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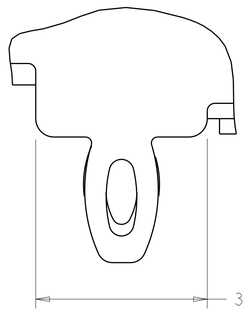
LOC	DIST
GP	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	I	PRELIMINARY	23FEB2012	KS	AC
	A	REVISED PER ECR-12-006970	17APR2012	KS	AC
	B	REVISED PER ECO-15-005721	4AUG2015	RG	SH



DETAIL S △12
SCALE 20:1

△1 MATERIALS:
CAGE ASSEMBLY: NICKEL SILVER, 0.25 THICK
EMI SPRINGS: COPPER ALLOY
EMI GASKET: BURRER FOAM
FRONT FLANGE: ZINC ALLOY
HEAT SINK: ALUMINUM
HEAT SINK CLIP: STAINLESS STEEL

△2 PITCH BETWEEN PORTS OF ONE 1X3 CAGE ASSEMBLY.

△3 SPACING BETWEEN CAGES ON THE SAME PC BOARD, TO BE SPECIFIED BY CUSTOMER, MUST COMPLY WITH MINIMUM DIMENSIONS SHOWN.

△4 REFERENCE APPLICATION SPEC 114-13218 FOR RECOMMENDED DRILL HOLE DIAMETER AND PLATING THICKNESS.

△5 DATUMS AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.

△6 DIMENSION C IS THE NOMINAL THICKNESS OF CUSTOMER SUPPLIED PC BOARD.
MINIMUM SINGLE SIDED PC BOARD THICKNESS: 1.45mm
MINIMUM DOUBLE SIDED PC BOARD THICKNESS: 2.2mm PER QSFP

△7 HEAT SINKS AND CLIPS SHIPPED ASSEMBLED TO CAGE ASSEMBLY. CAGE ASSEMBLY MAY BE PRESSED INTO THE PCB AS SHIPPED.

△8 DATUM -A- IS TOP SURFACE OF PC BOARD.

△9 DIMENSION APPLIES WITH MODULE INSERTED IN CAGE.

△10 UNPLATED THRU HOLE.

11. MATES WITH QSFP MSA COMPATIBLE TRANSCEIVER.

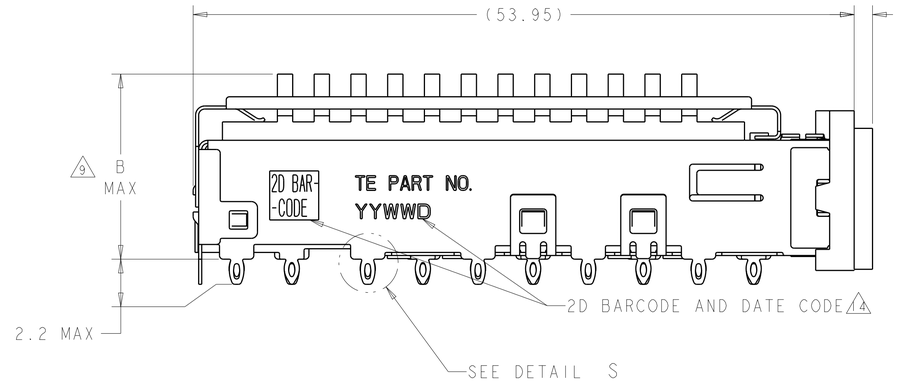
△12 SURFACE TRACES PERMITTED WITHIN THIS AREA EXCEPT WHERE CAGE STANDOFFS, SHOWN IN DETAIL S, CONTACT PC BOARD.

