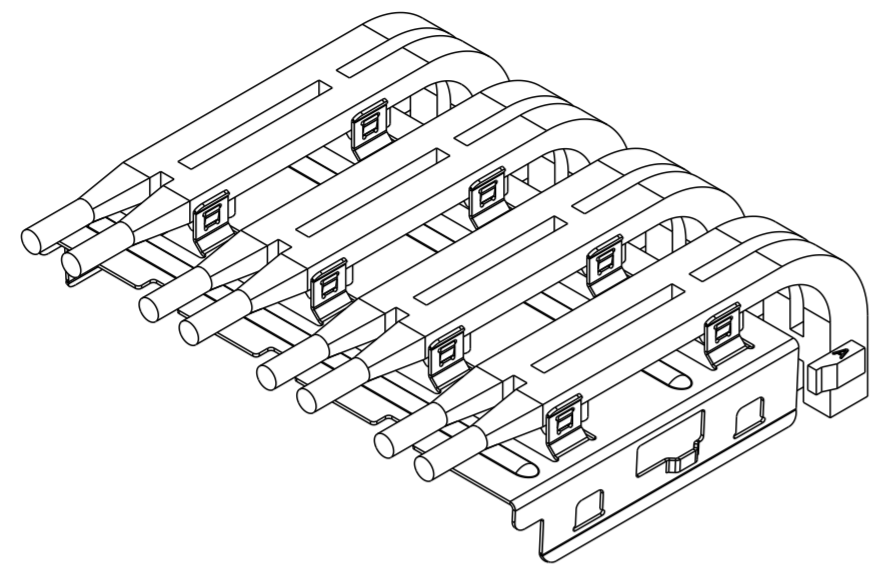
8. LIGHT PIPE SUB-ASSEMBLY WITH MOUNTING CLIP FINAL ASSEMBLY AFTER EXTERNAL ASSEMBLY APPLIED TO PCB.

MATES WITH  
MINI-SAS HD ENDS IN:

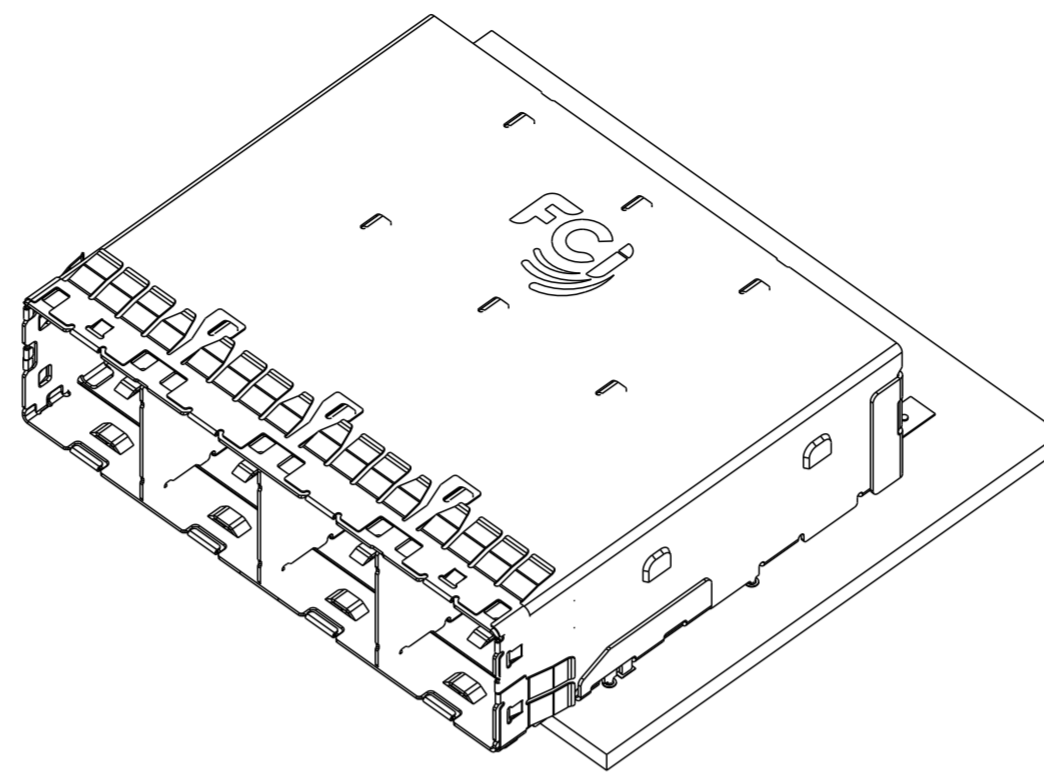
- 10112041 SERIES (4X)
- 10117771 SERIES (4X)
- 10117946 SERIES (4X)
- 10117949 SERIES (4X)
- 10117947 SERIES (8X)
- 10112359 SERIES (8X)
- 10117950 SERIES (8X)
- 10117948 SERIES (8X)

spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	4.000
tolerance std	ISO 406 ISO 1101	eng	Qin De-Feng	2013/03/11			ecn no	-	rel level	Released
surface	ISO 1302	chr	Jon Qin	2013/03/11						
linear	0.X ±0.5 0.XX ±0.3 0.XXX ±	appr	Pei-Ming Zheng	2013/03/11	www.fci.com	cat. no.	-	Product - Customer Drw	sheet 1 of 6	
angular	0° ±3°	title	1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD		dwg no	10120728	rev	A		

