

**AMPHENOL PART NUMBER CONFIGURATION**  
U90 - A 1 X 1 - 1 X 0 X

**HEAT SINK OPTION**

- 0 = NO HEAT SINK OR CLIP SHIPPED, CLOSE TOP
- 1 = NO HEAT SINK OR CLIP SHIPPED, OPEN TOP
- 2 = STANDARD HEAT SINK (HARD COAT ANODIZED) AND CLIP (H=6.5mm; SAN HEIGHT)
- 3 = STANDARD HEAT SINK (HARD COAT ANODIZED) AND CLIP (H=4.2mm; PCI HEIGHT)
- 4 = STANDARD HEAT SINK (HARD COAT ANODIZED) AND CLIP (H=13.5mm; TALL)
- A = STANDARD HEAT SINK (NICKEL PLATED) AND CLIP (H=6.5mm; SAN HEIGHT)
- B = STANDARD HEAT SINK (NICKEL PLATED) AND CLIP (H=4.2mm; PCI HEIGHT)
- C = STANDARD HEAT SINK (NICKEL PLATED) AND CLIP (H=13.5mm; TALL)

**NOTE:** FOR PIN STYLE HEAT SINKS REFER TO DRAWING NUMBER: P-U90-H1X1-1XXX

**PACKAGING**

- 1 = TRAY PACKAGING W/ HEAT SINK IN SEPARATE TRAY
- A = TRAY PACKAGING W/ HEAT SINK ASSEMBLED
- T = TAPE AND REEL PACKAGING W/ HEAT SINK IN SEPARATE TRAY