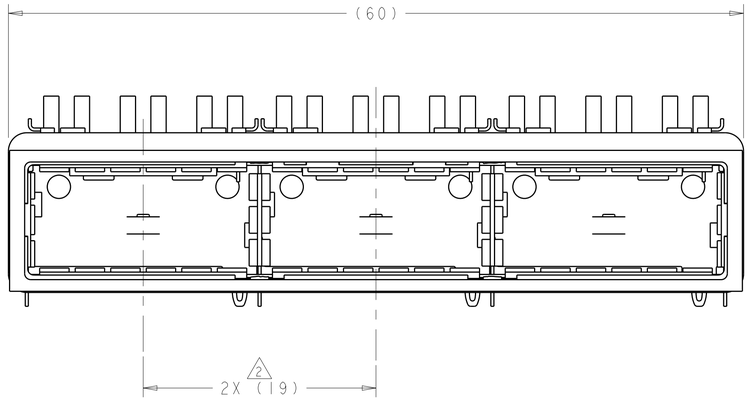
△13 BASELINE FOR THESE DIMENSIONS IS THE CENTER OF COMPLIANT PIN HOLE.

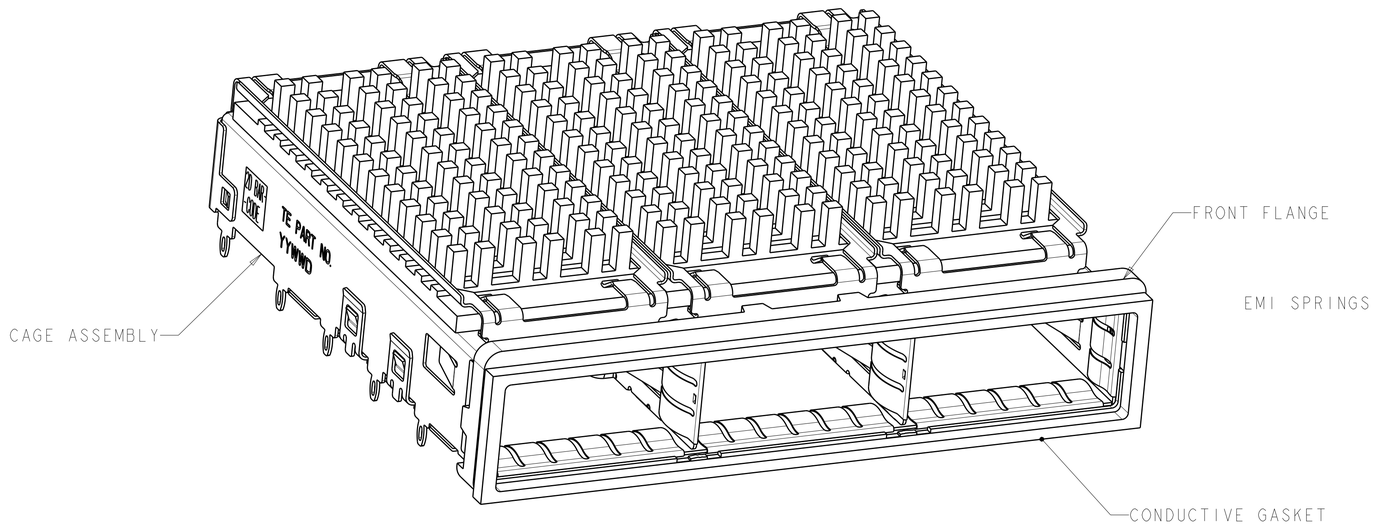
△14 2D BARCODE AND DATE CODE (YYWWD) MARKED ON SIDE OF CAGE.

△15 REFERENCE APP SPEC 114-13218 FOR GASKET THICKNESS CALCULATION.

△16 FINISH:
EMI SPRINGS: 2µm MINIMUM TIN
FRONT FLANGE: 3µm MINIMUM TIN OVER 1.27µm MINIMUM NICKEL OVER 5.08µm MINIMUM COPPER
HEAT SINK: NICKEL.