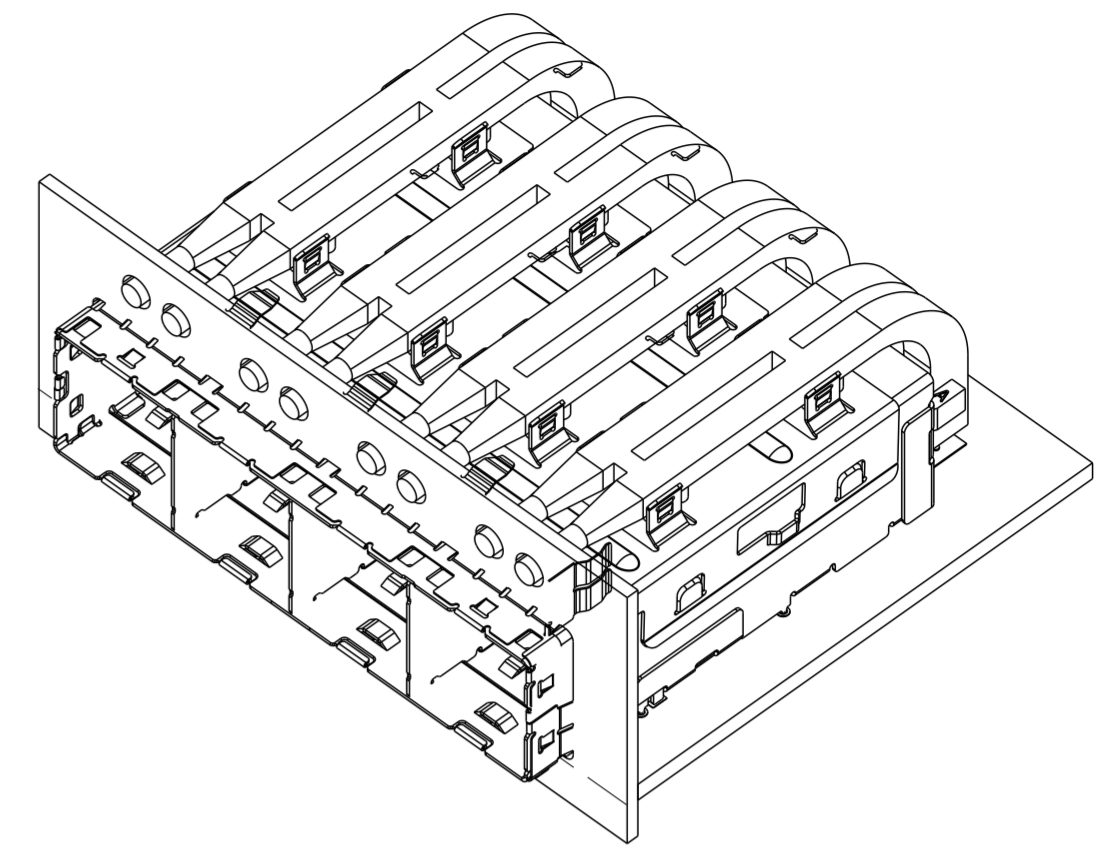




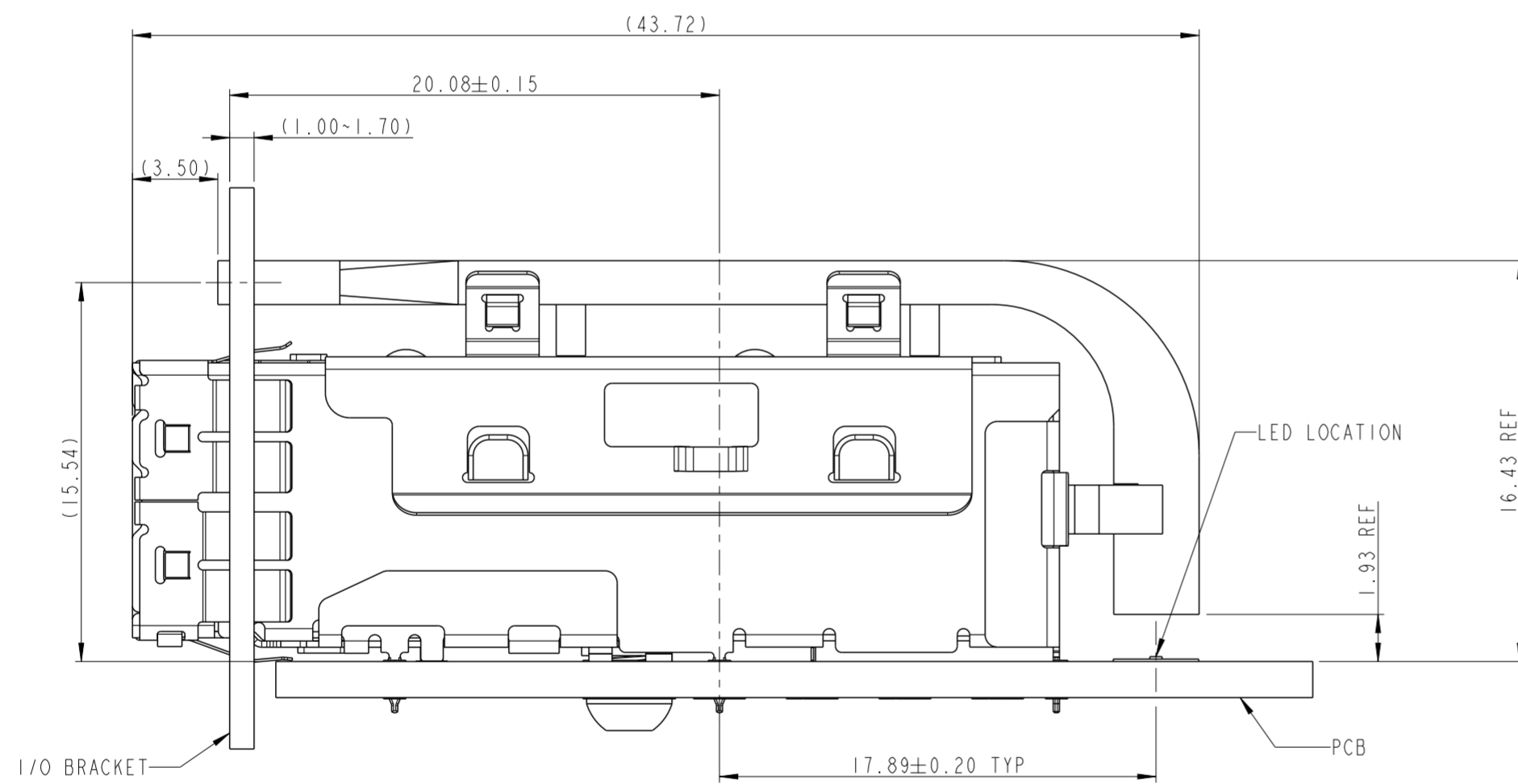
1X4 LIGHT PIPE SUB-ASSEMBLY  
WITH MOUNTING CLIP  
10121256-001LF



