

AMPHENOL PART NUMBER CONFIGURATION

U90 - H 1 X 1 - 1 X X X

HEAT SINK OPTION

- S = PIN STYLE HEAT SINK (NICKEL PLATED) AND CLIP (H=6.5mm: SAN HEIGHT)
- 5 = PIN STYLE HEAT SINK (NICKEL PLATED) AND CLIP (H=4.2mm: PCI HEIGHT)
- 6 = PIN STYLE HEAT SINK (NICKEL PLATED) AND CLIP (H=13.5mm: TALL)
- 7 = PIN STYLE HEAT SINK (NICKEL PLATED) AND CLIP (H=13.5mm: TALL)
- D = PIN-FIN HEAT SINK (ANODIZED, BLACK) AND CLIP (H=6.5mm: SAN HEIGHT)
- F = PIN-FIN HEAT SINK (ANODIZED, BLACK) AND CLIP (H=4.2mm: PCI HEIGHT)
- E = PIN-FIN HEAT SINK (ANODIZED, BLACK) AND CLIP (H=13.5mm: TALL)
- N = PIN-FIN HEAT SINK (NICKEL PLATED) AND CLIP (H=6.5mm: SAN HEIGHT)
- P = PIN-FIN HEAT SINK (NICKEL PLATED) AND CLIP (H=4.2mm: PCI HEIGHT)
- R = PIN-FIN HEAT SINK (NICKEL PLATED) AND CLIP (H=13.5mm: TALL)

NOTE: FOR DIMENSION "H" SEE SHEET 2

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

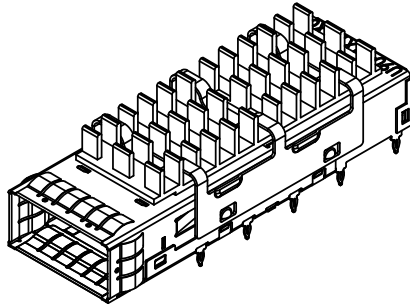
LIGHT PIPE OPTION

- 0 = WITHOUT LIGHT PIPE
- 1 = WITH DUAL ROUND LIGHT PIPE INSTALLED
- 3 = WITH SQUARE LIGHT PIPE INSTALLED (SEE SHEET 3 & 7 FOR DETAILS)
- 7 = WITH SINGLE ROUND LIGHT PIPE INSTALLED

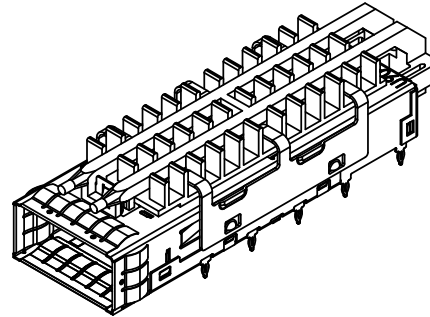
OPTIONAL DUST COVER

- 0 = WITHOUT DUST COVER
- D = WITH DUST COVER SHIPPED AS LOOSE PIECE

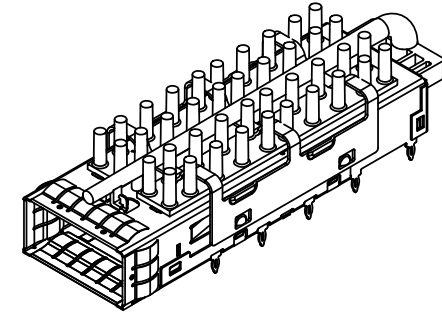
REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



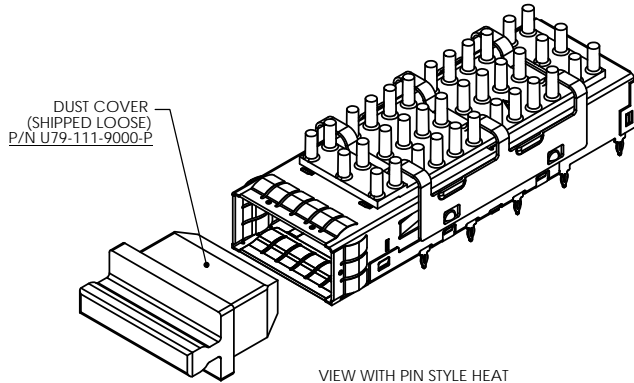
VIEW WITH PIN-FIN STYLE HEAT SINK AND CLIP ASSEMBLED (P/N U90-H1D1-100A)



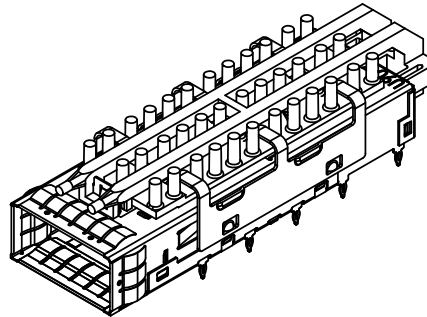
VIEW WITH PIN-FIN STYLE HEAT SINK, CLIP AND LIGHT PIPE ASSEMBLED (P/N U90-H1D1-101A)