23.0	NETWORKING	2174769-3
16.0	SAN	2174769-2
13.7	PCI	2174769-1
B	HEAT SINK PROFILE	PART NUMBER

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DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±-
1 PLC ±0.1
2 PLC ±0.1
3 PLC ±0.013
4 PLC ±0.0001
ANGLES ±-

MATERIAL - △1
FINISH △16

DWN KINSEN SUN 23FEB2012
CHK DENNY ZHU 23FEB2012
APVD ALEX CAI 23FEB2012
PRODUCT SPEC 108-2286
APPLICATION SPEC 114-13218
WEIGHT -

TE Connectivity

NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS,CONDUCTIVE GASKET, QSFP

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-2174769	-

CUSTOMER DRAWING | SCALE 4:1 | SHEET 1 OF 5 | REV B

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LOC	DIST
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REVISIONS

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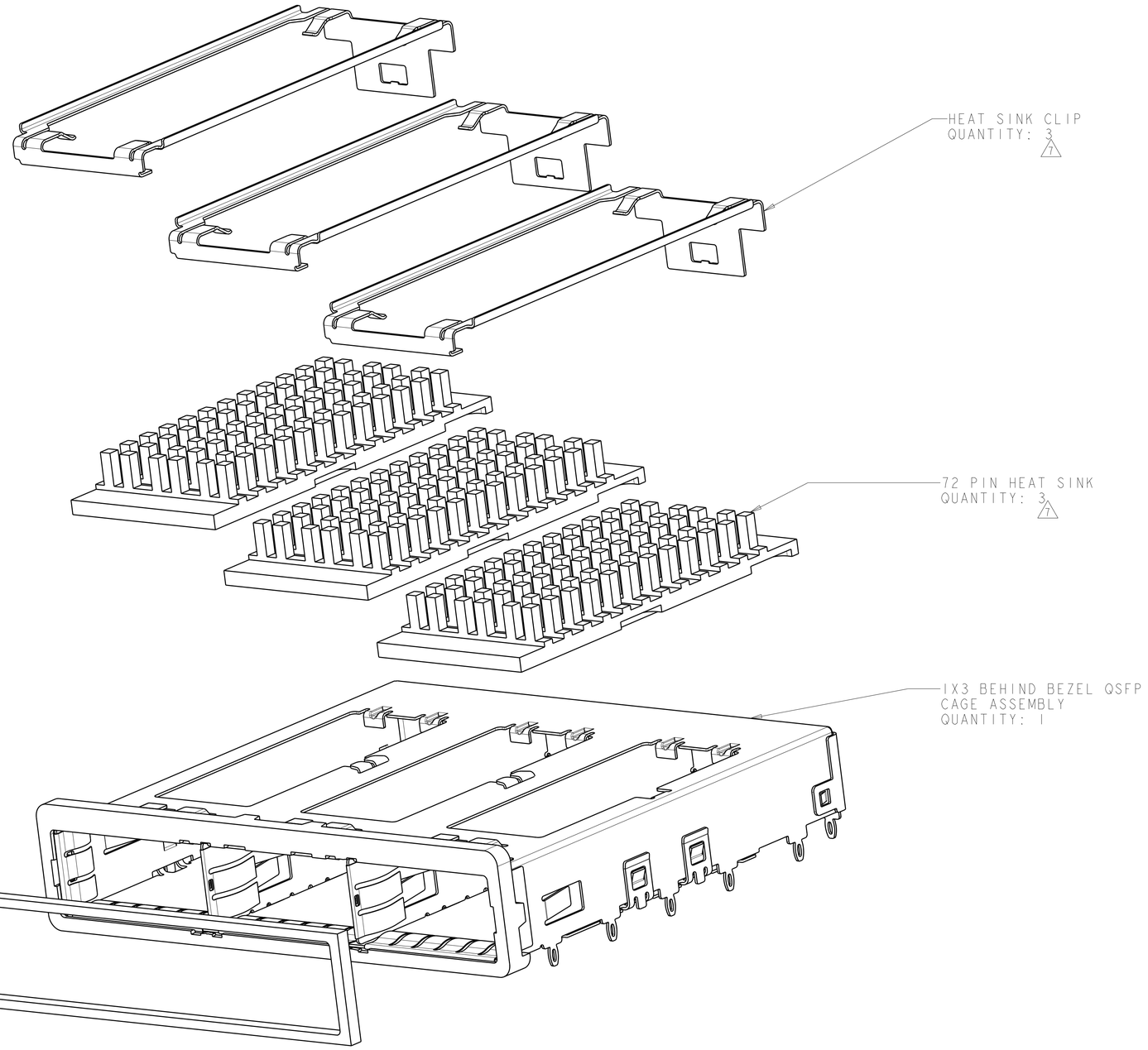
	-	SEE SHEET 1	-	-	-