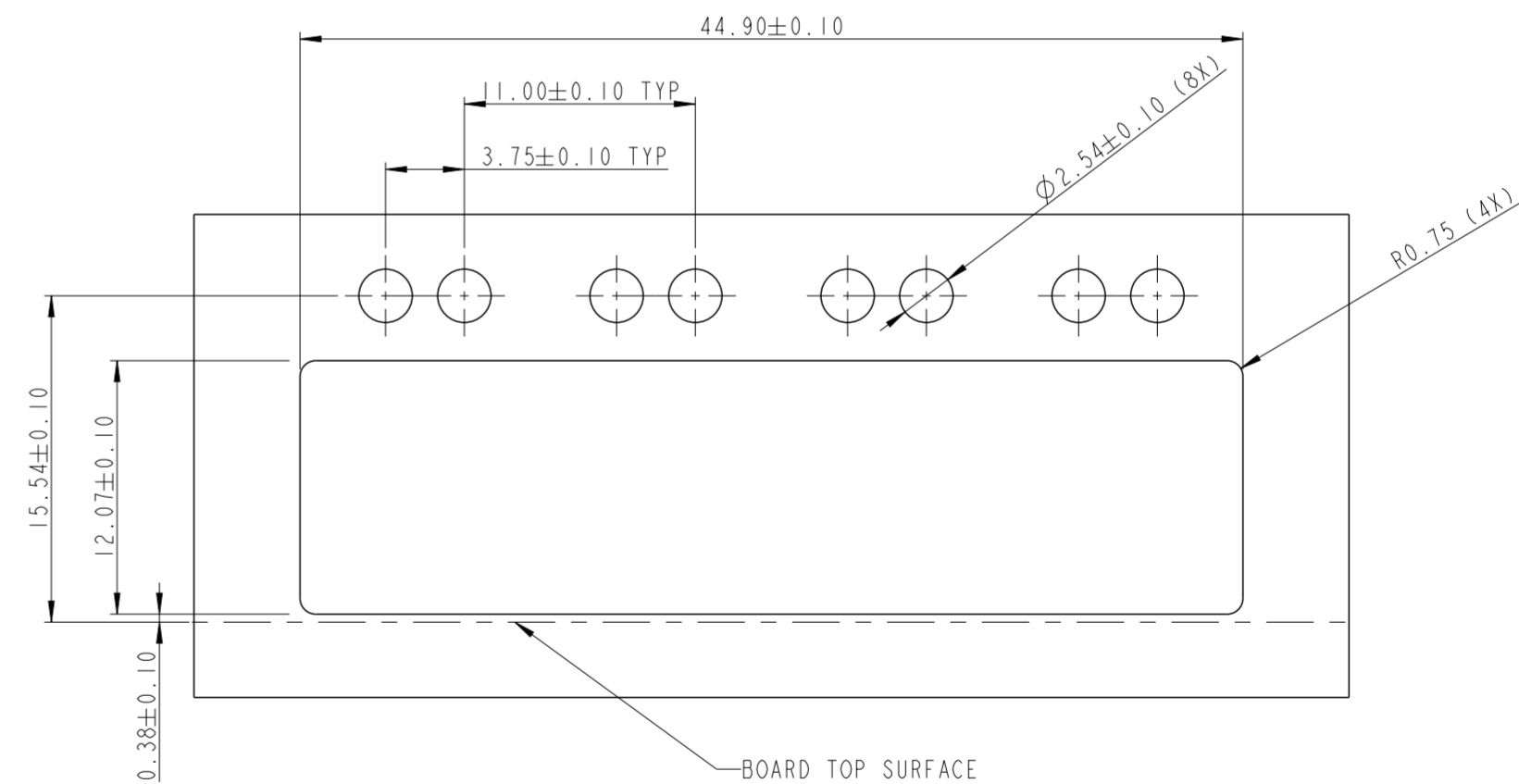
1X4 EXTERNAL ASSEMBLY  
APPLIED TO PCB  
10112628-101 & 101LF



10120728-101 & 101LF  
WITH LIGHT PIPES  
(LIGHT PIPE SUB-ASSEMBLY  
WITH MOUNTING CLIP FINAL  
ASSEMBLY BY CUSTOMER)