VIEW WITH PIN STYLE HEAT SINK, CLIP AND LIGHT PIPE ASSEMBLED (P/N U90-H151-107A)



VIEW WITH PIN STYLE HEAT SINK AND CLIP ASSEMBLED AND DUST COVER (SHIPPED LOOSE) (P/N U90-H151-1D0A)



VIEW WITH PIN STYLE HEAT SINK, CLIP AND LIGHT PIPE ASSEMBLED (P/N U90-H151-101A)

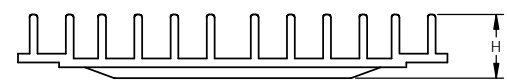
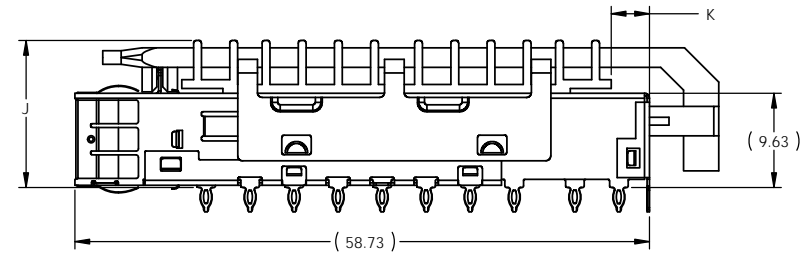
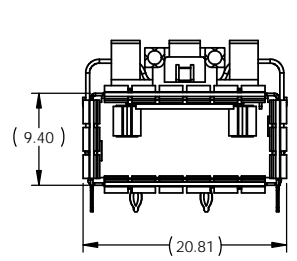
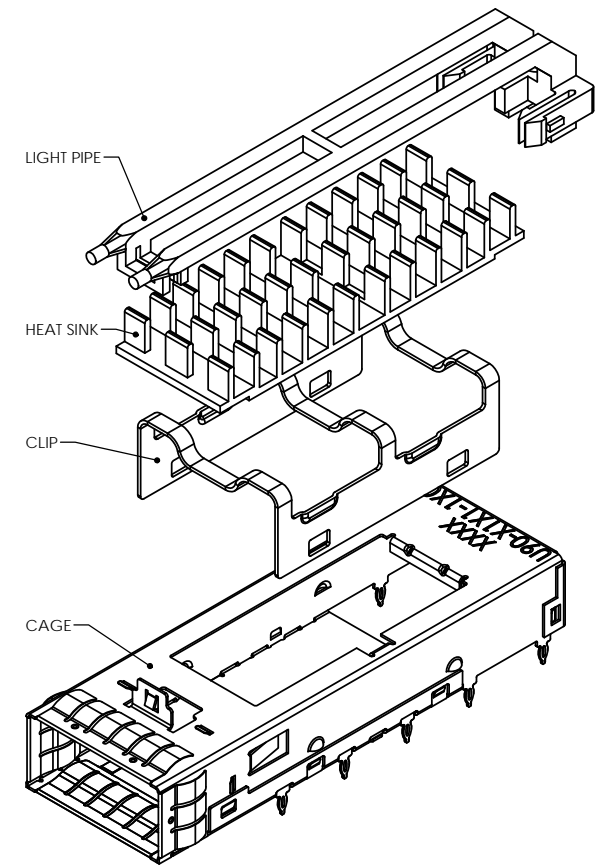
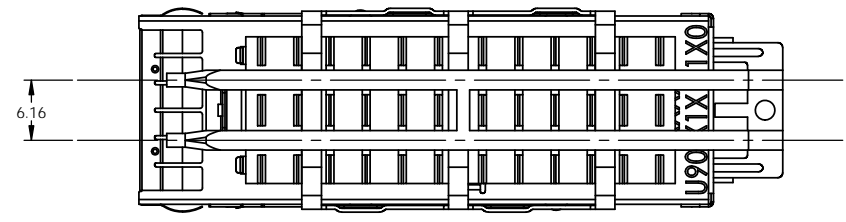


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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE: DIGITALS ANGLES X.X ± 0.15 ± 0.5° X.XX ± 0.10	APPROVALS	DATE	Amphenol High Speed Interconnects A Division of Amphenol Corp. www.amphenolhighspeed.com			
	DRAWN ZLJ	SEP 24/08				
	DESIGNED ZLJ		SEP 24/08	TITLE OSFP CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE		
	CHECKED J.SI		SEP 24/08			
MATERIAL AND FINISH		SEE NOTE 1				
REF.	E APPD		SIZE A3	DWG. NO. P-U90-H1X1-1XXX	REV. J	
CODE IDENT. NO. 03554	DWG APPD A.GREEN	SEP 24/08	SCALE 2:1	PROJECT	SHEET 1 OF 8	

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



PART NUMBER	DIM "J"	DIM "H"	DIM "K"
U90-H151-1XXX	15.03	6.50	3.90
U90-H161-1XXX	12.73	4.20	
U90-H171-1XXX	22.03	13.50	
U90-H1D1-1XXX	15.03	6.50	
U90-H1E1-1XXX	12.73	4.20	
U90-H1F1-1XXX	22.03	13.50	
U90-H1N1-1XXX	15.03	6.50	
U90-H1P1-1XXX	12.73	4.20	
U90-H1R1-1XXX	22.03	13.50	

