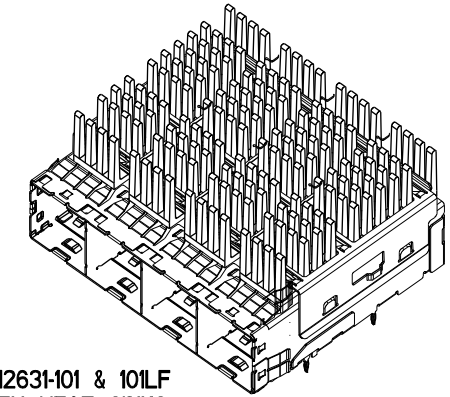
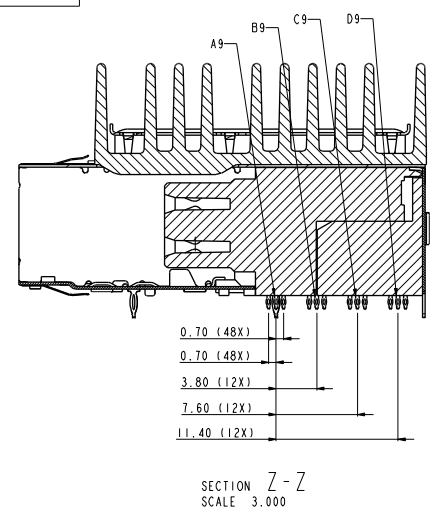
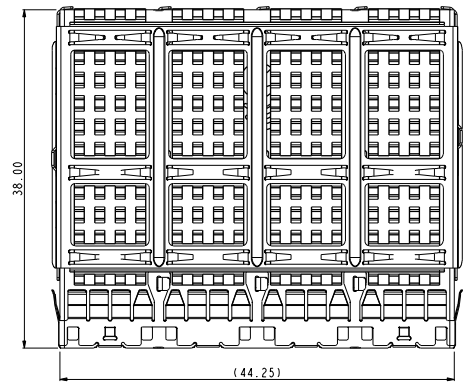
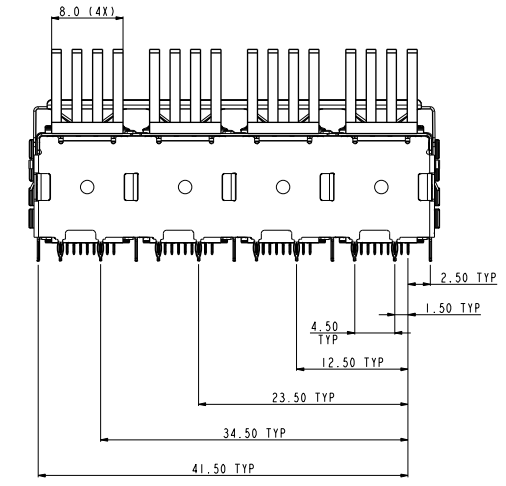
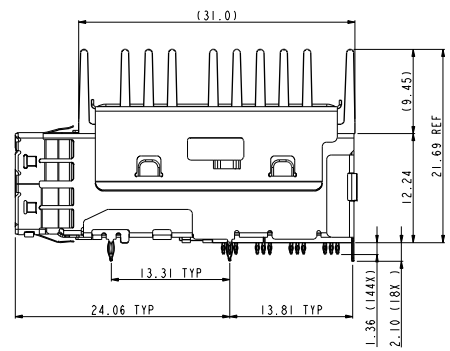
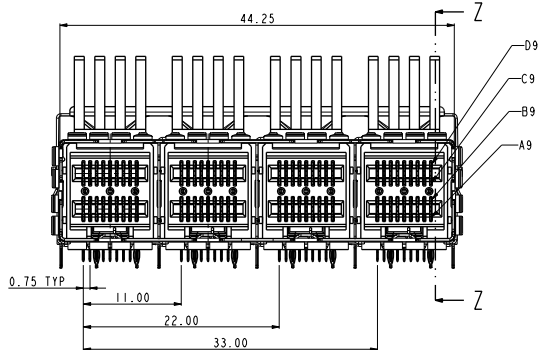


