APPROVAL SHEET

To：

Customer P/N：

UDE P/N： SQ10-ZZ-0002

Description： QSFP+ Cage 1X1
Press-fit
With heatsink
Packing With Tray

RoHS

Spec No.	Update Date	Revision
SQ1020002-00	2020/7/17	B

Approved	Checked	Prepared

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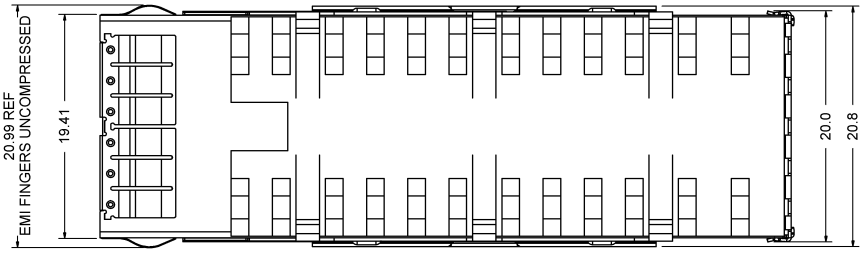
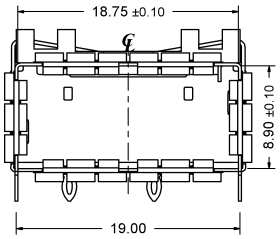
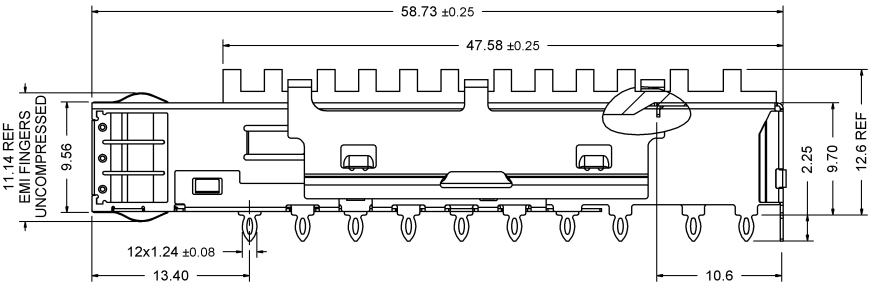
1. MECHANICAL DIMENSION

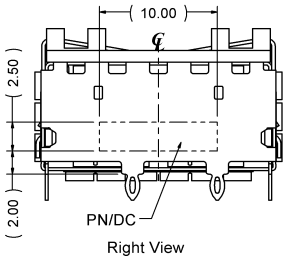
1.1 CAGE assembly Dimension

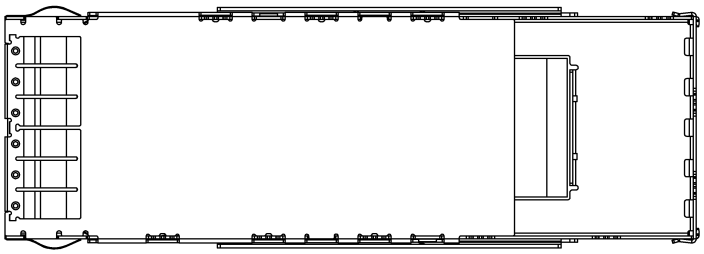
General Tolerance :	X.X : ± 0.38 X.XX : ± 0.20