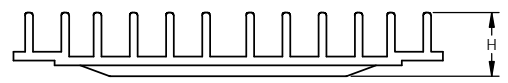
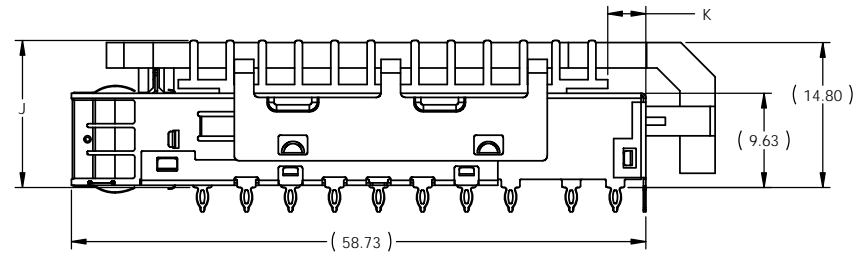
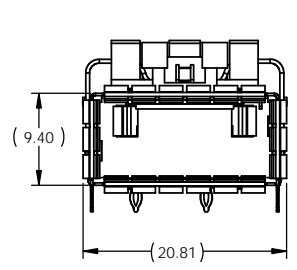
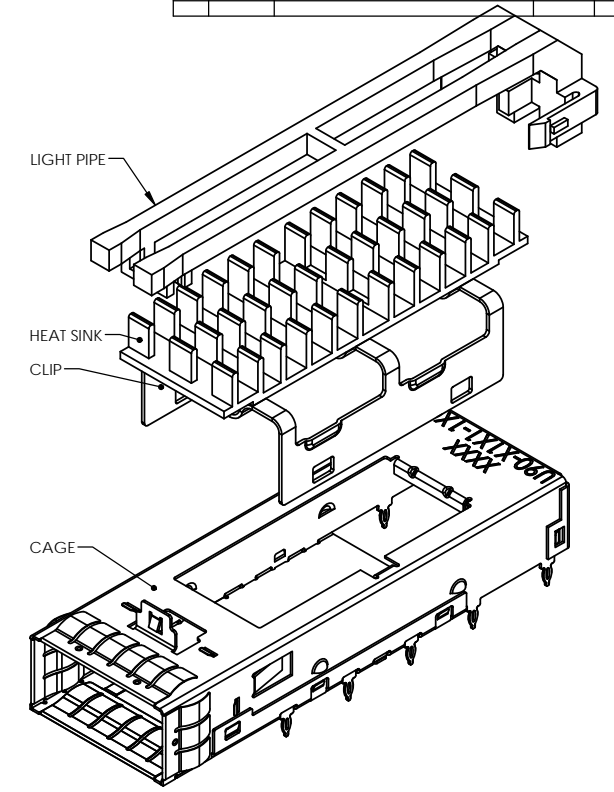
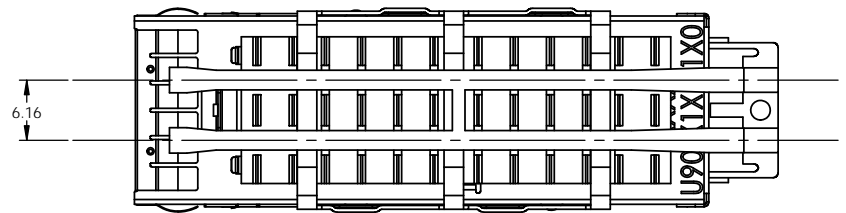
- NOTES:
- CAGE AND EMI SPRINGS MATERIAL: COPPER ALLOY
CAGE PLATING: 2.54µm [100µ"] MIN. NICKEL.
HEAT SINK CLIP MATERIAL: STEEL ALLOY
HEAT SINK MATERIAL: ALUMINUM
LIGHT PIPE MATERIAL: GE LEXAN CLEAR OPTICAL GRADE
 - CAGE IS INTENDED TO BE COMPLIANT WITH THE QUAD SMALL FORM-FACTOR PLUGGABLE (QSFP) TRANSCEIVER SPECIFICATION REVISION 1.0.

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	DRAWN ZLJ	SEP 24/08	TITLE		
	DESIGNED ZLJ	SEP 24/08	OSFP CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE		
	CHECKED J.SI	SEP 24/08	SCALE		
	CA APPD		SIZE A3	DWG. NO. P-U90-H1X1-1XXX	REV. J
	E APPD		SCALE 2:1	PROJECT	SHEET 2 OF 8
	DWG APPD A.GREEN	SEP 24/08			

