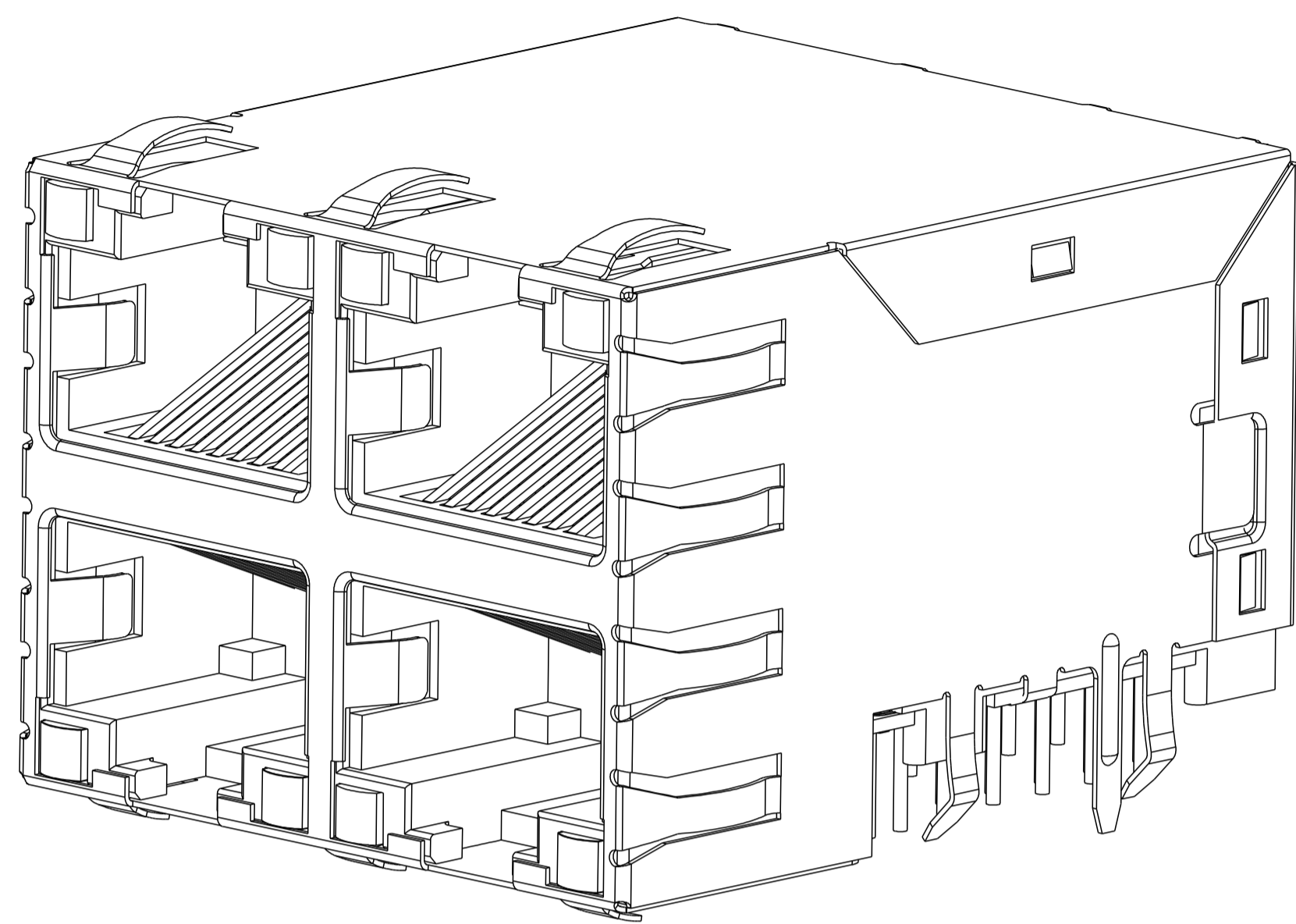