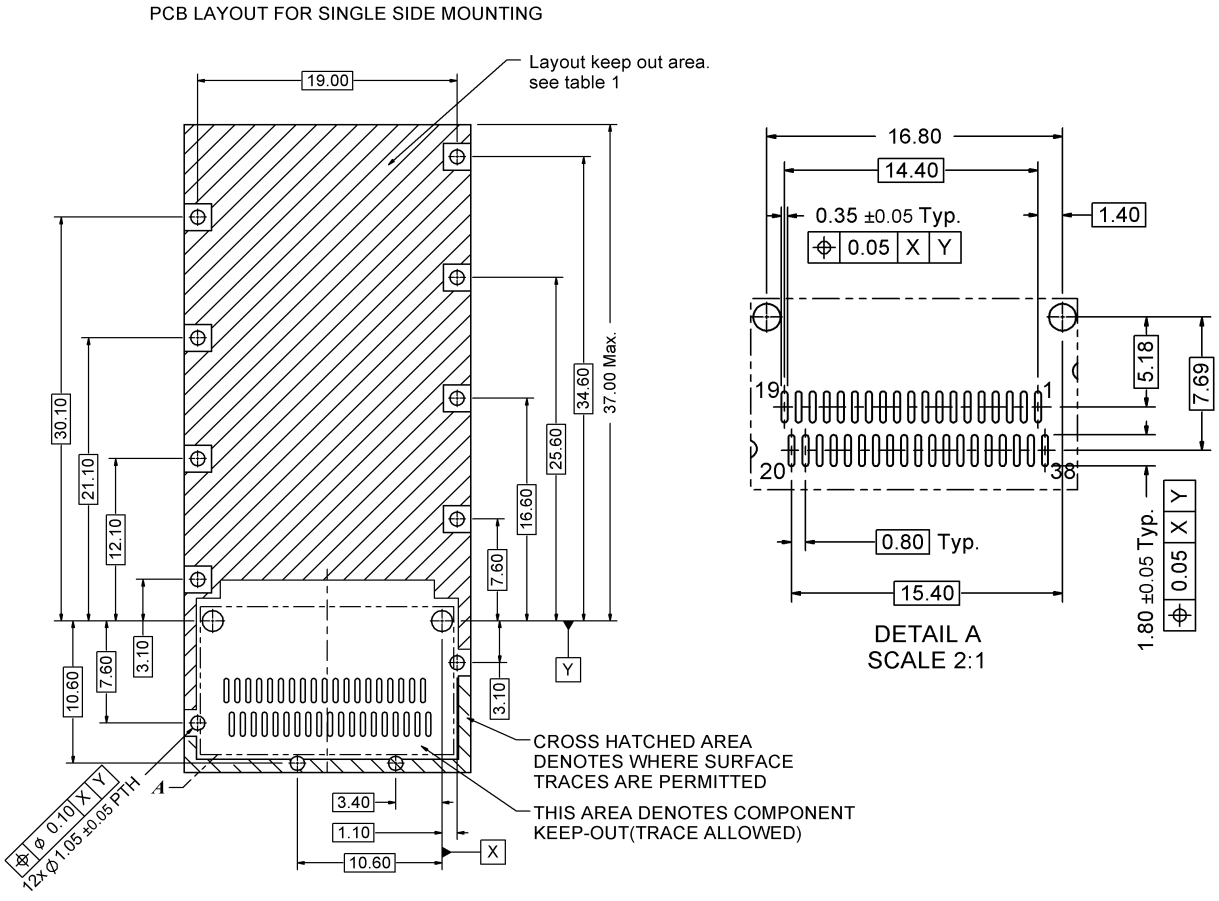




1.2 Recommended PCB Layout

Component Side of Board

All dimension tolerances are ±0.05mm unless otherwise specified



NOTES:

1.PADS AND VIAS CONNECT TO CHASSIS GROUND

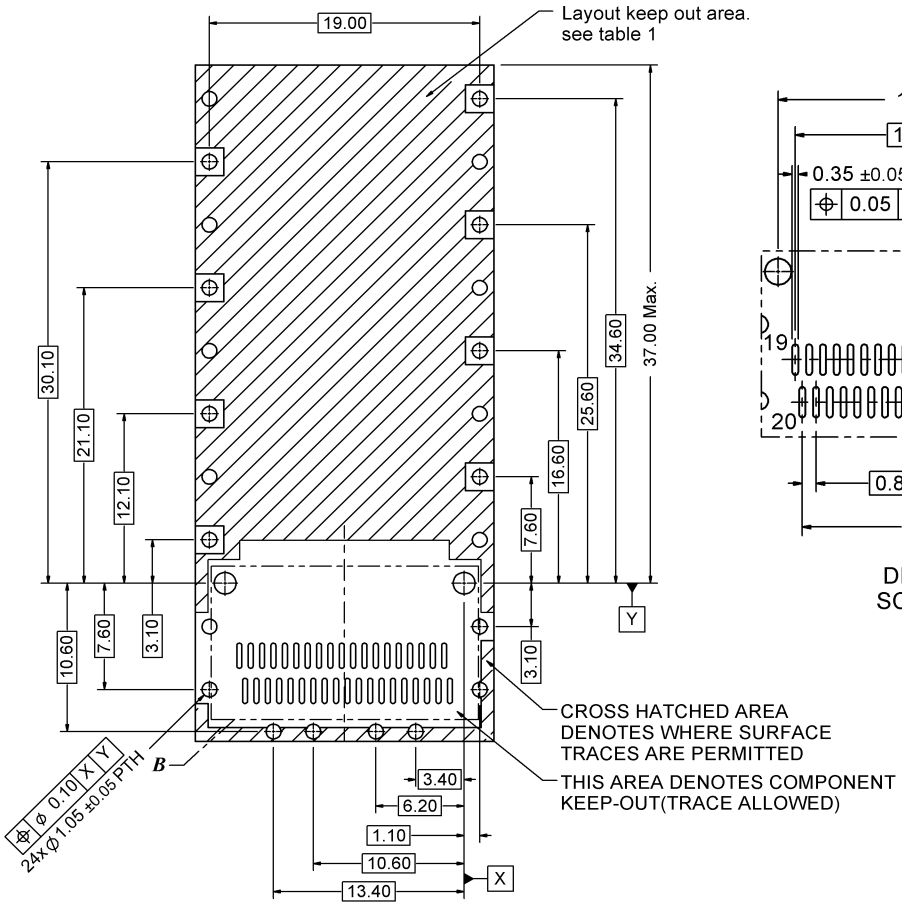
RECOMMEND PADS TO BE 2.00mm SQUARE

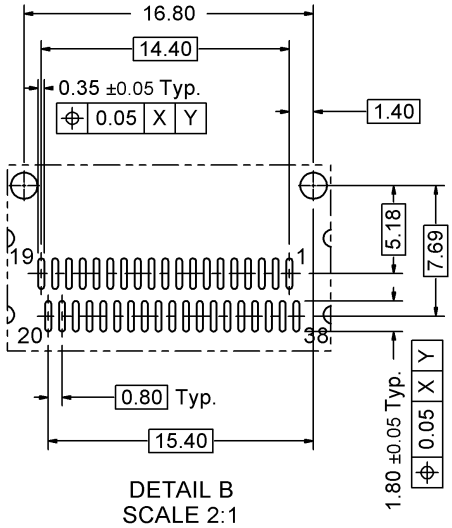
2.RECOMMENDED THRU HOLE PLATING INCLUDES

HASL,OSP,OR IMMERSION(GOLD,SILVER,OR TIN)

3.1.57mm MINIMUM PCB THICKNESS FOR SINGLE SIDED USE.

PCB LAYOUT FOR BELLY TO BELLY MOUNTING





DETAIL B
SCALE 2:1

NOTES:

1.PADS AND VIAS CONNECT TO CHASSIS GROUND

RECOMMEND PADS TO BE 2.00mm SQUARE

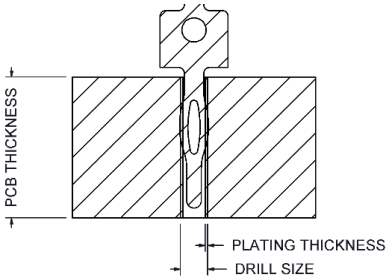
2.RECOMMENDED THRU HOLE PLATING INCLUDES

HASL,OSP,OR IMMERSION(GOLD,SILVER,OR TIN)

3.2.07mm MINIMUM PCB THICKNESS FOR BELLY TO BELLY SIDED USE.

RECOMMENDED MOTHER BOARD THROUGH HOLE DIMENSION

PLATED THROUGH HOLE	1.05 SHIELD PINS
FINISHED HOLE DIAMETER	1.05±0.05
DRILLED HOLE DIAMETER	1.15
COPPER PLATING	0.025



RECOMMENDED MOTHER BOARD
THROUGH HOLE DIMENSION

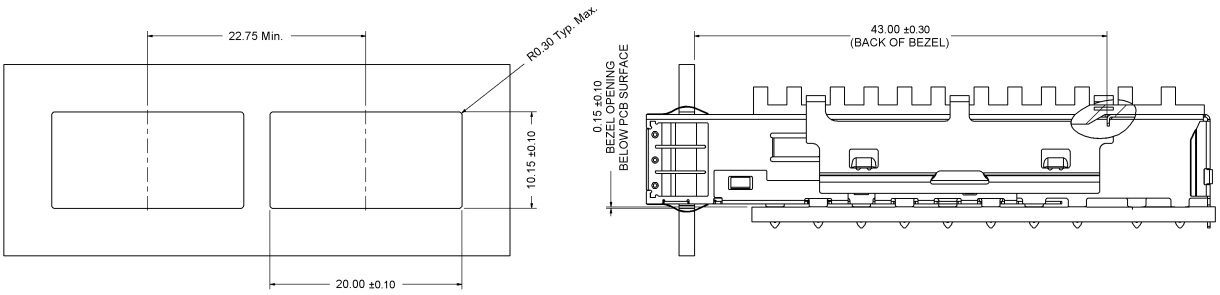
Table1

Layout / Layer	Trace	component	Grounding	Test Point	Via Hole	PTH	NPTH
Component side	X	X	O	X	X	X	O
Inner layer	O	NA	O	NA	O	X	O
Bottom side	O	O	O	O	O	X	O