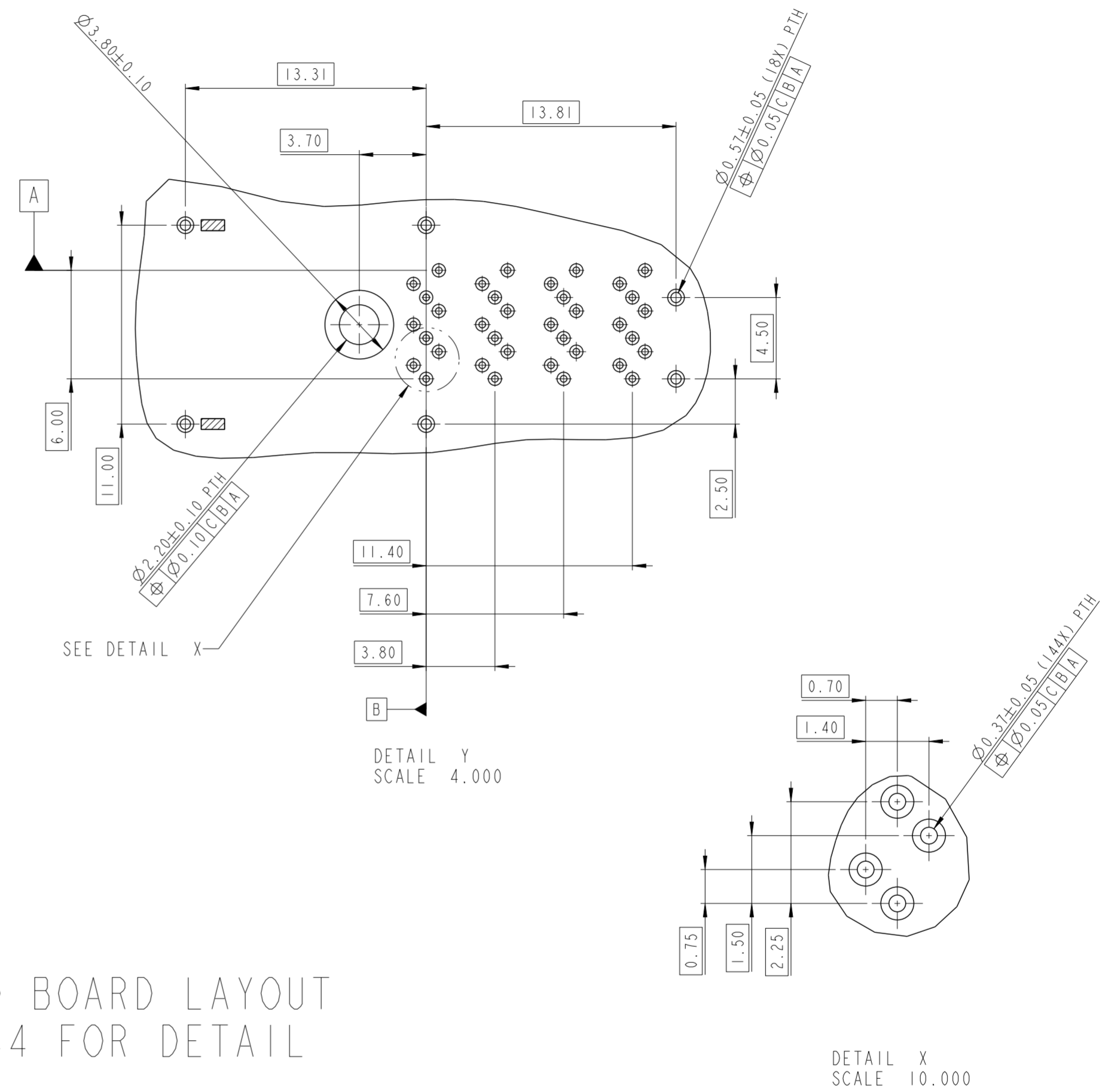
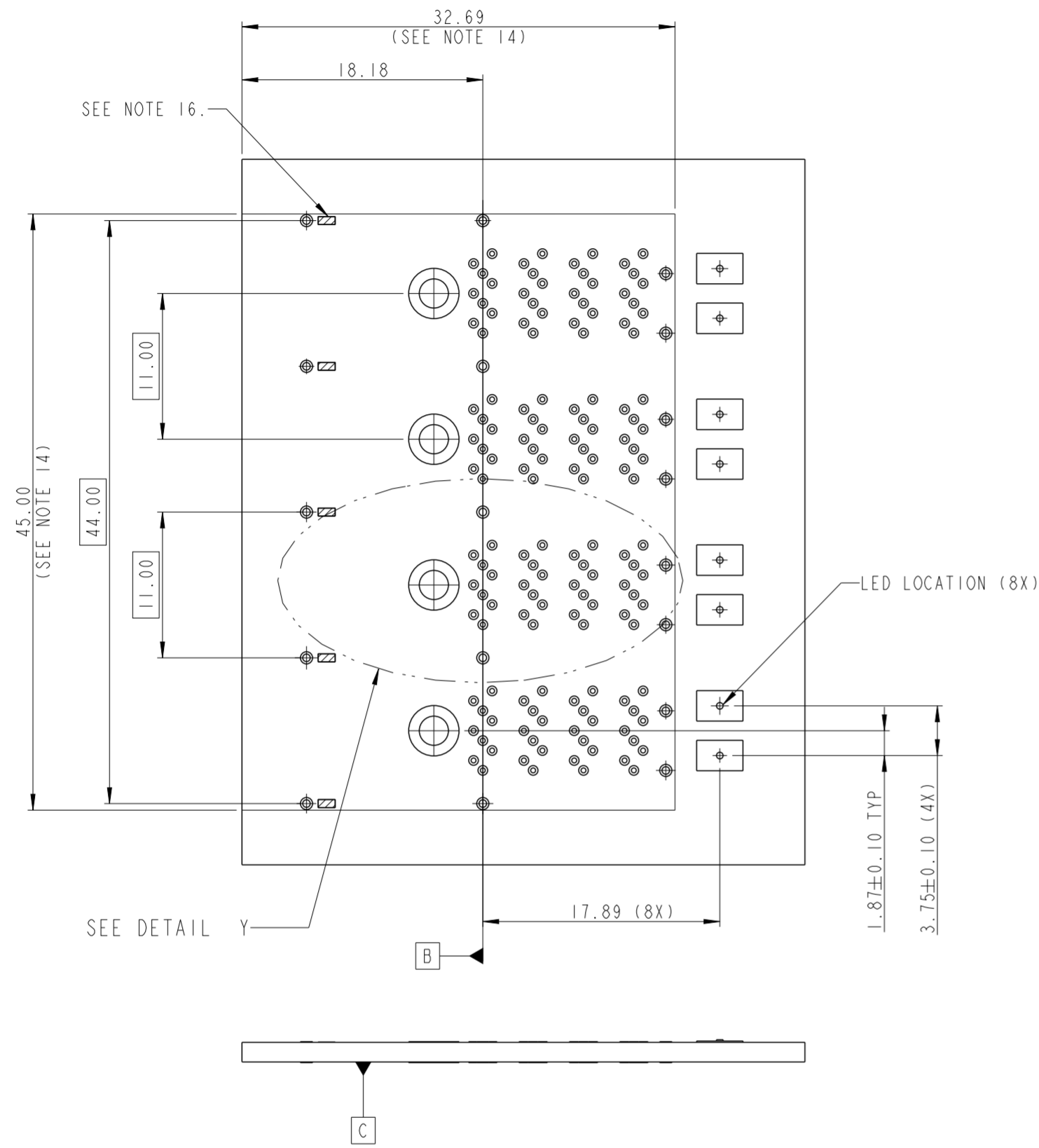
ASSEMBLED VIEW  
WITH LIGHT PIPES  
SCALE 4:1