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



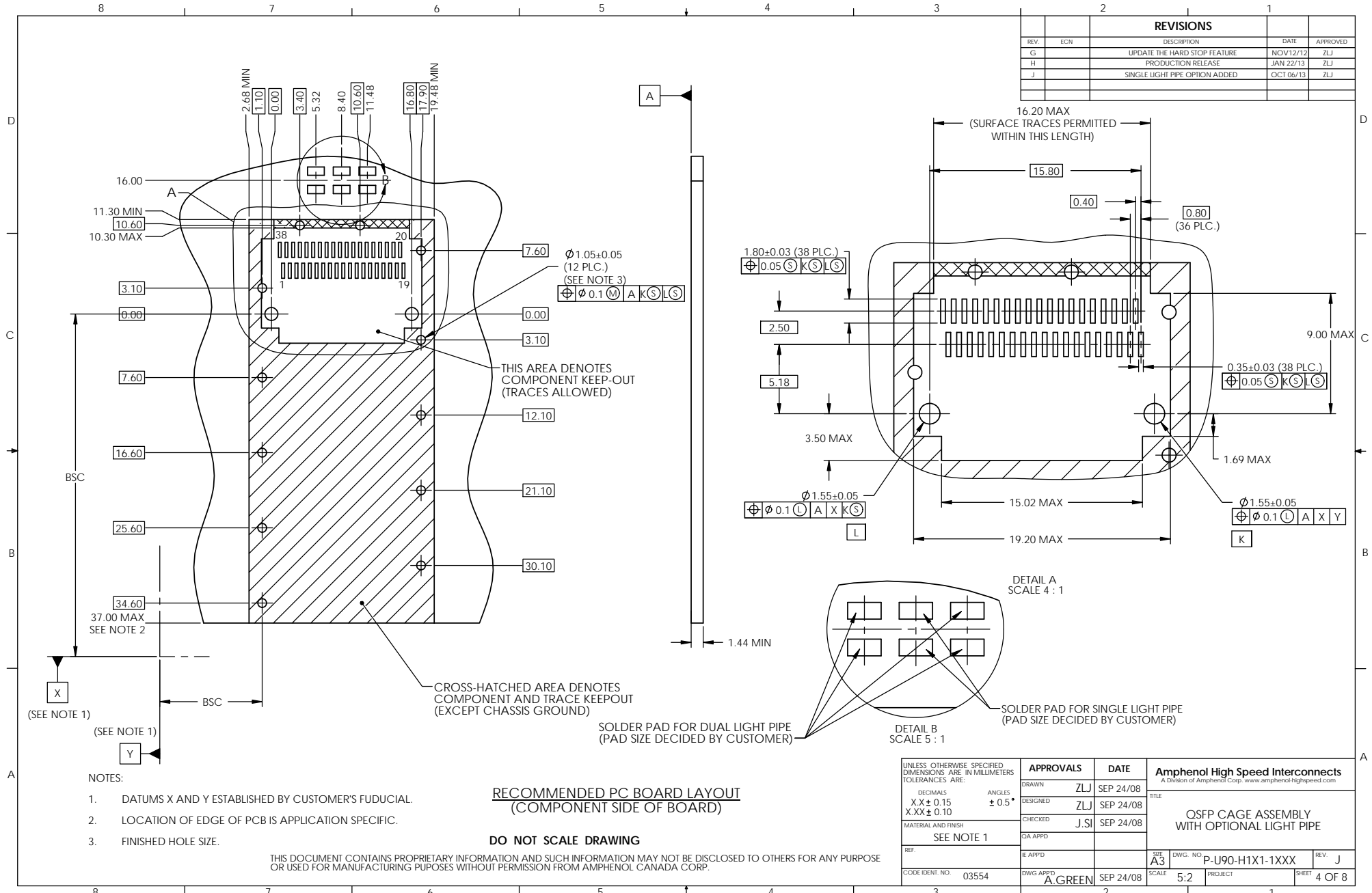
NOTE:
1. FOR DIMENSION "H", "J" AND "K" SEE SHEET 2.

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DIGITALS X.X ± 0.15 X.XX ± 0.10		ANGLES ± 0.5°		DRAWN	ZLJ	SEP 24/08	TITLE	
MATERIAL AND FINISH		DESIGNED		ZLJ	SEP 24/08	OSFP CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE		
SEE NOTE 1		CHECKED		J.SI	SEP 24/08	CAGE		
REF.	E APPD	DIA APPD		SCALE		SIZE	DWG. NO.	REV.
CODE IDENT. NO.	DWG APPD	A.GREEN		SEP 24/08	2:1	A3	P-U90-H1X1-1XXX	J
03554							PROJECT	SHEET
								3 OF 8

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



2.68 MIN
1.10
0.00
3.40
5.32
8.40
10.60
11.48
16.80
17.90
19.48 MIN

16.00
11.30 MIN
10.60
10.30 MAX

3.10
0.00
7.60
16.60
25.60
34.60
37.00 MAX
SEE NOTE 2

7.60
0.00
3.10
12.10
21.10
30.10

1.44 MIN

16.20 MAX
(SURFACE TRACES PERMITTED WITHIN THIS LENGTH)

15.80
0.40
0.80
(36 PLC.)

