

# APPROVAL SHEET

To :

Customer P/N :

UDE P/N : SZB0-ZZ-0001

Description : QSFP28 2X2 Ass'y  
Press-fit  
With 4 Lightpipe  
Contact Area : 15μ" min. Gold  
Packing With Tray



Spec No.	Update Date	Revision
SZB021001-00	2021/1/12	A

Approved	Checked	Prepared



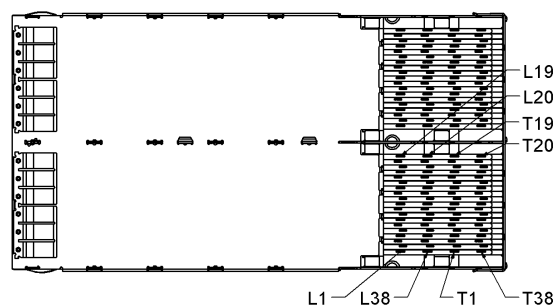
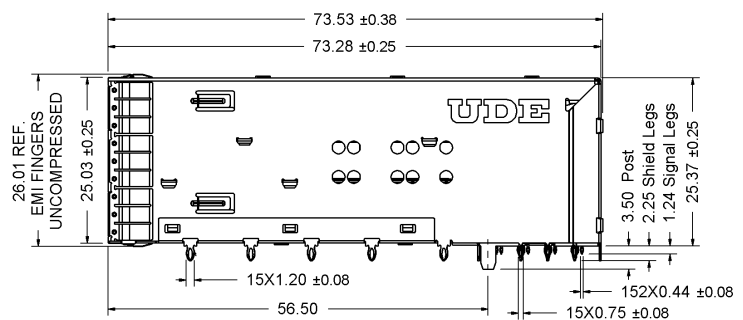
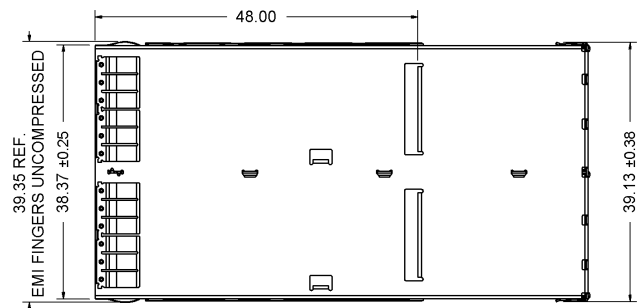
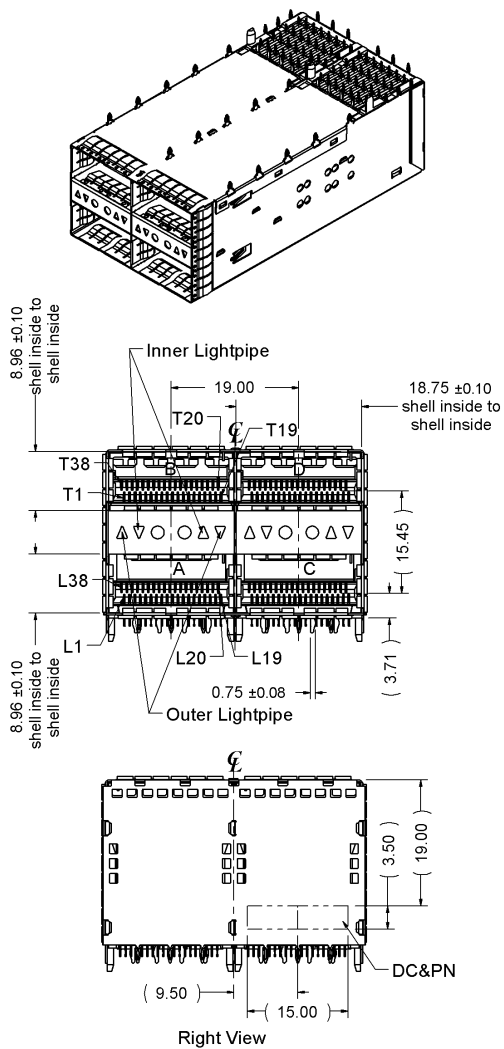
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UDE Corp.