I/O BRACKET CUT OUT  
(BRACKET NOT SUPPLIED)

SCALE 3:000

spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	12.000
tolerance std	ISO 406 ISO 1101	eng	Qin De-Feng	2013/03/11			ecn no	-	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013/03/11						
surface	ISO 1302	appr	Pei-Ming Zheng	2013/03/11	product family	-	dwg no	10120728	rev	A
	linear	0.X	±0.5		title		1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE		Product - Customer Drw	
		0.XX	±0.3		MINI-SAS HD		sheet 2 of 6			
	angular	0°	±3°		cat. no.		-			



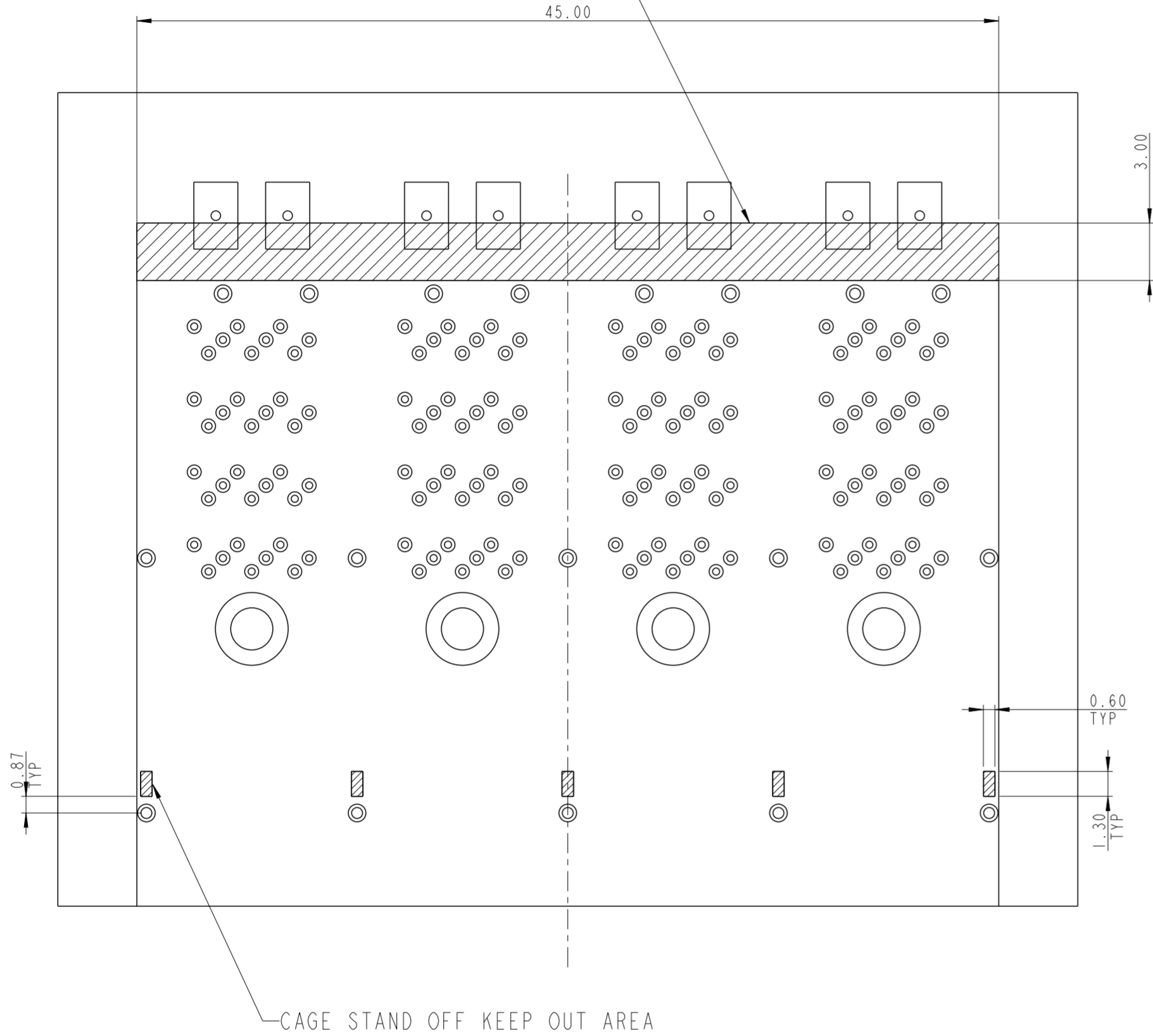
RECOMMENDED BOARD LAYOUT  
SEE SFF-8644 FOR DETAIL

- NOTES:
9. RECOMMENDED DRILL SIZE FOR  $\varnothing 0.37$  FINISHED PTH IS  $\varnothing 0.457$ .
  10. RECOMMENDED ANNULAR RING AROUND  $\varnothing 0.37$  FINISHED PTH IS  $\varnothing 0.73$ .
  11. RECOMMENDED DRILL SIZE FOR  $\varnothing 0.57$  FINISHED PTH IS  $\varnothing 0.68$ .
  12. RECOMMENDED ANNULAR RING AROUND  $\varnothing 0.57$  FINISHED PTH IS  $\varnothing 0.93$ .
  13. MINIMUM RECOMMENDED CENTER TO CENTER SPACING BETWEEN ADJACENT CONNECTORS: 47.00mm.
  14. CONNECTOR KEEP OUT AREA.
  15. MINIMUM PCB THICKNESS: 1.57mm.
  16. 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	12.000
tolerance std	ISO 406 ISO 1101	eng	Qin De-Feng	2013/03/11			ecn no	-	rel level	Released
surface	ISO 1302	chr	Jon Qin	2013/03/11						
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Pei-Ming Zheng	2013/03/11	product family	-	rel level	-	cat. no.	-
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	A
angular	0° ±3°	www.fci.com		Product - Customer Drw		sheet 3 of 6				