1.80±0.03 (38 PLC.)
⊕0.05 (S) K (S) L (S)

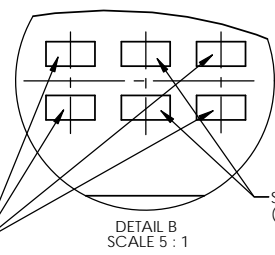
2.50
5.18
3.50 MAX

9.00 MAX
0.35±0.03 (38 PLC.)
⊕0.05 (S) K (S) L (S)

15.02 MAX
19.20 MAX
1.69 MAX

⊕1.55±0.05
⊕0.1 (L) A X K (S)

⊕1.55±0.05
⊕0.1 (L) A X Y



DETAIL A
SCALE 4 : 1

DETAIL B
SCALE 5 : 1

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

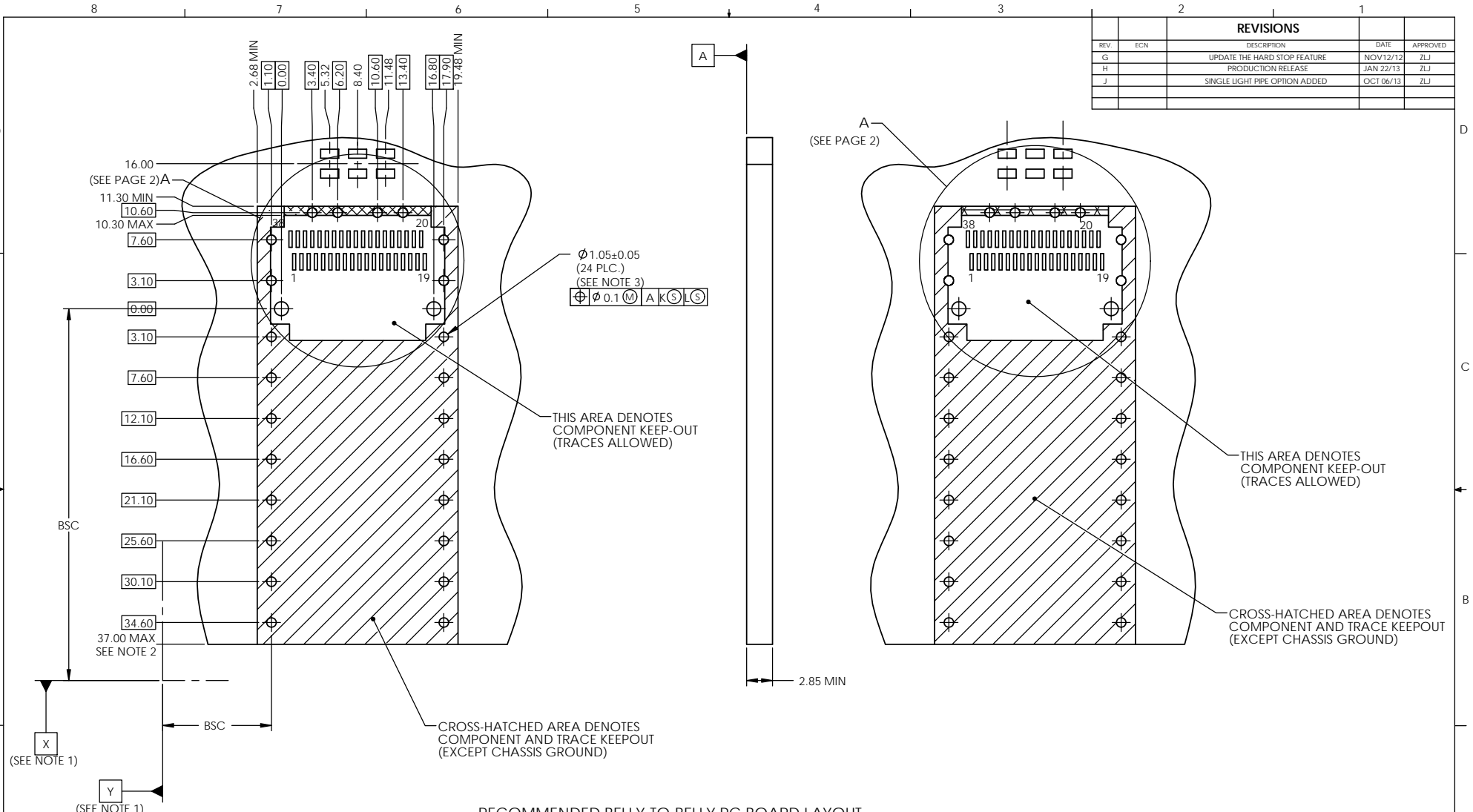
**RECOMMENDED PC BOARD LAYOUT
(COMPONENT SIDE OF BOARD)**

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	DRAWN ZLJ	SEP 24/08	TITLE	
	DESIGNED ZLJ	SEP 24/08	QSPF CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE	
	CHECKED J.SI	SEP 24/08	SIZE A3 DWG. NO. P-U90-H1X1-1XXX SCALE 5:2 PROJECT SHEET 4 OF 8	
	DATE	REV		
	SEP 24/08	J		
	APPROVED A.GREEN			