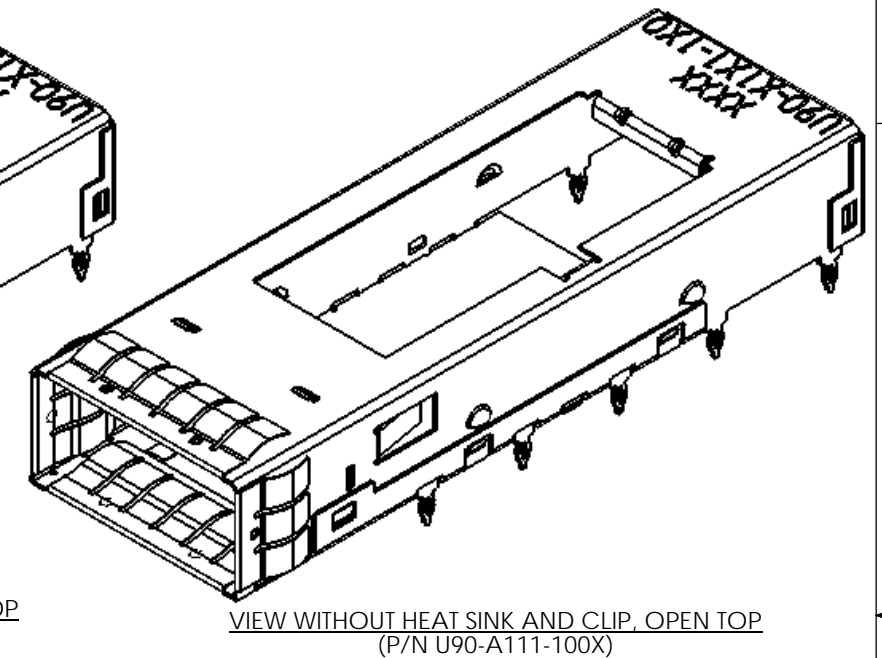
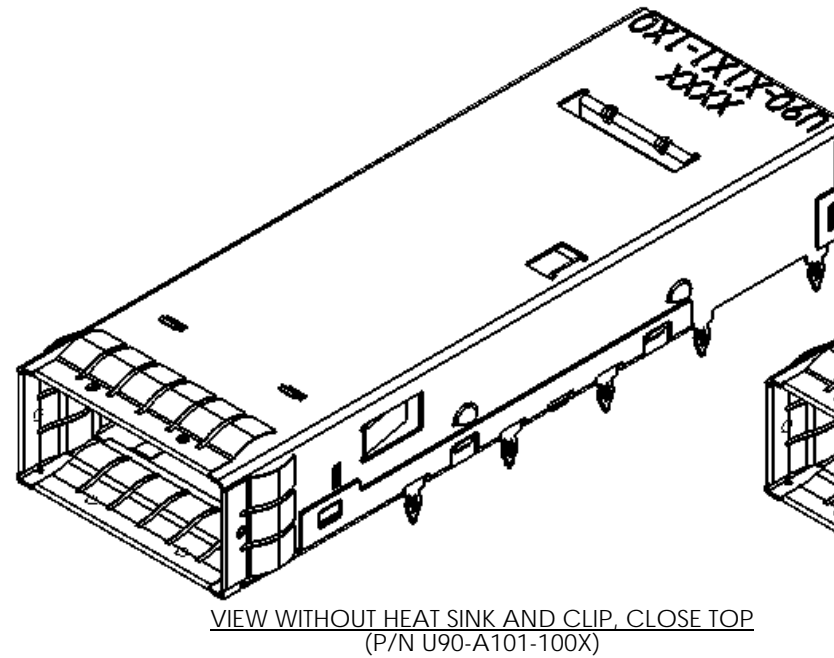