1	2	3	4	5	6	7	8
PRODUCT NUMBER	TAIL PLATING OPTION, SEE NOTE 2	1X4 EXTERNAL ASSEMBLY WITH WINDOWS	HEAT SINK MOUNTING CLIP(1X4)	HEAT SINK			
10112631-101	OPTION 1	10112628-103	10112656-001LF	10112655-001LF			
10112631-101LF	OPTION 2	10112628-103LF					



10112631-101 & 101LF WITH HEAT SINKS



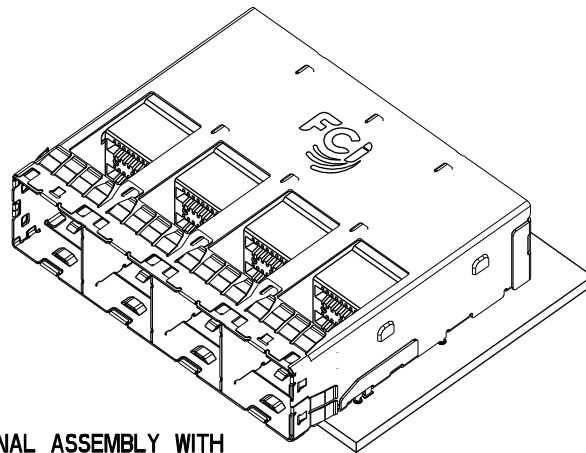
NOTES:

- MATERIALS:  
CONNECTOR HOUSING: HIGH TEMPERATURE THERMOPLASTIC  
GLASS FILLED, UL 94V-0  
EMI CAGE: NICKEL SILVER ALLOY  
EMI FINGERS: COPPER ALLOY  
TERMINALS: COPPER ALLOY  
HEAT SINK CLIP: STAINLESS STEEL  
HEAT SINK: ALUMINIUM ALLOY
- FINISHES:  
EMI FINGERS: 0.50um MIN NICKEL  
CONTACT AREA: 0.16um MIN GOLD OVER 2.54um MIN NICKEL TAIL AREA:  
OPTION 1: 0.16um - 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 WITH WINDOWS WILL BE IN ONE BOX.  
HEAT SINK AND HEAT SINK MOUNTING CLIP WILL BE IN EACH ONE BOX.  
TOTAL THREE 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.
- THIS CONNECTOR IS DESIGNED TO MEET THE REQUIREMENTS OF INDUSTRY SPECIFICATION SFF-8644.
- HEAT SINK AND HEAT SINK MOUNTING CLIP FINAL ASSEMBLY AFTER EXTERNAL ASSEMBLY WITH WINDOW APPLIED TO PCB.

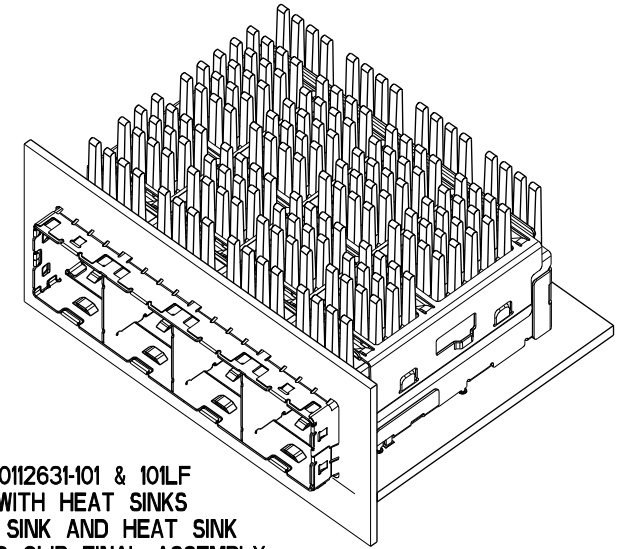
MATES WITH MINI-SAS HD ENDS IN:	
10112041 SERIES (4X)	
10117771 SERIES (4X)	
10117946 SERIES (4X)	
10117949 SERIES (4X)	
10117947 SERIES (8X)	
10112359 SERIES (8X)	
10117950 SERIES (8X)	
10117948 SERIES (8X)	

spec ref	-	dr	Benny Chen	2012-04-12	projection	MM	size	A2	scale	4,000
tolerance std	ISO 406 ISO 1101	eng	De-Feng Qin	2013-03-01			ecn no	-	rel level	-
		chr	Jon Qin	2013-03-01			product family	-		
		appr	Pei-Ming Zheng	2013-03-01			cat. no.	10112631	rev	A
surface	linear	0.X	±0.5		<b>1x4 EXTERNAL ASSEMBLY WITH HEAT SINK</b>					
		0.XX	±0.3		<b>MINI-SAS HD</b>					
	angular	0°	±3°		Product - Customer Drw			sheet 1 of 6		