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



**RECOMMENDED BELLY-TO-BELLY PC BOARD LAYOUT
(COMPONENT SIDE OF BOARD)**

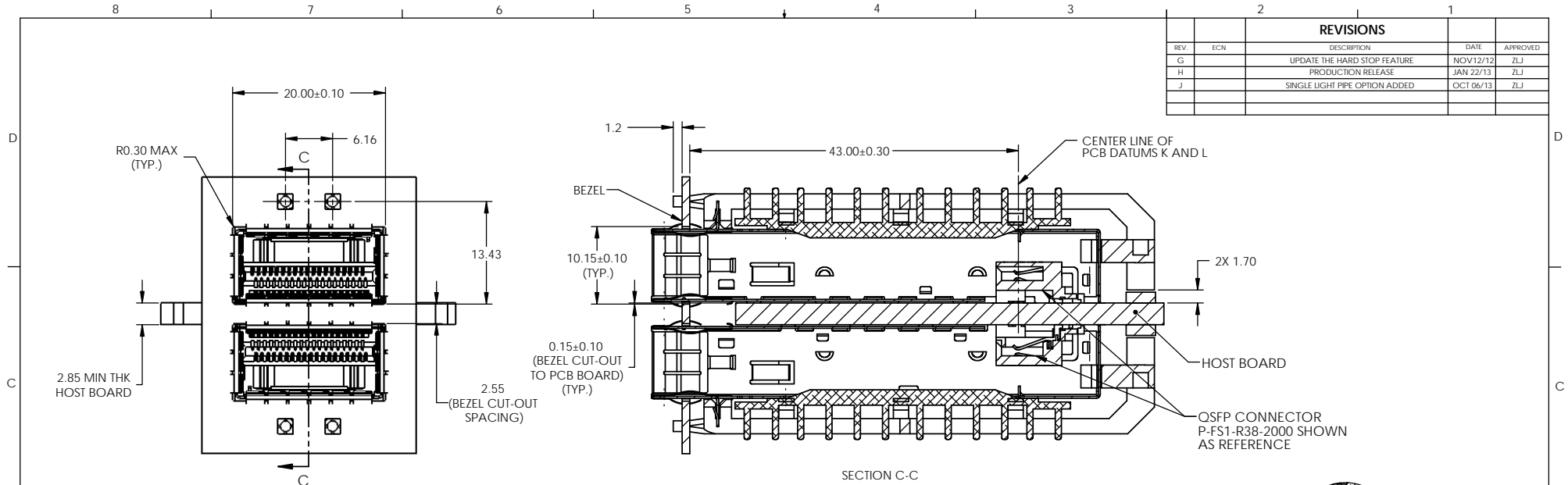
- NOTES:
- DATUMS X AND Y ESTABLISHED BY CUSTOMER'S FUDICIAL.
 - LOCATION OF EDGE OF PCB IS APPLICATION SPECIFIC.
 - FINISHED HOLE SIZE.

DO NOT SCALE DRAWING

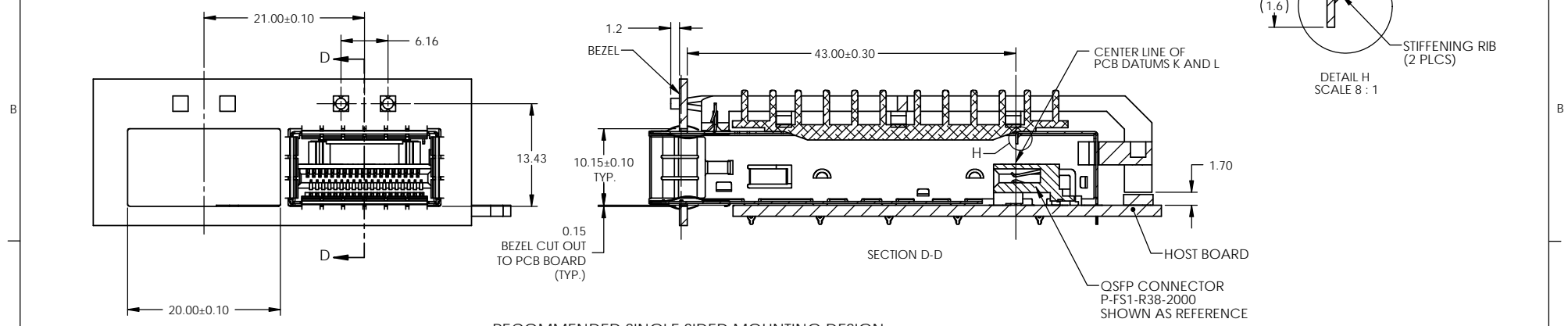
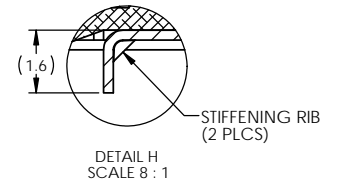
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	DRAWN ZLJ	SEP 24/08	TITLE	
	DESIGNED ZLJ	SEP 24/08	OSFP CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE	
	CHECKED J.SI	SEP 24/08	REV J	
	EA APPD		SIZE A3	DWG. NO. P-U90-H1X1-1XXX
	E APPD		SCALE 5:2	PROJECT
	DWG APPD A.GREEN	SEP 24/08	SHEET 5 OF 8	