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## 1. MECHANICAL DIMENSION

## 1.1 CAGE assembly Dimension

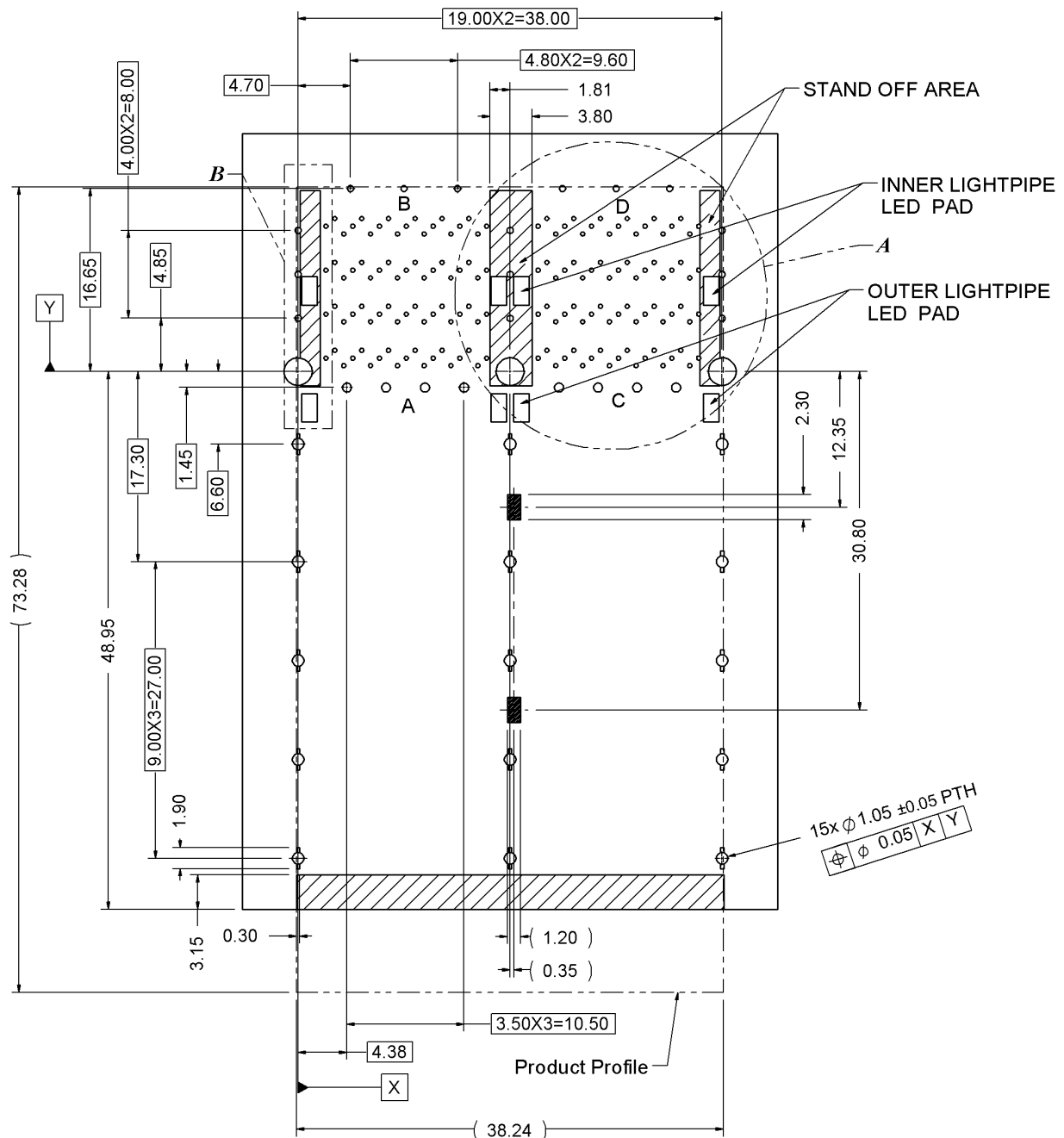
General Tolerance : X.X :  $\pm 0.38$   
X.XX :  $\pm 0.20$