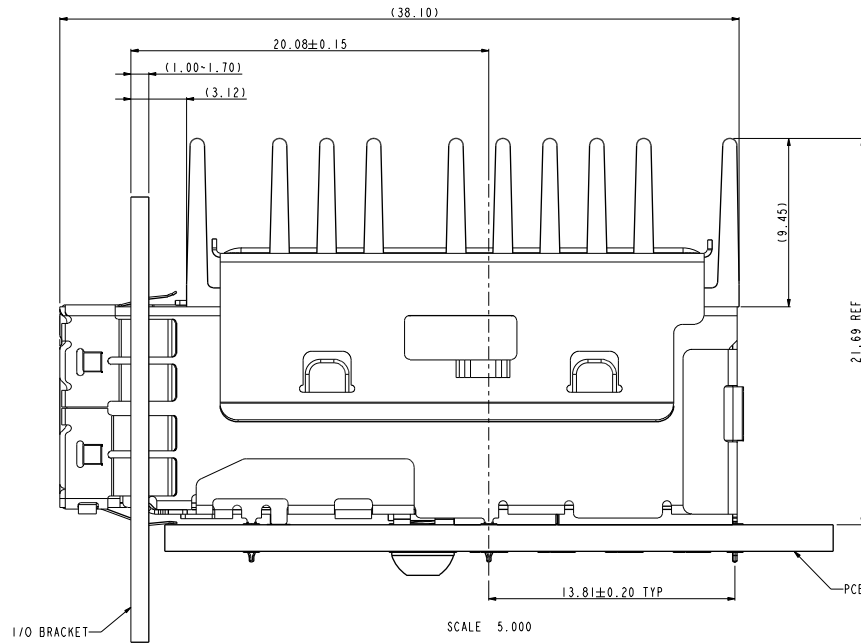
Copyright FCI



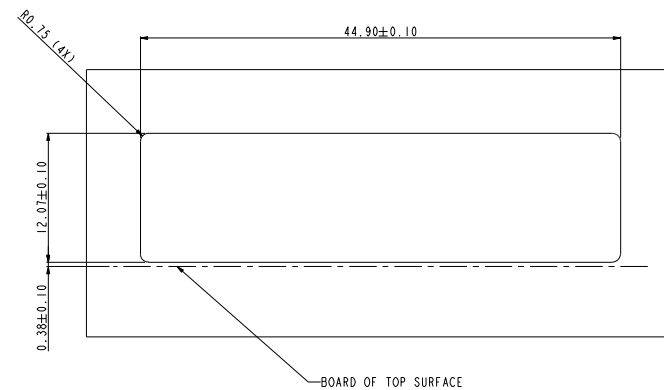
EXTERNAL ASSEMBLY WITH  
WINDOWS APPLIED TO PCB  
10112628-103 & 103LF



10112631-101 & 101LF  
WITH HEAT SINKS  
(HEAT SINK AND HEAT SINK  
MOUNTING CLIP FINAL ASSEMBLY  
BY CUSTOMER)



ASSEMBLED VIEW  
WITH HEAT SINKS



I/O BRACKET CUT OUT  
(BRACKET NOT INCLUDED)

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spec ref	-	dr	Benny Chen	2012-04-12	projection	MM	size	A2	scale	12.000
tolerance std	ISO 406 ISO 1101	eng	De-Feng Qin	2013-03-01			ecn no	-	rel level	-
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013-03-01			product family	-	rel level	-
surface	linear	0.X	±0.5		title 1x4 EXTERNAL ASSEMBLY WITH HEAT SINK MINI-SAS HD	dwg no 10112631	rev A	Product - Customer Drw		
ISO 1302	angular	0°	±3°					cat. no.	-	sheet 2 of 6
www.fcicom										