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



RECOMMENDED BELLY-TO-BELLY MOUNTING DESIGN



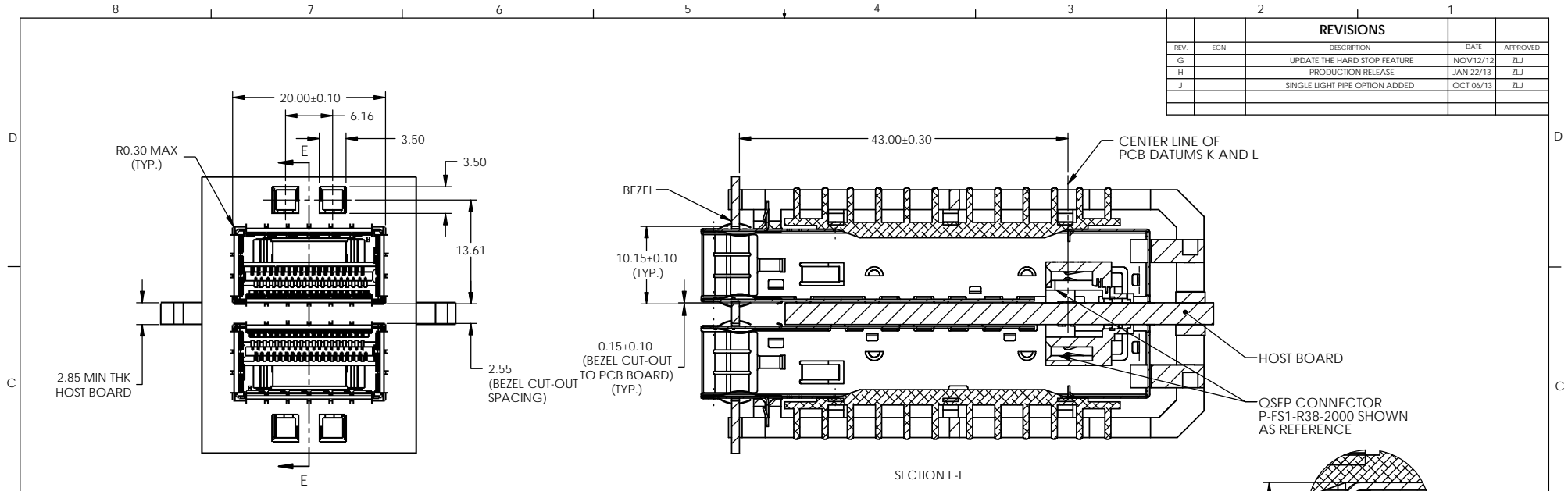
RECOMMENDED SINGLE SIDED MOUNTING DESIGN

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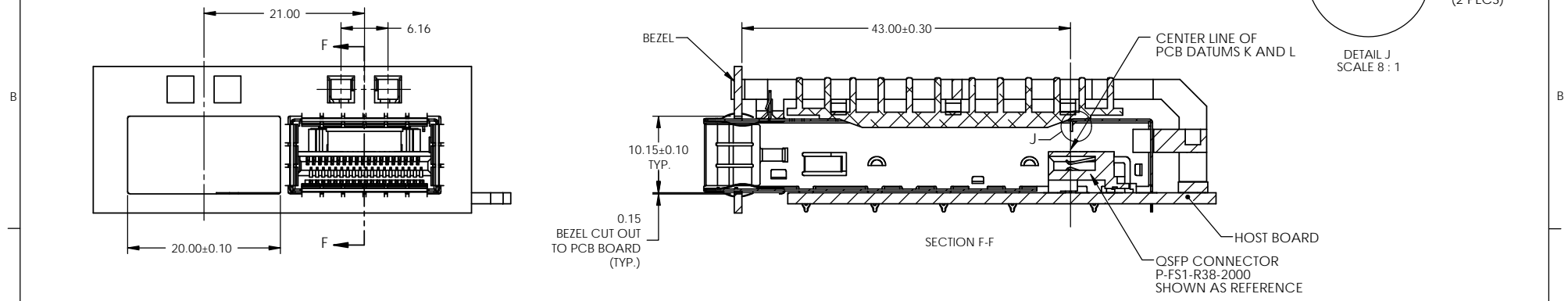
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	DRAWN ZLJ	SEP 24/08			
	DESIGNED ZLJ	SEP 24/08	SIZE A3	DWG. NO. P-U90-H1X1-1XXX	REV. J
	CHECKED J.SI	SEP 24/08	SCALE 2:1	PROJECT	SHEET 6 OF 8
	<small>E. APPD.</small> A.GREEN	SEP 24/08			

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
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RECOMMENDED BELLY-TO-BELLY MOUNTING DESIGN