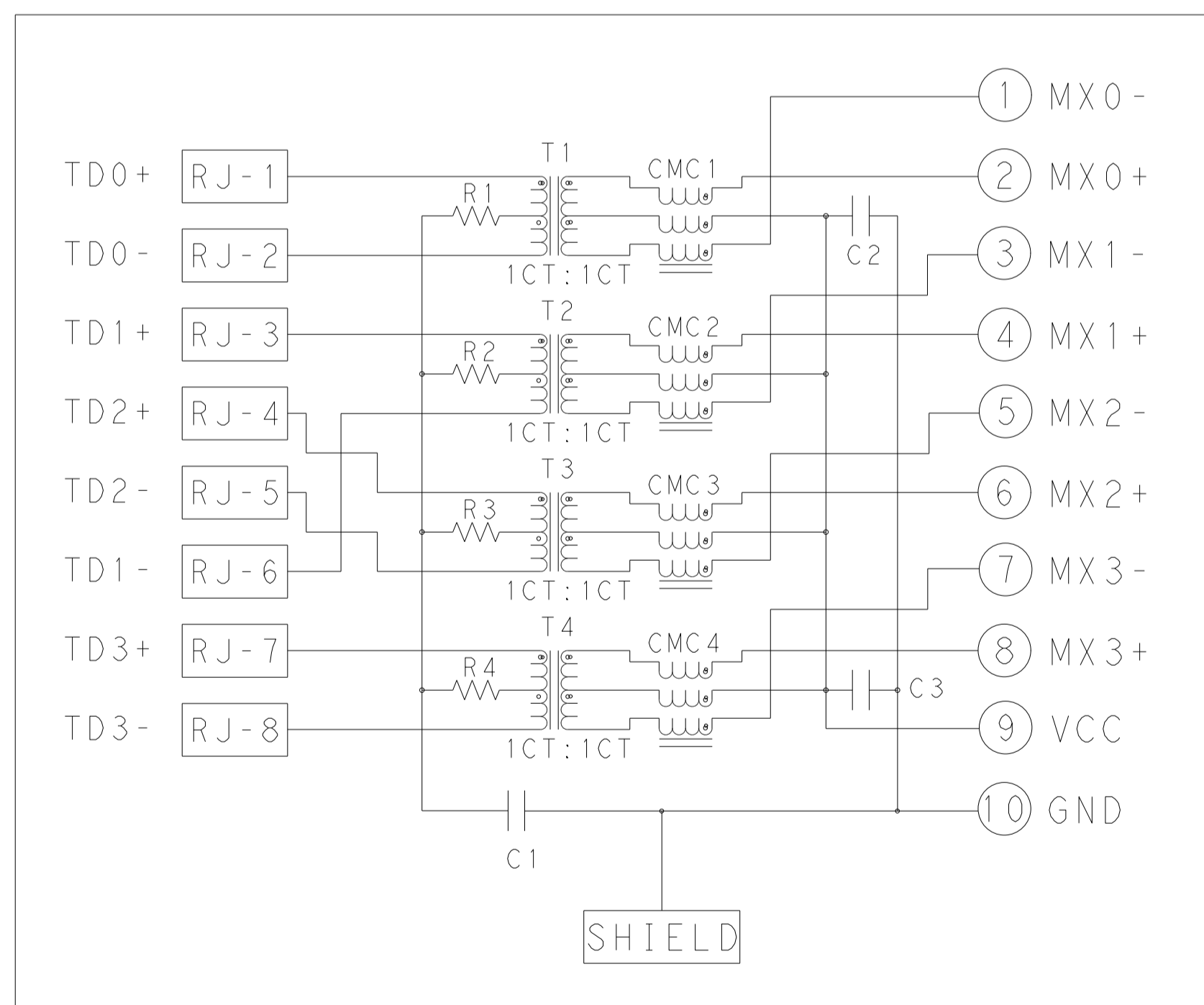


REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
B		LOGO CHANGE	18APR2013	RL	KZ



S8G56A GIGABIT CIRCUIT

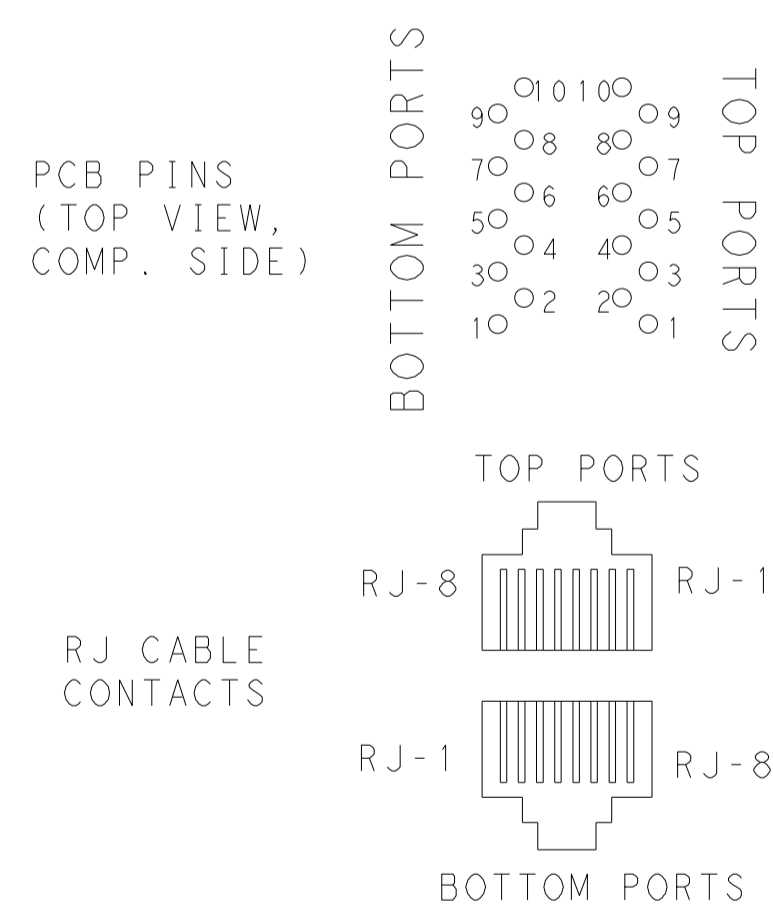
TOP AND BOTTOM PORTS



C1 = 1000pF, 2kV CAPACITOR
 C2 - C3 = 10nF, 50V, CAPACITORS
 R1-R4 = 75 Ohms, 1/16 W, RESISTORS

PIN DESIGNATIONS

(REPEAT FOR EACH VERTICAL PAIR OF PORTS))



- MATERIALS:
 - HOUSING: THERMOPLASTIC, BLACK, FLAMMABILITY RATING UL 94V-0.
 - SHIELD: BRASS, PREPLATED WITH 0.76um MIN SEMI-BRIGHT NICKEL, POST DIPPED WITH 2.54um MIN SAC SOLDER ON SOLDER TAILS.
 - CONTACTS: PHOSPHOR BRONZE, PLATED WITH 1.27um MIN OVERALL NICKEL UNDERPLATE, SELECTIVE 1.27um MIN GOLD AT MATING INTERFACE AND 2.54um MIN MATTE TIN ON SOLDER TAILS.
 - LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME LEADS, PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL OVER 1.02um MIN COPPER UNDERPLATE, POST PLATED WITH 2.54um MIN MATTE TIN AND/OR 2.54um MIN SAC SOLDER DIP OR PURE TIN SOLDER DIP.

- MAGNETICS
 - APPLICATION: 10/100/1000 BASE-T
 - IMPEDANCE: 100 Ohms
 - TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS
 - OPEN CIRCUIT INDUCTANCE (OCL): 350uH MIN @100kHz, 0.1VRMS, 8mADC BIAS FROM 0 °C TO 70 °C, ALL FOUR PAIRS
 - ALL FOUR PAIRS BI-DIRECTIONAL
 - PERFORMANCE @ 25 °C:
 - INSERTION LOSS (IL): 1.1dB MAX FROM 0.5MHz TO 100MHz
 - RETURN LOSS (RL): 18dB MIN FROM 0.5MHz TO 40MHz
 - 12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz
 - CROSSTALK ATTENUATION: 35dB MIN FROM 0.5MHz TO 40MHz
 - 33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz
 - COMMON MODE REJECTION RATIO (CMRR): 30dB MIN FROM 0.5MHz TO 100MHz
 - ISOLATION VOLTAGE: 2250VDC (MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC AND WITH ALL PORTS CONNECTED.

- PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE LOCATED IN THE APPROXIMATE AREA SHOWN. DATE CODE: YY IS YEAR, WW IS WORK WEEK, D IS DAY OF WEEK, WITH SUNDAY=1

- TRP CONNECTOR LOGO AND AGENCY APPROVAL LOGO ARE LOCATED IN THE APPROXIMATE AREA SHOWN.