A

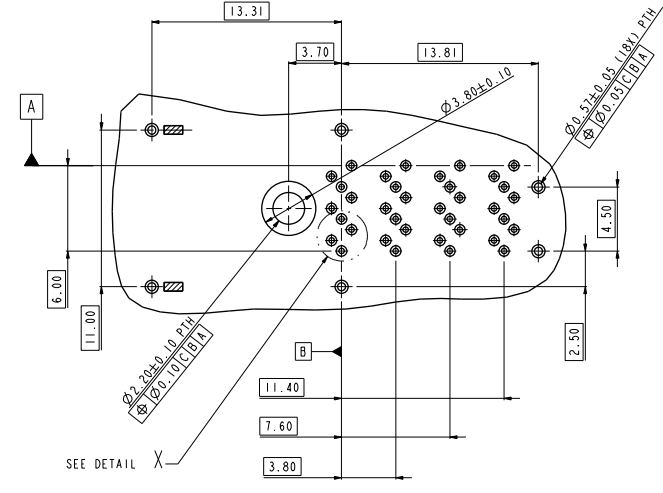
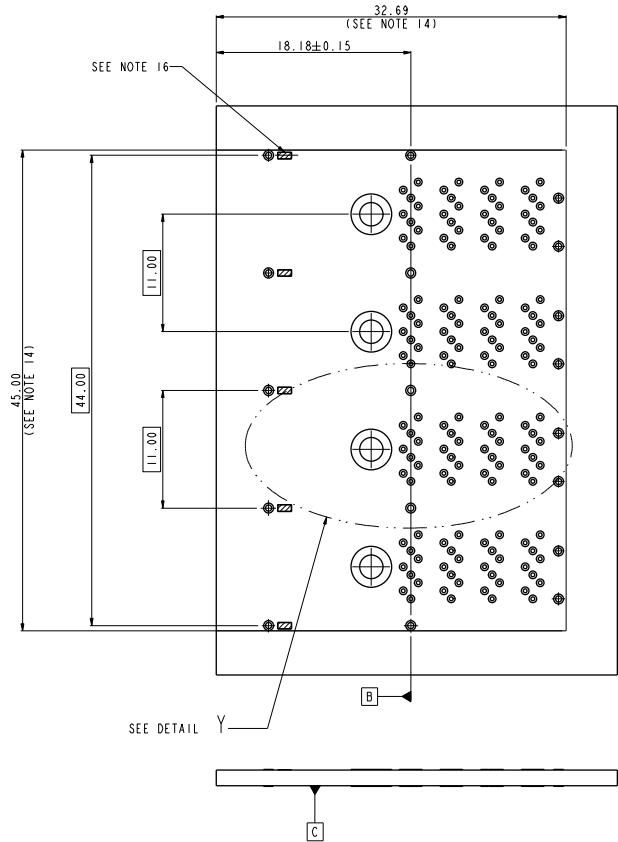
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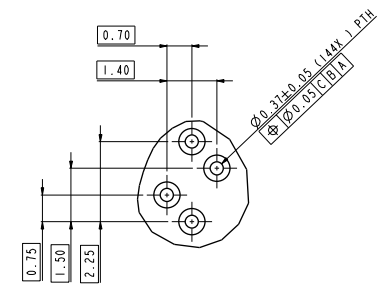
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DETAIL Y  
SCALE 4.000

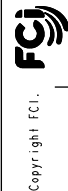


DETAIL X  
SCALE 10.000

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.