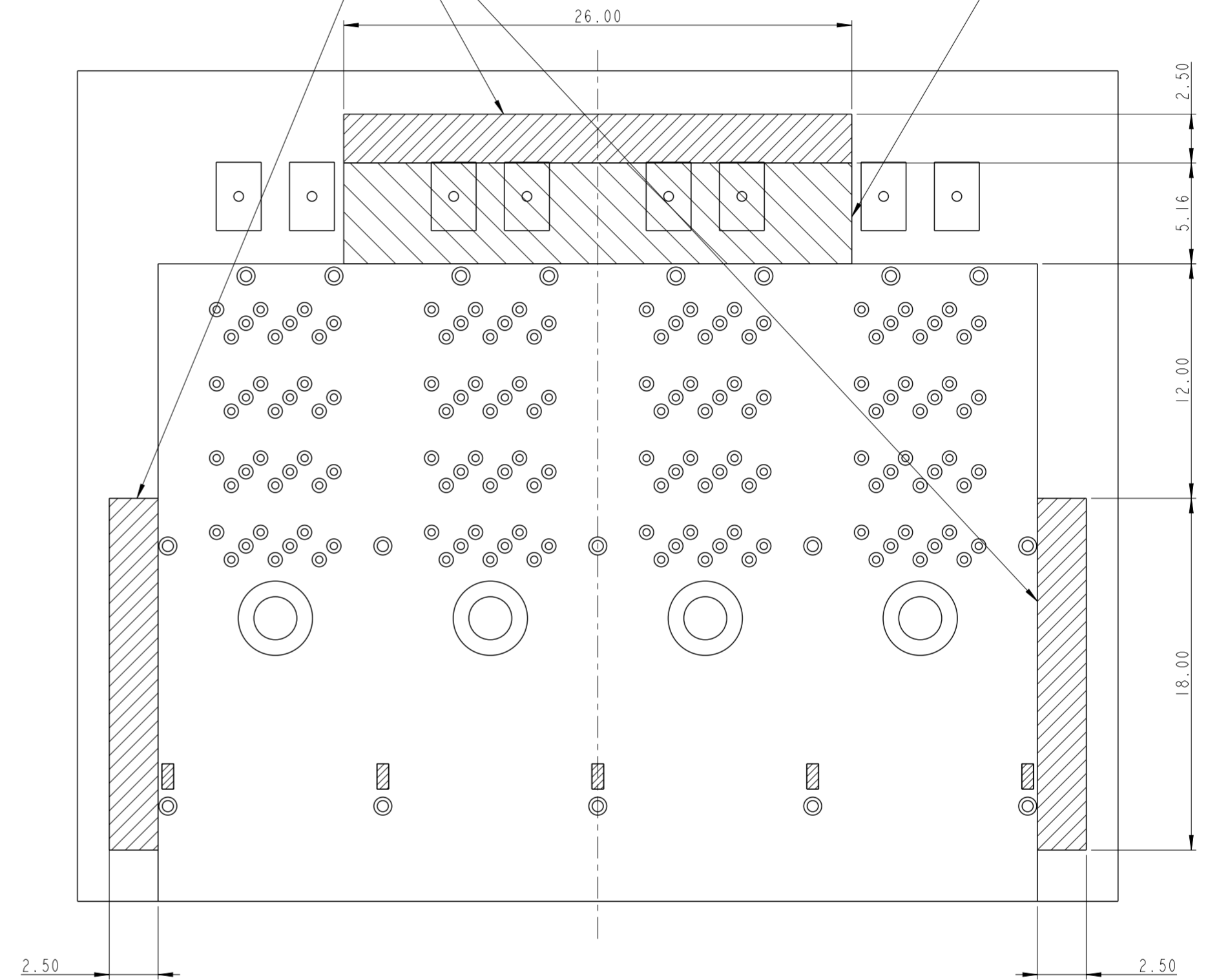
# RECOMMENDED KEEP OUT AREAS

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



RECOMMENDED EXTRACTION TOOL  
KEEP OUT AREA  
NO COMPONENTS IN THESE AREAS

RECOMMENDED EXTRACTION TOOL  
KEEP OUT AREA  
NO COMPONENTS IN THESE AREAS

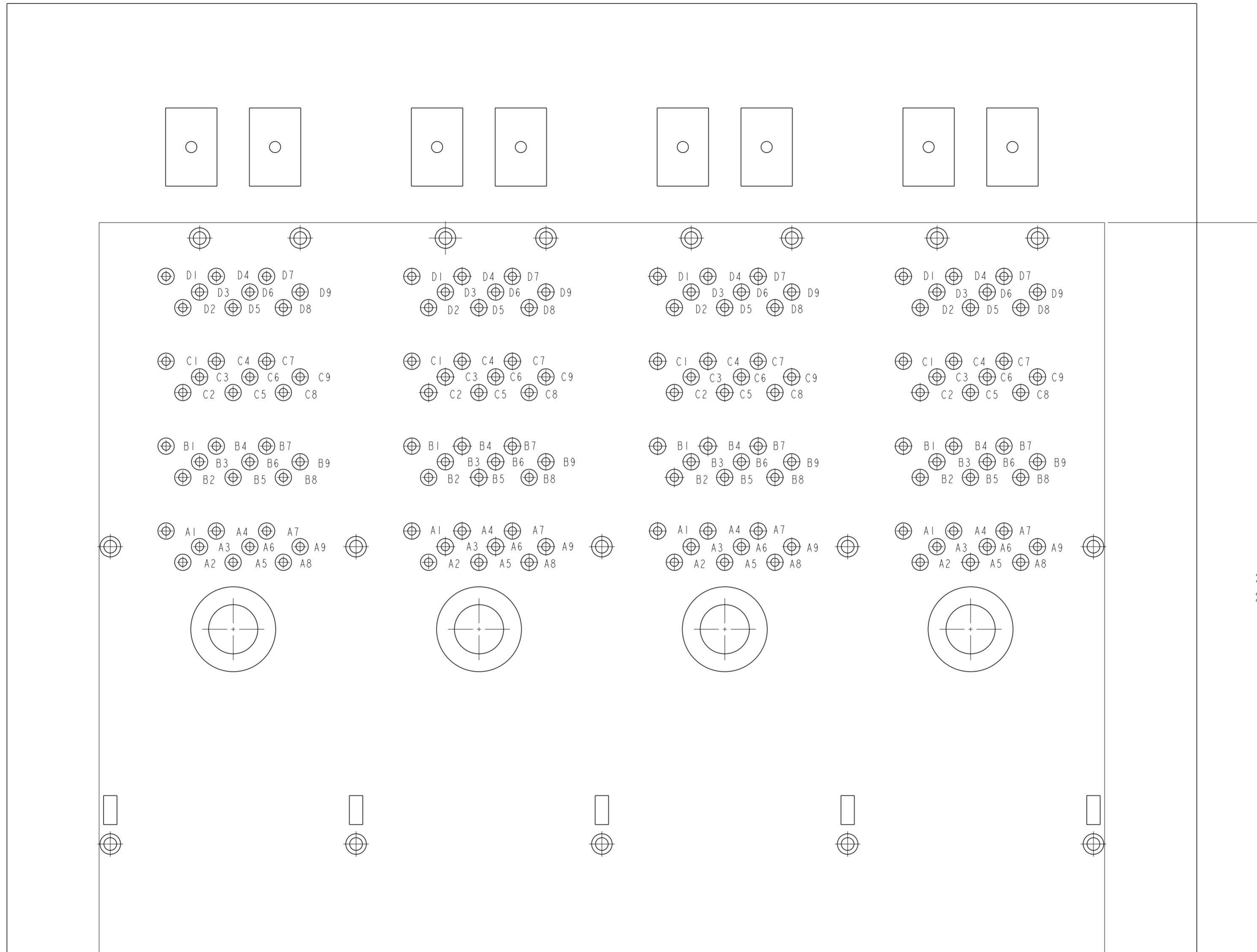


Copyright FCI.

spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	12.000	
tolerance std	ISO 406 ISO 1101	eng	Qin De-Feng	2013/03/11			ecn no	-	rel level	Released	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013/03/11							
		appr	Pei-Ming Zheng	2013/03/11							
surface	ISO 1302	linear	0.X	±0.5	0.XX	±0.3	0.XXX	±-	angular	0°	±3°
				title 1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD		dwg no 10120728		rev A			
		www.fci.com		cat. no.		Product - Customer Draw		sheet 4 of 6			