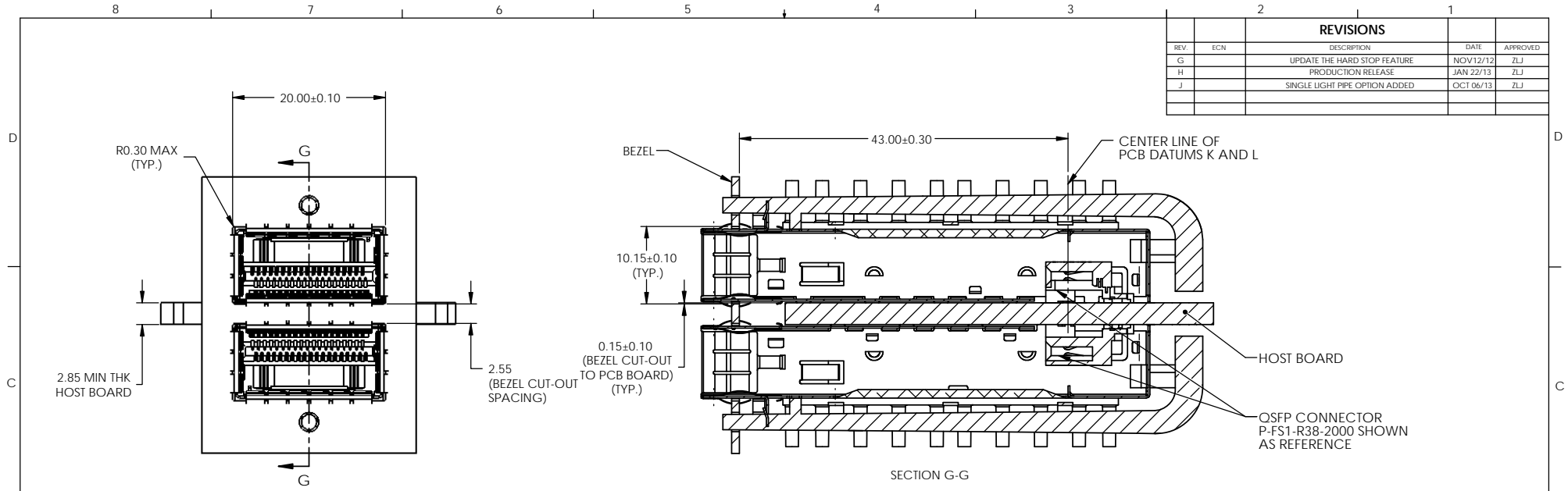
RECOMMENDED SINGLE SIDED MOUNTING DESIGN

DO NOT SCALE DRAWING

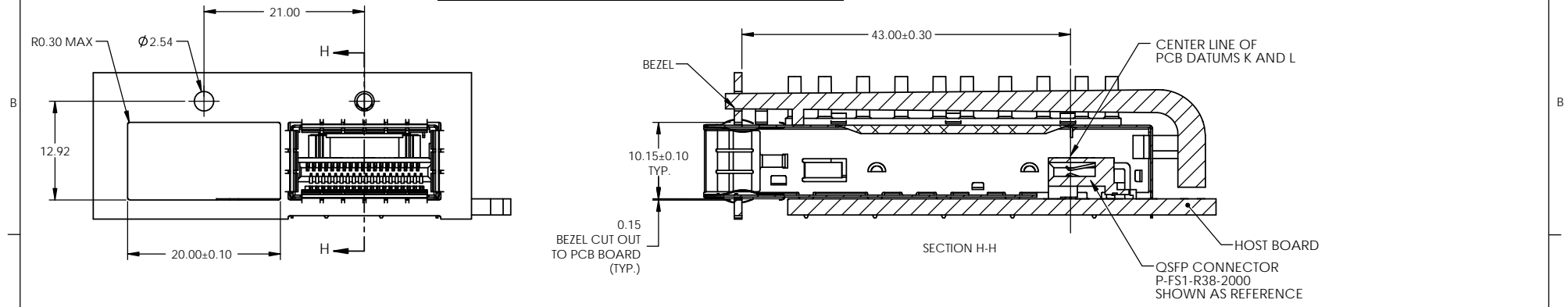
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	DRAWN: ZLJ	SEP 24/08		
	DESIGNED: ZLJ	SEP 24/08	QSFP CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE	
	CHECKED: J.SI	SEP 24/08	SIZE: A3	DWG. NO: P-U90-H1X1-1XXX
REF:	E APPD:		SCALE: 2:1	PROJECT:
CODE IDENT NO: 03554	DWG APPD: A.GREEN	SEP 24/08		SHEET 7 OF 8

REVISIONS				
REV	ECN	DESCRIPTION	DATE	APPROVED
G		UPDATE THE HARD STOP FEATURE	NOV12/12	ZLJ
H		PRODUCTION RELEASE	JAN 22/13	ZLJ
J		SINGLE LIGHT PIPE OPTION ADDED	OCT 06/13	ZLJ



RECOMMENDED BELLY-TO-BELLY MOUNTING DESIGN



RECOMMENDED SINGLE SIDED MOUNTING DESIGN

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	DESIGNED ZLJ	SEP 24/08	QSFP CAGE ASSEMBLY WITH OPTIONAL LIGHT PIPE			
	CHECKED J.SI	SEP 24/08				
MATERIAL AND FINISH	SEE NOTE 1	SCALE	SIZE	DWG. NO.	REV.	
REF.		SCALE	A3	P-U90-H1X1-1XXX	J	
CODE IDENT. NO.	03554	DWG. APP'D	A.GREEN	SEP 24/08	PROJECT	SHEET
						8 OF 8

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «**JONHON**», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «**FORSTAR**».



JONHON

«**JONHON**» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«**FORSTAR**» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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