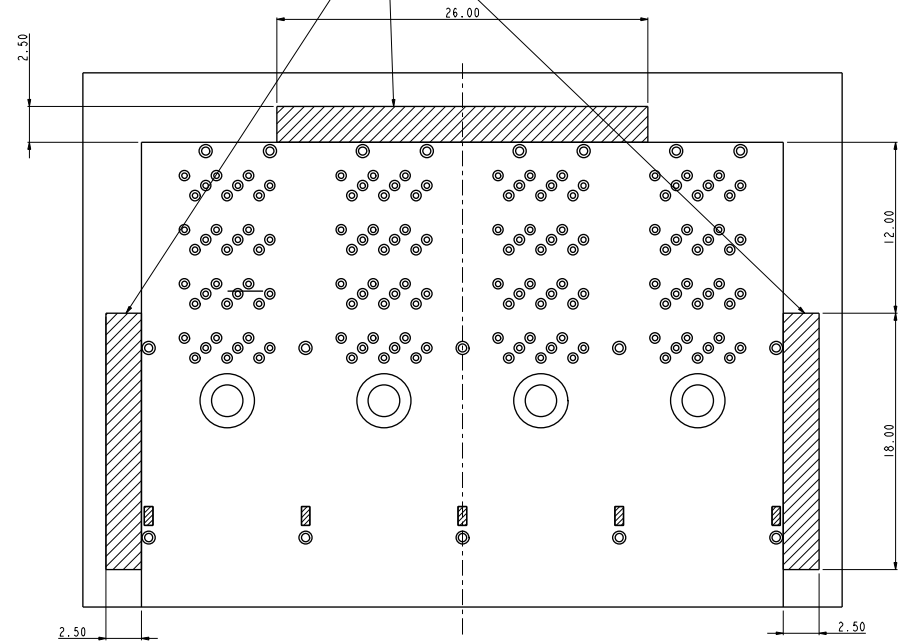
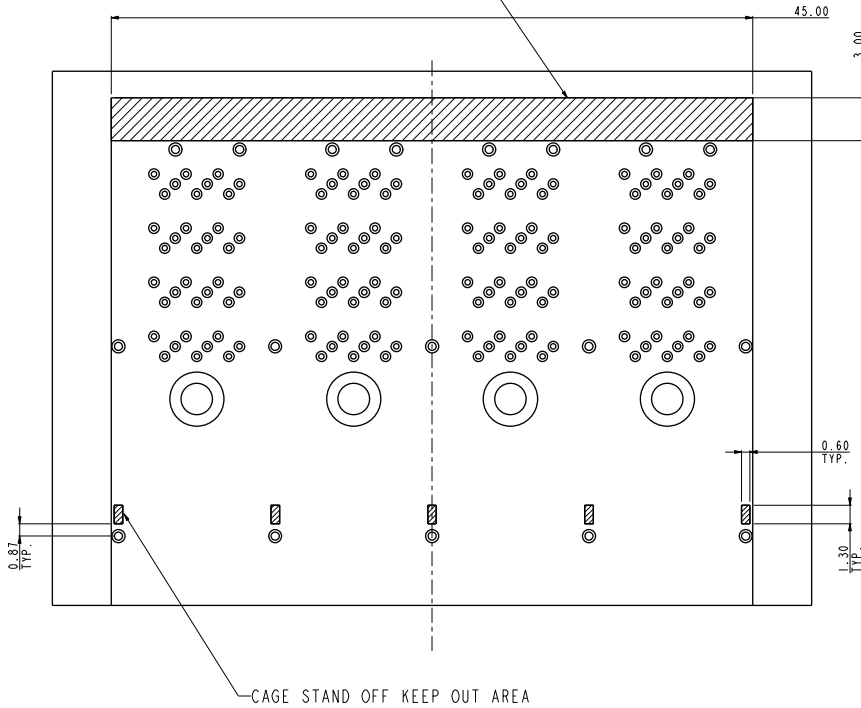


spec ref	-	dr	Benny Chen	2012-04-12	projection	MM	size	A2	scale	12.000	
tolerance std	ISO 406 ISO 1101	eng	De-Feng Qin	2013-03-01			ecn no	-	rel level	-	
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013-03-01			product family	-	rel level	-	
surface	linear	appr	Pei-Ming Zheng	2013-03-01			title	1x4 EXTERNAL ASSEMBLY WITH HEAT SINK		rev	A
ISO 1302	angular	www.fcj.com		cat. no.	-		cat. no.	-		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