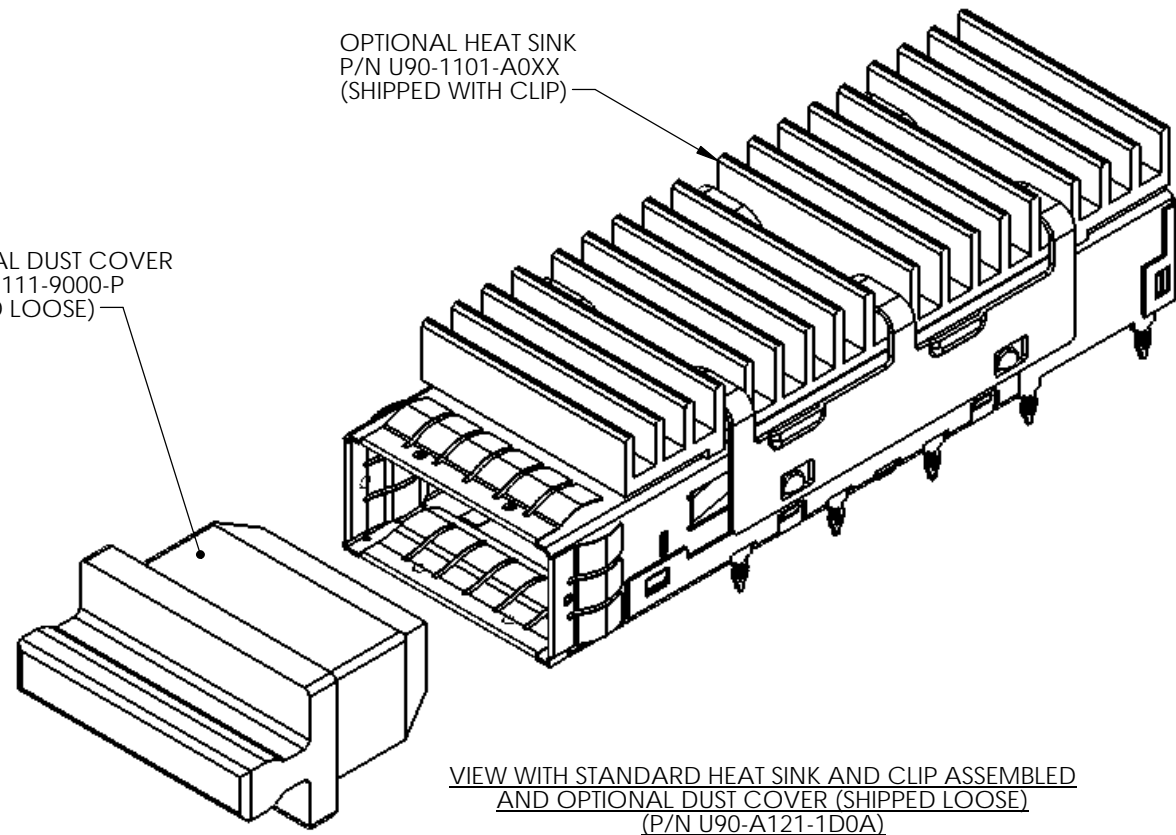
**OPTIONAL DUST COVER**