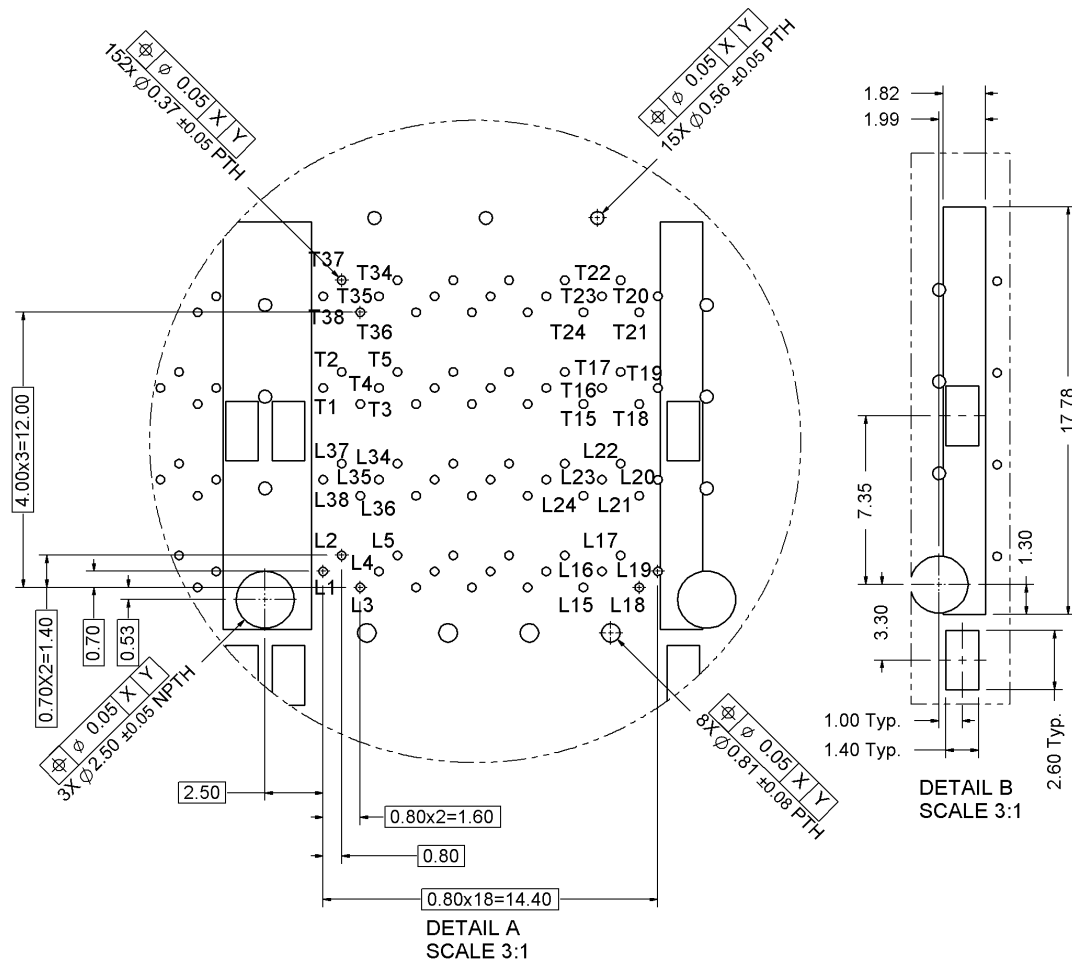


## 1.2 Recommended PCB Layout

## Component Side of Board

All dimension tolerances are  $\pm 0.05\text{mm}$  unless otherwise specified



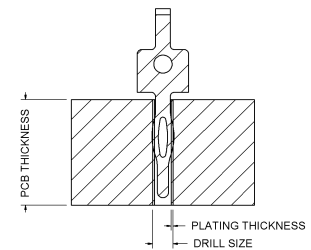


## NOTES:

1. THE ENTIRE AREA OF THE CONNECTOR FOOTPRINT, INDICATED BY THE DASHED LINES, TO BE CONSIDERED THE KEEPOUT AREA FOR COMPONENTS
2. CROSS-HATCHED AREAS REPRESENT ZONES ON THE PCB THAT COME IN CONTACT WITH OR BE IN CLOSE PROXIMITY TO THE PLASTIC HOUSING OR THE CAGE. INDICATED AREAS TO BE CONSIDERED TRACE FREE
3. RECOMMENDED THRU HOLE PLATING INCLUDES HASL, OSP, OR IMMERSION (GOLD, SILVER, OR TIN)
4. 1.57mm MINIMUM PCB THICKNESS FOR SINGLE SIDED USE
5. HATCHED AREA IS PLACEMENT ZONE FOR LED, LED SHOULD BE CENTERED WITHIN ZONE, RECOMMEND 0805 PACKAGE