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ANGLES ±-

MATERIAL -
-

FINISH -
-

DWN KINSEN SUN 23FEB2012
CHK DENNY ZHU 23FEB2012
APVD ALEX CAI 23FEB2012
PRODUCT SPEC 108-2286
APPLICATION SPEC 114-13218
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TE Connectivity

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SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
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CUSTOMER DRAWING | SCALE 4:1 | SHEET 2 OF 5 | REV B

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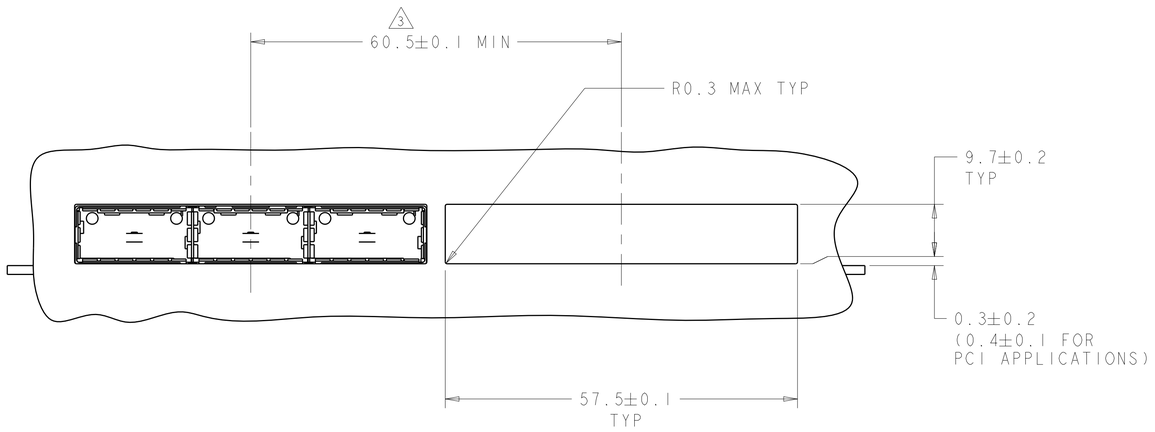
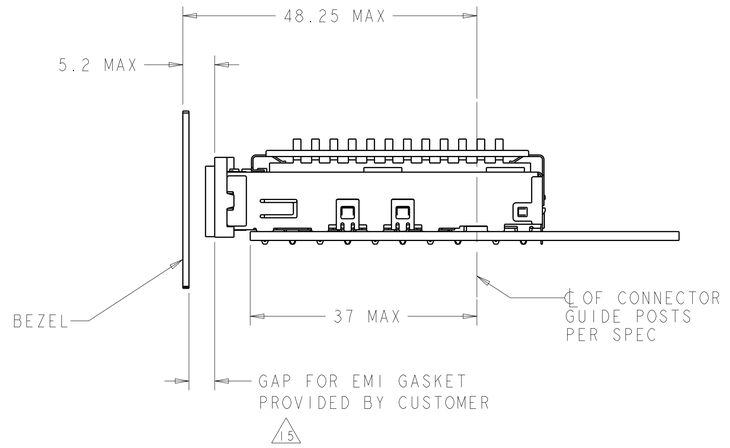
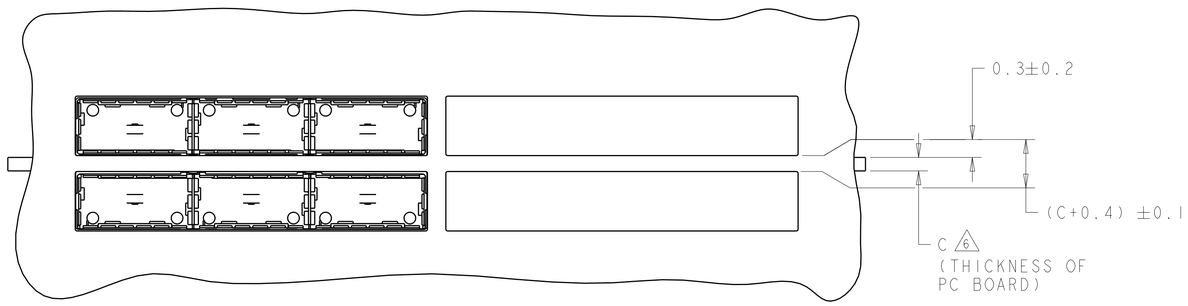
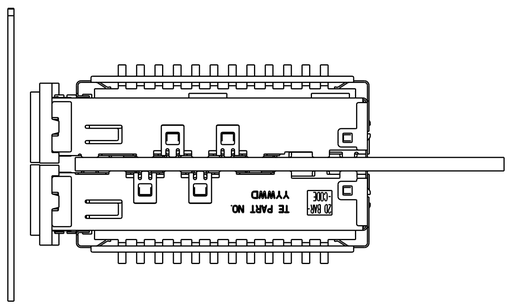