- 0 = WITHOUT DUST COVER
- D = WITH DUST COVER (SHIPPED LOOSE PIECE)

REVISIONS				
REV.	ECN	DESCRIPTION	DATE	APPROVED
F		NOTE ADDED "FOR PIN STYLE REFER TO U90-H1X1-1XXX"	JAN 12/09	ZLJ
G		REAR STOP MODIFIED	SEP 18/09	ZLJ
H		ADD PIN LENGTH DIMENSION 2.50	APR 10/13	ZLJ
J		NEW PART NUMBER U90-A101-1001 ADDED	OCT 06/13	ZLJ

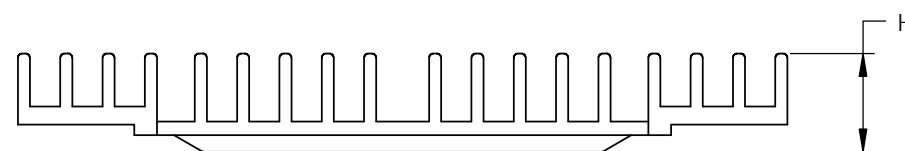
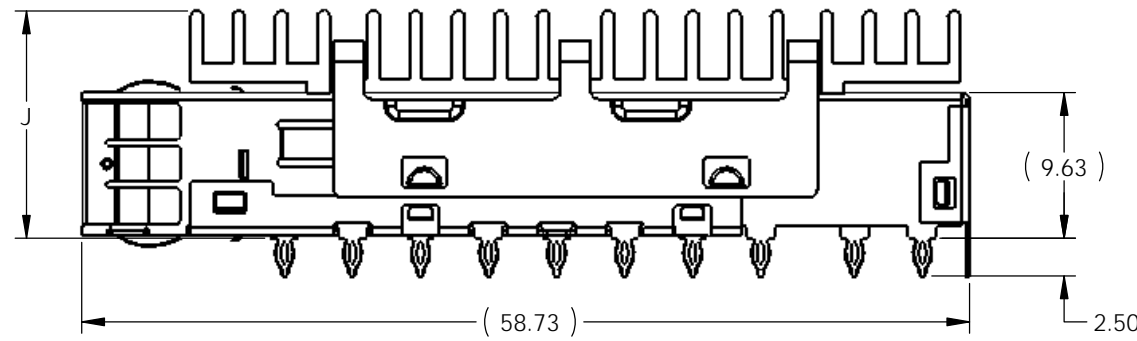
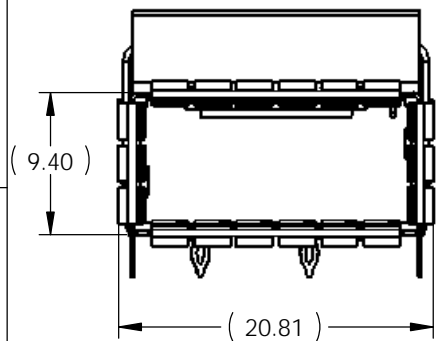
OPTIONAL HEAT SINK  
P/N U90-1101-A0XX  
(SHIPPED WITH CLIP)

OPTIONAL DUST COVER  
P/N U79-111-9000-P  
(SHIPPED LOOSE)



**NOTES:**

- CAGE AND EMI SPRINGS MATERIAL: COPPER ALLOY  
HEAT SINK CLIP MATERIAL: STEEL ALLOY  
HEAT SINK MATERIAL: ALUMINUM  
CAGE PLATING: 3.81µm [100µ"] MIN. NICKEL.
- CAGE IS INTENDED TO BE COMPLIANT WITH THE QUAD SMALL FORM-FACTOR PLUGGABLE (QSFP) TRANSCEIVER SPECIFICATION REVISION 1.0.
- HEAT SINK, HEAT SINK CLIP AND DUST COVER ARE SHIPPED LOOSE PIECE.