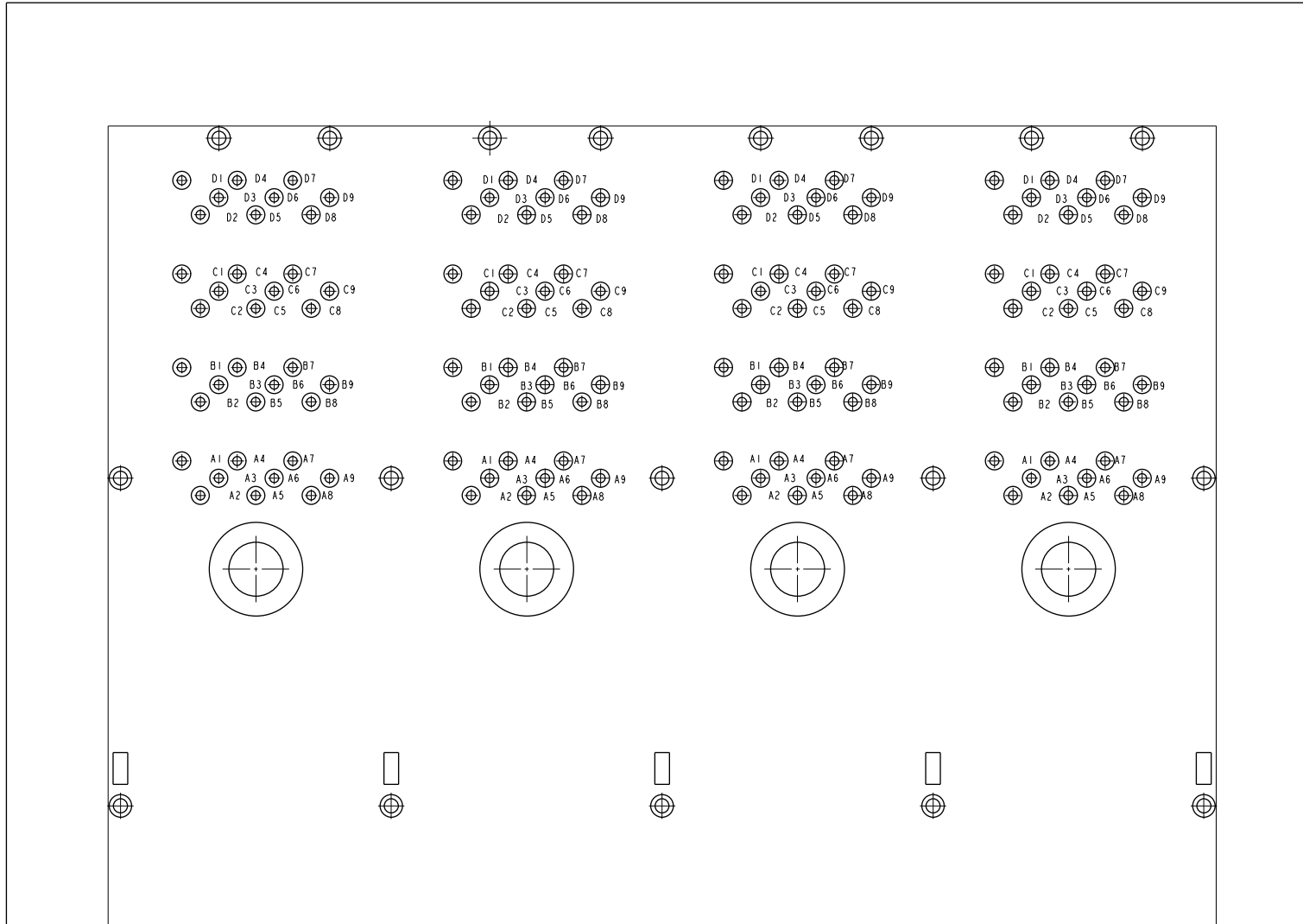
RECOMMENDED EXTRACTION TOOL  
KEEP OUT AREA  
NO COMPONENTS IN THESE AREAS



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spec ref	-	dr	Benny Chen	2012-04-12	projection	MM	size	A2	scale	12.000
tolerance std	ISO 406 ISO 1101	eng	De-Feng Qin	2013-03-01			ecn no	-	rel level	-
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013-03-01			product family	-	rel level	-
		appr	Pei-Ming Zheng	2013-03-01			product family	-	rel level	-
surface	<input checked="" type="checkbox"/> linear <input type="checkbox"/> angular	0.X ±0.5 0.XX ±0.3 0.XXX ±- 0° ±3°	 <a href="http://www.fci.com">www.fci.com</a>	<b>1x4 EXTERNAL ASSEMBLY WITH HEAT SINK</b> MINI-SAS HD		cat. no. -	dwg no 10112631	rev A	Product - Customer Drw	sheet 4 of 6