# PIN OUT DESIGNATIONS



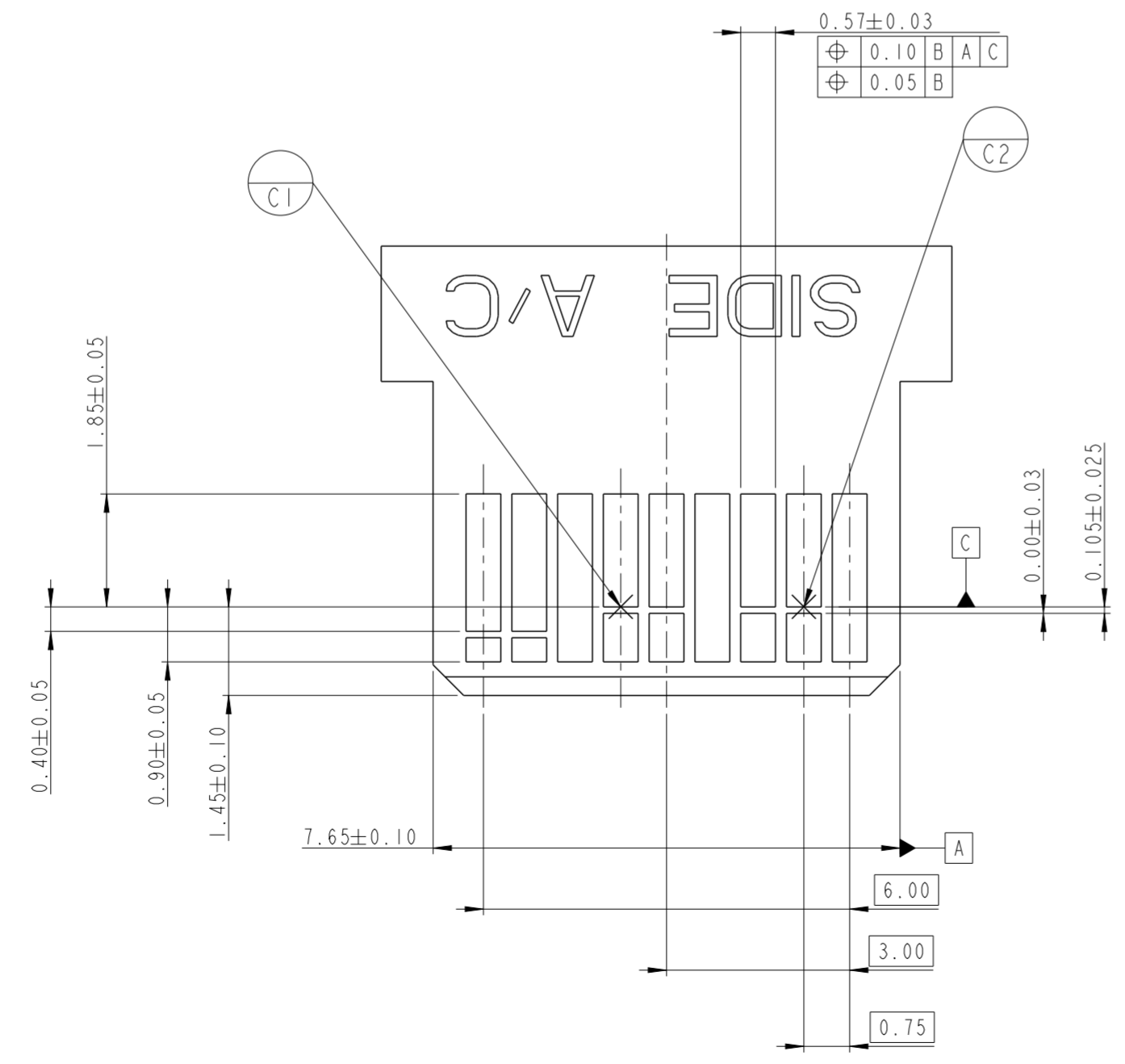
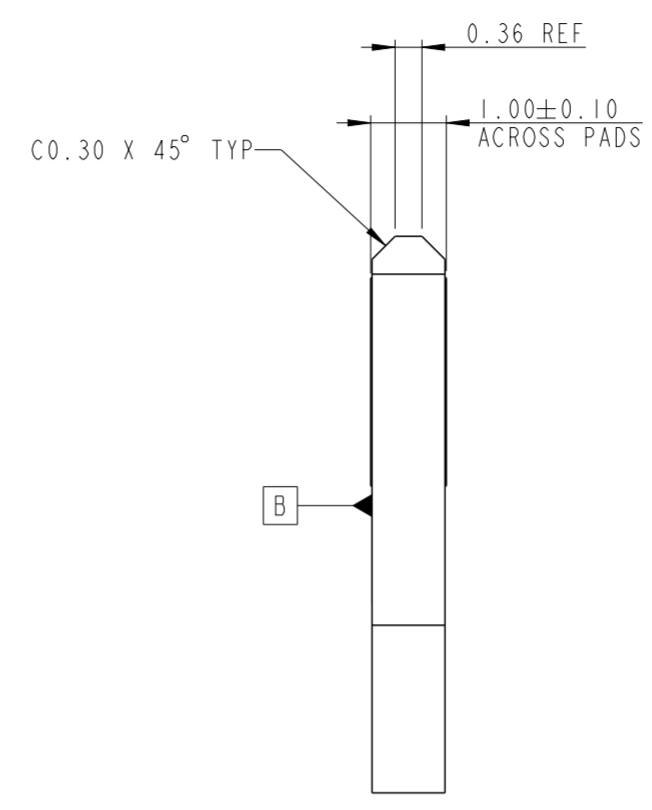
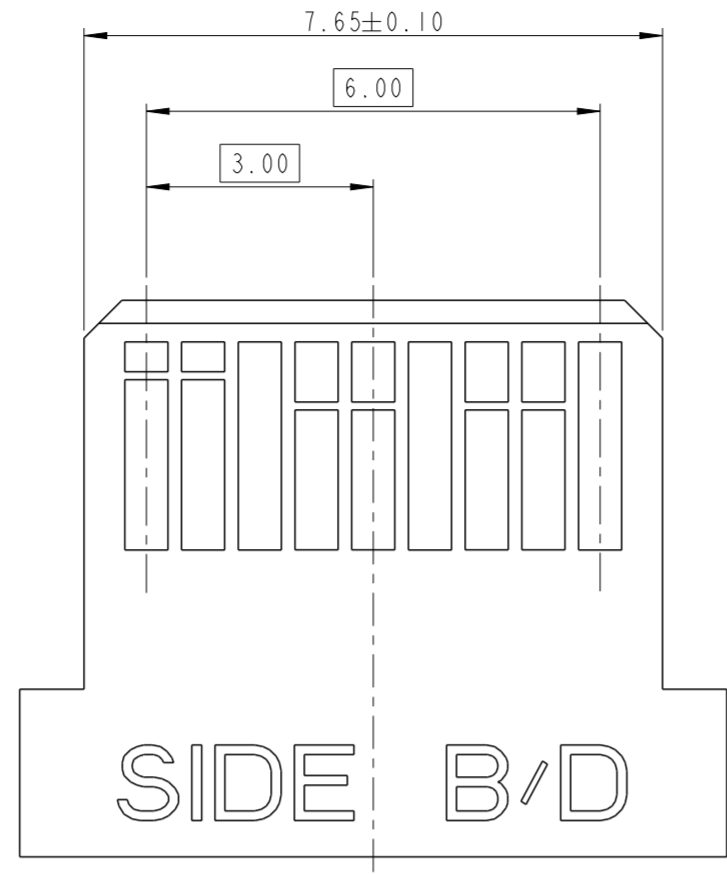
Copyright FCI.

spec ref	-	dr	Qin De-Feng	2012/1/21	projection	MM	size	A2	scale	12.000
tolerance std	ISO 406 ISO 1101	eng	Qin De-Feng	2013/03/11			ecn no	-	rel level	Released
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013/03/11						
surface	ISO 1302	appr	Pei-Ming Zheng	2013/03/11	product family	-	dwg no	10120728	rev	A
					www.fci.com	cat. no.	Product - Customer Drw	sheet 5 of 6		

PDS: Rev :A

STATUS:Released

Printed: Mar 12, 2013



RECOMMENDED PLUG PADDLE CARD  
SEE SFF-8644 FOR DETAIL

- NOTES:
- 17. 0.05 MINIMUM KEEP OUT FOR SOLDER MASK AROUND ALL PADS.
  - 18. 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	12.000
tolerance std	ISO 406 ISO 1101	eng	Qin De-Feng	2013/03/11			ecn no	-	rel level	
surface	ISO 1302	chr	Jon Qin	2013/03/11			product family	-	rel level	Released
linear	0.X ±0.5 0.XX ±0.3 0.XXX ±-	appr	Pei-Ming Zheng	2013/03/11			cat. no.	1x4 EXTERNAL ASSEMBLY WITH LIGHT PIPE MINI-SAS HD	10120728	rev
angular	0° ±3°	www.fci.com		Product - Customer Drw		sheet 6 of 6		A		