VIEW OF HEAT SINK

**DO NOT SCALE DRAWING**

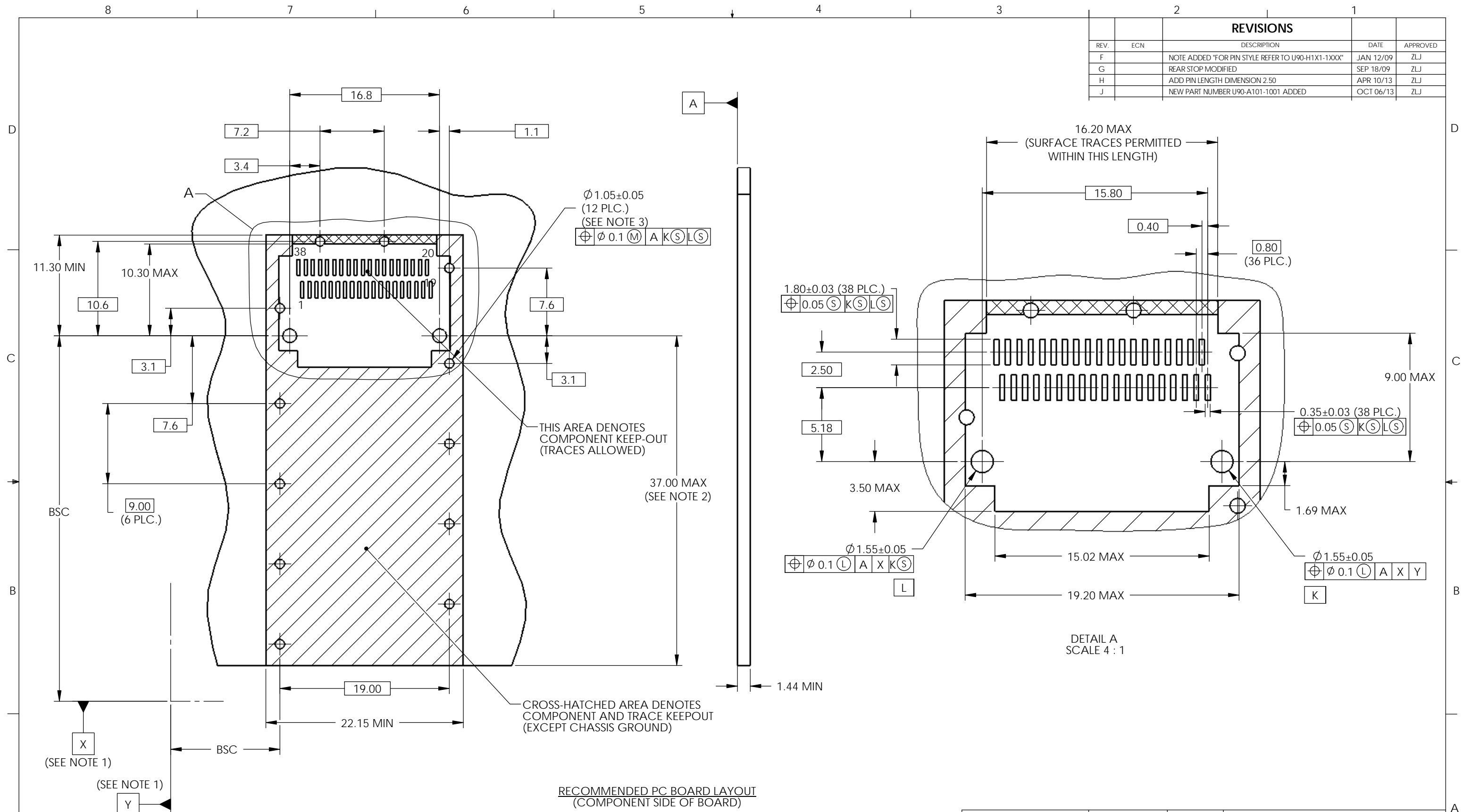
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PART NUMBER	DIM "J"	DIM "H"	HEAT SINK & CLIP OPTION
U90-A121-1X0X	15.03	6.50	IF HEAT SINK AND CLIP ARE SHIPPED LOOSE SEE DRAWING P-U90-1101-AXX0-BP
U90-A131-1X0X	12.73	4.20	
U90-A141-1X0X	22.03	13.50	
U90-A1A1-1X0X	15.03	6.50	
U90-A1B1-1X0X	12.73	4.20	
U90-A1C1-1X0X	22.03	13.50	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE:		APPROVALS		DATE		Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenol-highspeed.com				
DECIMALS	ANGLES	DRAWN	DESIGNED	CHECKED	DATE					
X.X ± 0.15	± 0.5°	M.LONG	M.LONG	J.SI	DEC04/06	OSFP CAGE ASSEMBLY				
X.XX ± 0.10										
MATERIAL AND FINISH		QA APPD		IE APPD		SIZE	DWG. NO.	REV.		
SEE NOTE 1						A3	P-U90-A1X1-1X0X	J		
REF.		DWG APPD		SCALE		PROJECT		SHEET		
		A.GREEN		2:1				1 OF 4		
CODE IDENT. NO.	03554	DEC04/06								