# PIN OUT DESIGNATIONS



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spec ref	-	dr	Benny Chen	2012-04-12	projection	MM	size	A2	scale	12.000	
tolerance std	ISO 406 ISO 1101	eng	De-Feng Qin	2013-03-01	chr	Jon Qin	2013-03-01	ecm no	-	rel level	-
TOLERANCES UNLESS OTHERWISE SPECIFIED		appr	Pei-Ming Zheng	2013-03-01	product family						
surface	linear	0.X	±0.5	FCI	1x4 EXTERNAL ASSEMBLY WITH HEAT SINK		10112631	rev		A	
		0.XX	±0.3		MINI-SAS HD						
	angular	0°	±3°		www.fcicom cat. no.						
ISO 1302								Product - Customer Drw	sheet 5 of 6		

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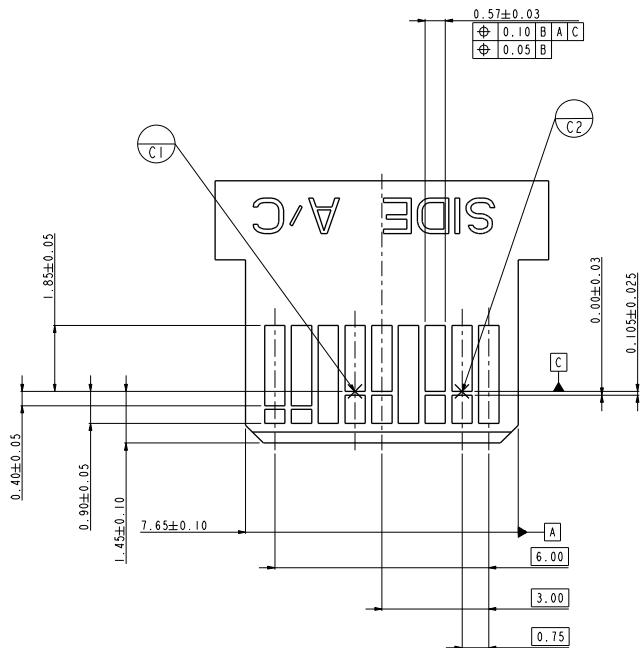
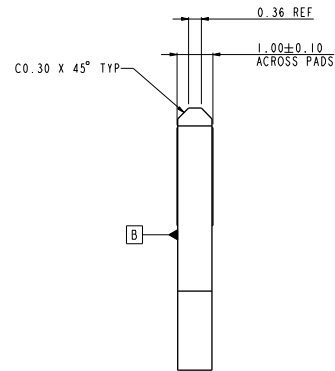
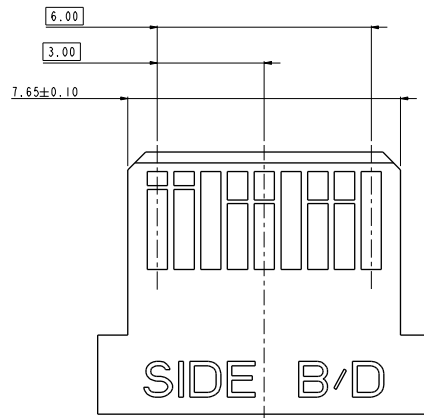
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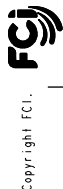
F



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	Benny Chen	2012-04-12	projection	MM	size	A2	scale	12.000
tolerance std	ISO 406 ISO 1101	eng	De-Feng Qin	2013-03-01			ecn no	-	rel level	-
TOLERANCES UNLESS OTHERWISE SPECIFIED		chr	Jon Qin	2013-03-01						
surface	linear	0.X	±0.5		1x4 EXTERNAL ASSEMBLY WITH HEAT SINK		10112631	rev A		
		0.XX	±0.3		MINI-SAS HD					
	angular	0°	±3°		-					
ISO 1302		www.fcj.com	cat. no.	-	Product - Customer Drw	sheet 6 of 6				