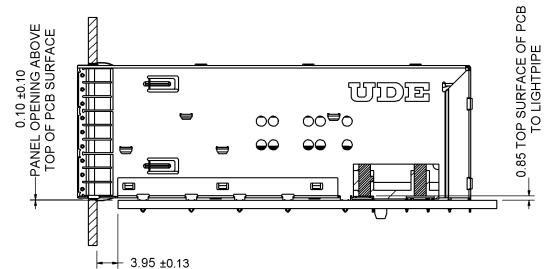
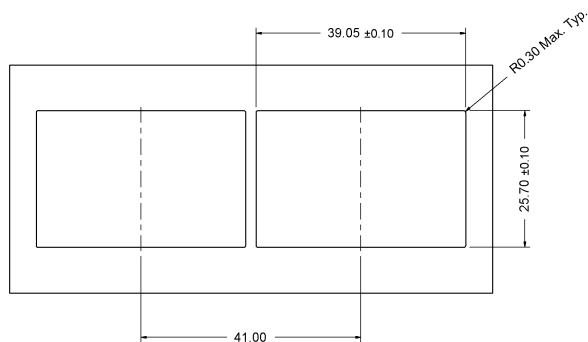
## RECOMMENDED MOTHER BOARD THROUGH HOLE DIMENSION

PLATED THROUGH HOLE	1.05 SHIELD PINS	0.81 SHIELD PINS	0.56 SHIELD PINS	0.37 SIGNAL PINS
FINISHED HOLE DIAMETER	1.05 ±0.05	0.81 ±0.05	0.56 ±0.05	0.37 ±0.05
DRILLED HOLE DIAMETER	1.15	0.91	0.66	0.47
COPPER PLATING	0.025 min.	0.025 min.	0.025 min.	0.025 min.



RECOMMENDED MOTHER BOARD THROUGH HOLE DIMENSION

## 1.3 Recommended Panel Cutout



## PRESS-FIT ASSEMBLIES

HAND PLACE USING PROPER SEATING FORCE TO ENGAGE ALL LEG TAILS INTO PLATED THROUGH 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
2X2	Copper w/OSP	1200±120N

## 1.4 Packing Information

10 pcs finished goods per tray

5trays(50pcs 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

Top Shell : Copper Alloy, Thickness=0.25mm

Bottom Shell : Copper Alloy, Thickness=0.25mm

EMI Spring Finger : Ph.Bronze, Thickness=0.06mm

UD Mid Ground: Copper Alloy, Thickness=0.25mm

RL Mid Ground: Copper Alloy, Thickness=0.25mm

Connector Housing: LCP, UL94-0, Color: Black

Terminal: Copper Alloy, Thickness=0.20mm

Lightpipe Cover : PBT/BK,UL94V-0

Outer&Inner Lightpipe : PC,UL94V-0,Transp:

### 2.3 Finish

EMI Spring Finger : 30μ" min. Nickel overall

Terminal : contact area 15μ" min.Gold Plating, 50μ" min.Nickel overall

Solder Tail 30μ"min Matte Tin, 50μ" min. Nickel overall

### 2.4 Operating and Storage Temperature

Operating Temperature : -40°C to +85°C

Storage Temperature : -55°C to +105°C

## 2.5 QSFP28 specifications

Contact Current Rating: 0.5A (per contact)

Insulation Resistance : 1000M $\Omega$  min.

Dielectric Withstanding Voltage : 300VDC @ 1min.

Insertion force : 60 N MAX.

Extraction force : 30 N MAX.

Cage Retention (Latch strength) : 125N Min.

Durability : 100 cycles for standard class

## 2.6 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.

## 2.7 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

[illegible]