REVISIONS				
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F		NOTE ADDED *FOR PIN STYLE REFER TO U90-H1X1-1XXX*	JAN 12/09	ZLJ
G		REAR STOP MODIFIED	SEP 18/09	ZLJ
H		ADD PIN LENGTH DIMENSION 2.50	APR 10/13	ZLJ
J		NEW PART NUMBER U90-A101-1001 ADDED	OCT 06/13	ZLJ



RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE OF BOARD)

DETAIL A  
SCALE 4 : 1

- NOTES:
- DATUMS X AND Y ESTABLISHED BY CUSTOMER'S FUDUCIAL.
  - LOCATION OF EDGE OF PCB IS APPLICATION SPECIFIC.
  - FINISHED HOLE SIZE.

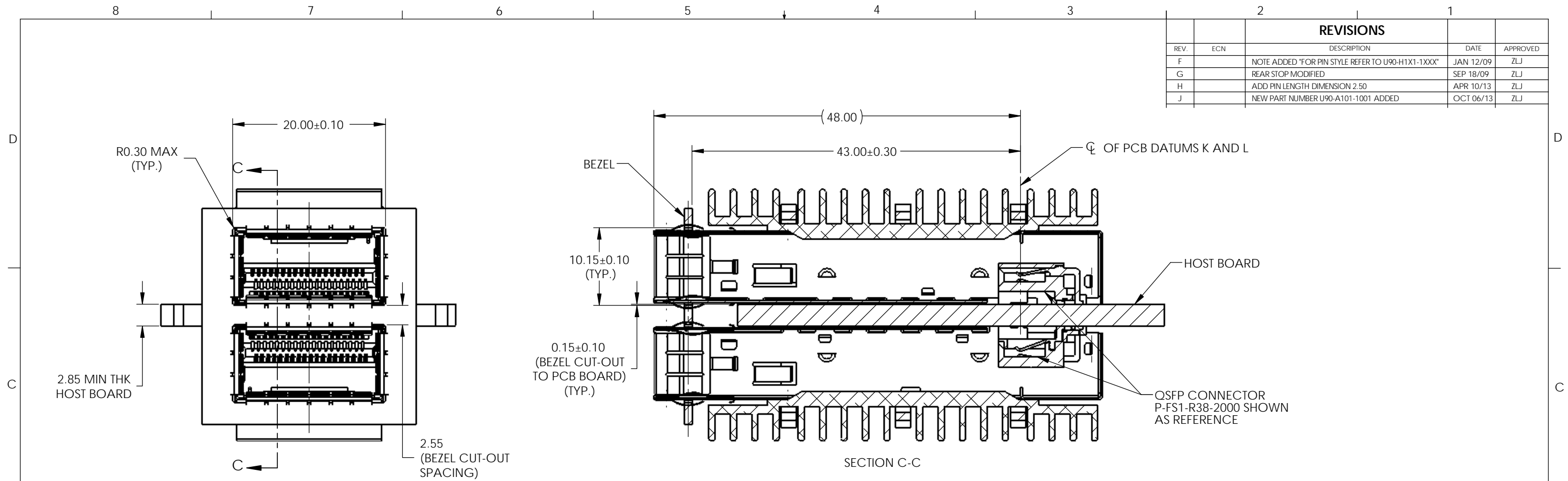
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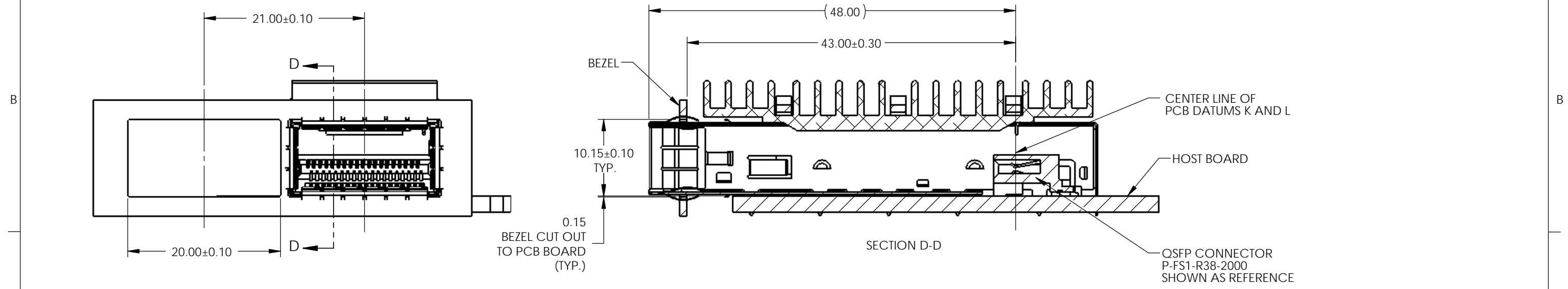
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE:  DECIMALS      ANGLES X.X ± 0.15      ± 0.5° X.XX ± 0.10	<b>APPROVALS</b>	<b>DATE</b>	<b>Amphenol High Speed Interconnects</b> <small>A Division of Amphenol Corp. www.amphenol-highspeed.com</small>		
	DRAWN M.LONG	DEC04/06			
	DESIGNED M.LONG	DEC04/06			
	CHECKED J.SI	DEC04/06			
MATERIAL AND FINISH SEE NOTE 1	QA APPD		TITLE <b>QSFP CAGE ASSEMBLY</b>		
REF.	IE APPD				
CODE IDENT. NO. 03554	DWG APPD A.GREEN	DEC04/06			
			SIZE A3	DWG. NO. P-U90-A1X1-1X0X	REV. J
			SCALE 5:2	PROJECT	SHEET 2 OF 4



REVISIONS				
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G		REAR STOP MODIFIED	SEP 18/09	ZLJ
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RECOMMENDED BELLY-TO-BELLY MOUNTING DESIGN



RECOMMENDED SINGLE SIDED MOUNTING DESIGN

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DECIMALS	ANGLES	DRAWN	M.LONG	DEC04/06	TITLE <b>QSFP CAGE ASSEMBLY</b>	
X.X ± 0.15	± 0.5°	DESIGNED	M.LONG	DEC04/06		
X.XX ± 0.10		CHECKED	J.SI	DEC04/06		
MATERIAL AND FINISH		QA APPD				
SEE NOTE 1		IE APPD			SIZE A3	DWG. NO P-U90-A1X1-1X0X
REF.		DWG APPD	A.GREEN	DEC04/06	SCALE 2:1	PROJECT
CODE IDENT. NO.	03554				SHEET	4 OF 4