ONE SIDED CONFIGURATION
SCALE 2:1





BELLY TO BELLY CONFIGURATION SIMILAR
TO ONE SIDED EXCEPT WHERE NOTED
SCALE 2:1

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0 PLC ±-
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2 PLC ±0.1
3 PLC ±0.013
4 PLC ±0.0001
ANGLES ±-

MATERIAL - -
FINISH - -

DWN KINSEN SUN 23FEB2012
CHK DENNY ZHU 23FEB2012
APVD ALEX CAI 23FEB2012

TE Connectivity

NAME 1X3 CAGE ASSEMBLY, BEHIND BEZEL, W/ HEAT SINKS,CONDUCTIVE GASKET, QSFP

PRODUCT SPEC 108-2286
APPLICATION SPEC 114-13218
WEIGHT -

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A1	00779	C-2174769	-

CUSTOMER DRAWING | SCALE 4:1 | SHEET 3 OF 5 | REV B

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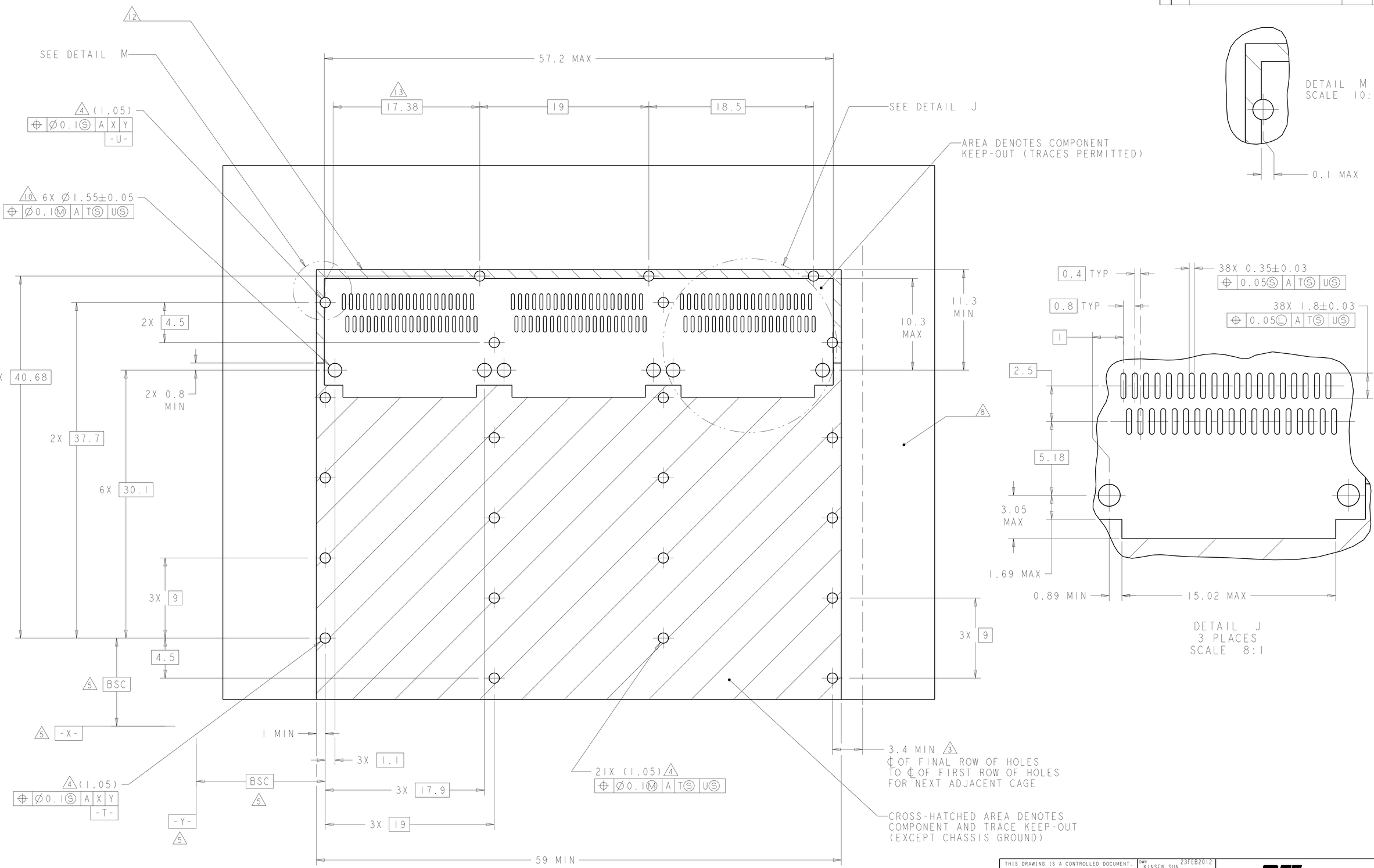
LOC	DIST
GP	00