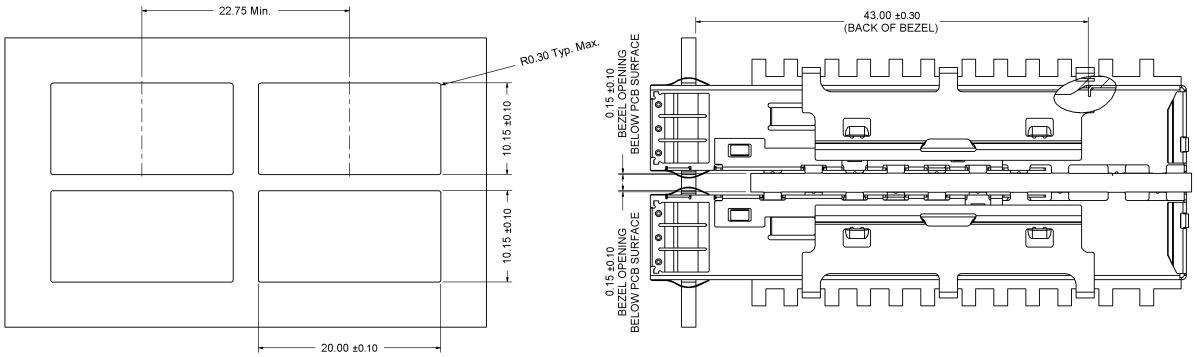
X--Forbid; O--OK; NA--Not Applicable.

1.3 Recommended Panel Cutout

PANELCUTOFF FOR SINGLE SIDE MOUNTING(SPRING FINGERS)



PANELCUTOFF FOR BELLY TO BELLY MOUNTING(SPRING FINGERS)



PRESS-FIT ASSEMBLIES
Hand place using proper seating force to engage all Leg tails into plated thru-holes.

Assemblies are to be seated per the instructions associated with the appropriate insertion tool
Note:UDE recommends only one connector assembly be installed at a time.

ASSEMBLE INSERTION FORCE		
PORT SIZE	PCB FINISH	FORCE
1X1	Copper w/OSP	362±36N

1.4 Packing Information

16 pcs finished goods per tray

8 trays(128 pcs finished goods) per master carton

2. REQUIREMENTS

2.1 Design and Construction

Product shall be of design, construction and physical dimensions specified on applicable.

2.2 Material

2.2.1 Shield Parts

2.2.1.1 Top Shell : Copper Alloy, Thickness=0.25mm

2.2.1.2 Bottom Shell : Copper Alloy, Thickness=0.25mm

2.2.1.3 EMI Spring Finger : Ph.Bronze, Thickness=0.08mm

Finish : 30μ" min. Nickel

2.2.1.4 Heatsink : Aluminum Alloy

Finish : Black oxide coating

2.2.1.5 Heatsink Clip : Stainless steel, Thickness=0.30mm

2.3 Operating and Storage Temperature

Operating Temperature : -40℃ to +85℃

Storage Temperature : -55℃ to +105℃

2.4 QSFP CAGE specifications

Insertion force : 60 N max at a max. rate of 25.4mm per minute

(QSFP module to PCB connector and QSFP cage)

Extraction force : 30 N max at a max. rate of 25.4mm per minute

(QSFP module to PCB connector and QSFP cage)

Cage Retention (Latch strength) : 125N Min.

Durability : 100 cycles for standard class

2.5 Performance and Test Description

Product is designed to meet electrical, mechanical and environmental performance requirements specified in below table. All tests are performed at ambient environmental conditions per MIL-STD-1344A and EIA-364 unless otherwise specified.

2.6 Packaging and Packing

All parts shall be packaged and packed to protect against physical damage,corrosion and deterioration during shipment and storage.

3. Revision History

Issue Date	Revision	Comments	Operator
2020/5/19	A	Initial Release .	Zan
2020/7/17	B	Update Mechanical Drawing and PCB Layout	Zan