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	-	SEE SHEET 1	-	-	-



RECOMMENDED PC BOARD LAYOUT
SINGLE SIDE MOUNT CONFIGURATION
SCALE 5:1

DETAIL M
SCALE 10:1

DETAIL J
3 PLACES
SCALE 8:1

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2 PLC ±0.1
3 PLC ±0.013
4 PLC ±0.0001
ANGLES ±-

MATERIAL -
FINISH -

DWN	KINSEN SUN	23FEB2012
CHK	DENNY ZHU	23FEB2012
APVD	ALEX CAI	23FEB2012
PRODUCT SPEC	108-2286	
APPLICATION SPEC	114-13218	
WEIGHT	-	

TE Connectivity

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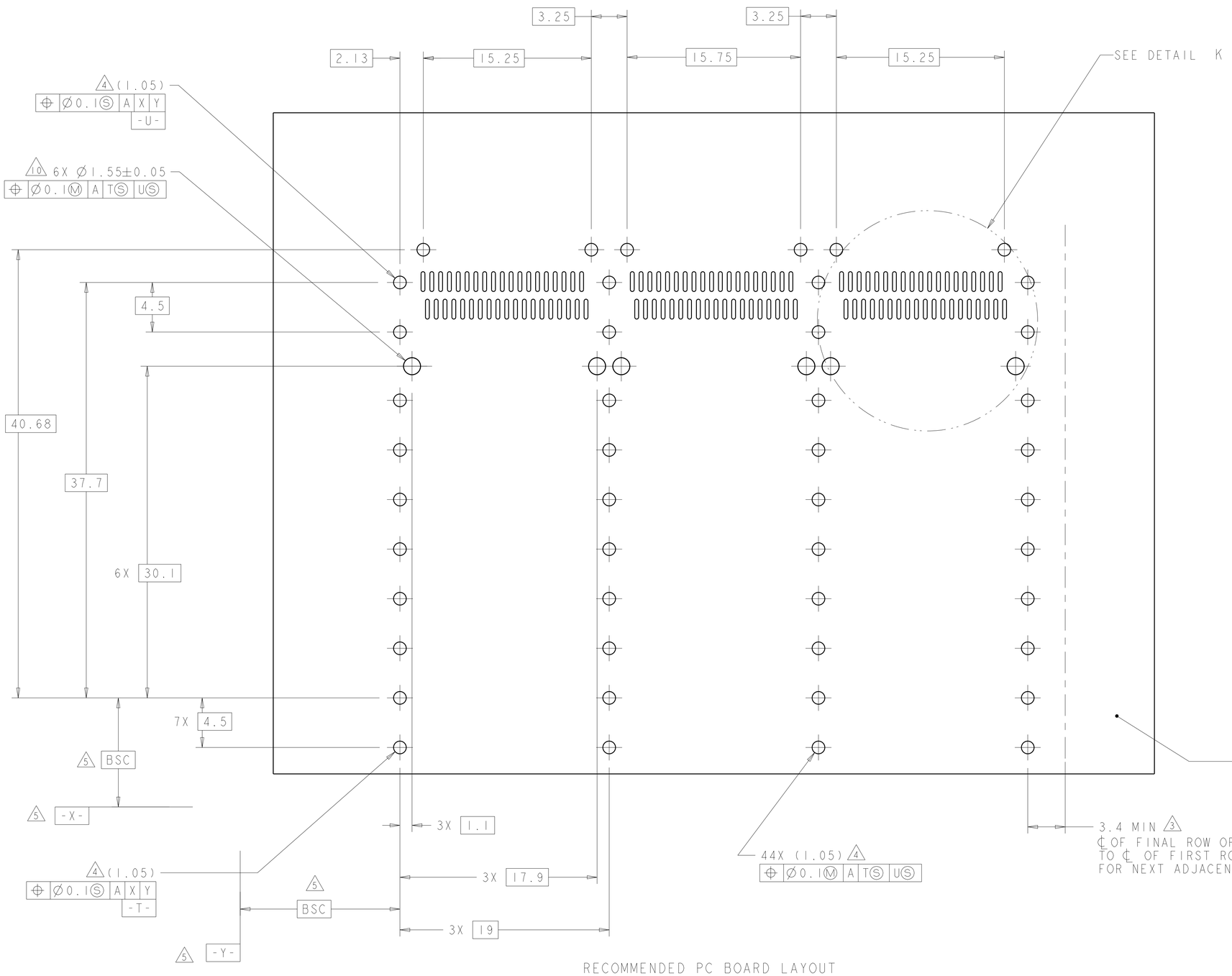
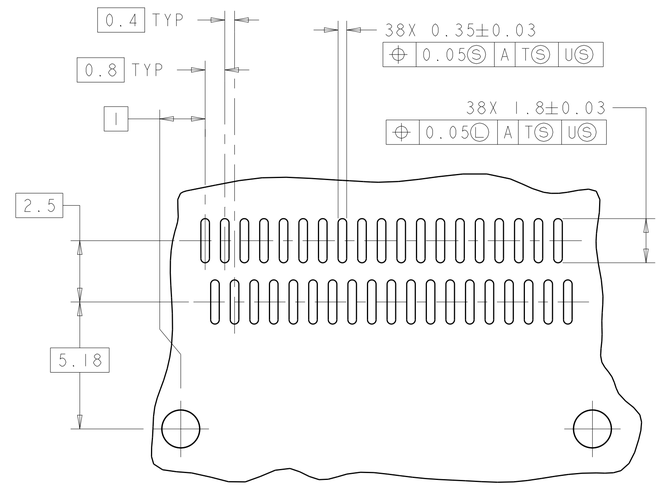


RECOMMENDED PC BOARD LAYOUT
BELLY TO BELLY CONFIGURATION
SEE SHEET 4 FOR COMPONENT
AND TRACE KEEP-OUTS
SCALE 5:1



DETAIL K
3 PLACES
SCALE 8:1

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DIMENSIONS: mm

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3 PLC ±0.013
4 PLC ±0.0001
ANGLES ±-

MATERIAL -
FINISH -

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CUSTOMER DRAWING | SCALE 4:1 | SHEET 5 OF 5 | REV B