- RJ45 CAVITIES CONFORM TO FCC RULES AND REGULATION PART 68 SUBPART F.

- LEDS ARE DRIVEN WITH CONSTANT CURRENT AT APPROX. 20mA.
 - DOMINANT WAVELENGTH (λ D)
 - GREEN, 568nm TYP AT IF=20mA
 - YELLOW, 588nm TYP AT IF=20mA
 - FORWARD VOLTAGE(VF)
 - GREEN, 2.2V TYP AT IF=20mA
 - YELLOW, 2.1V TYP AT IF=20mA

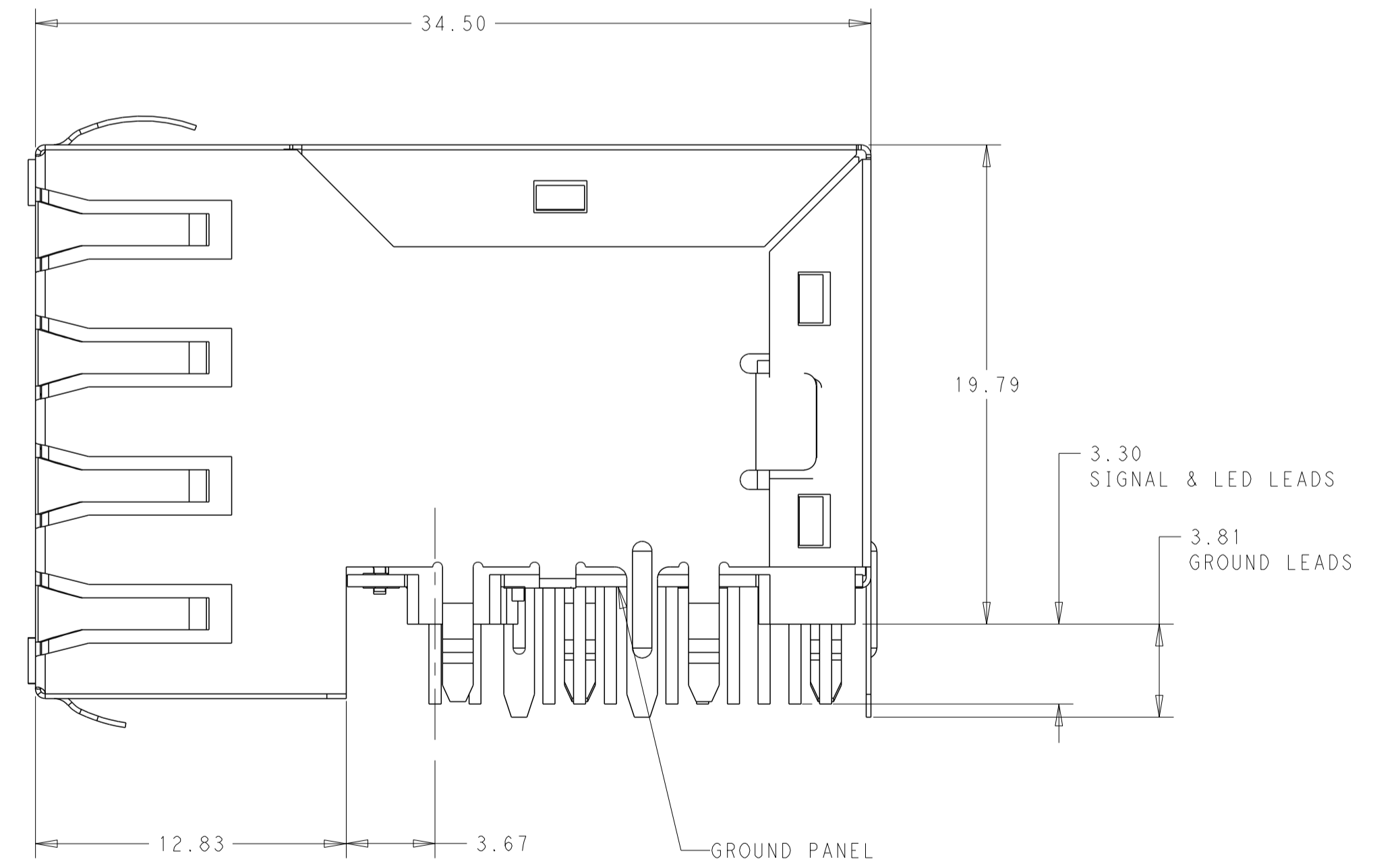
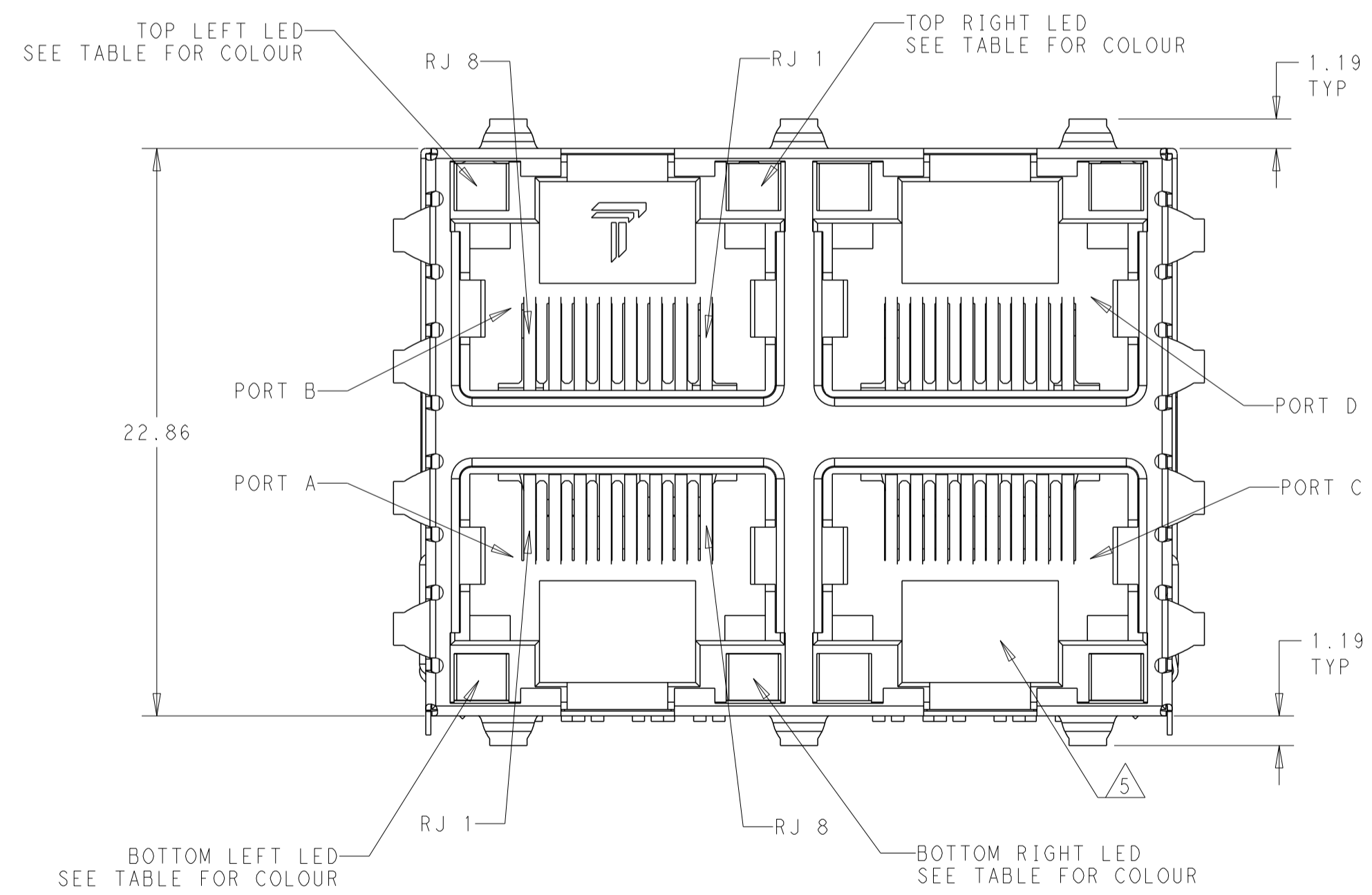
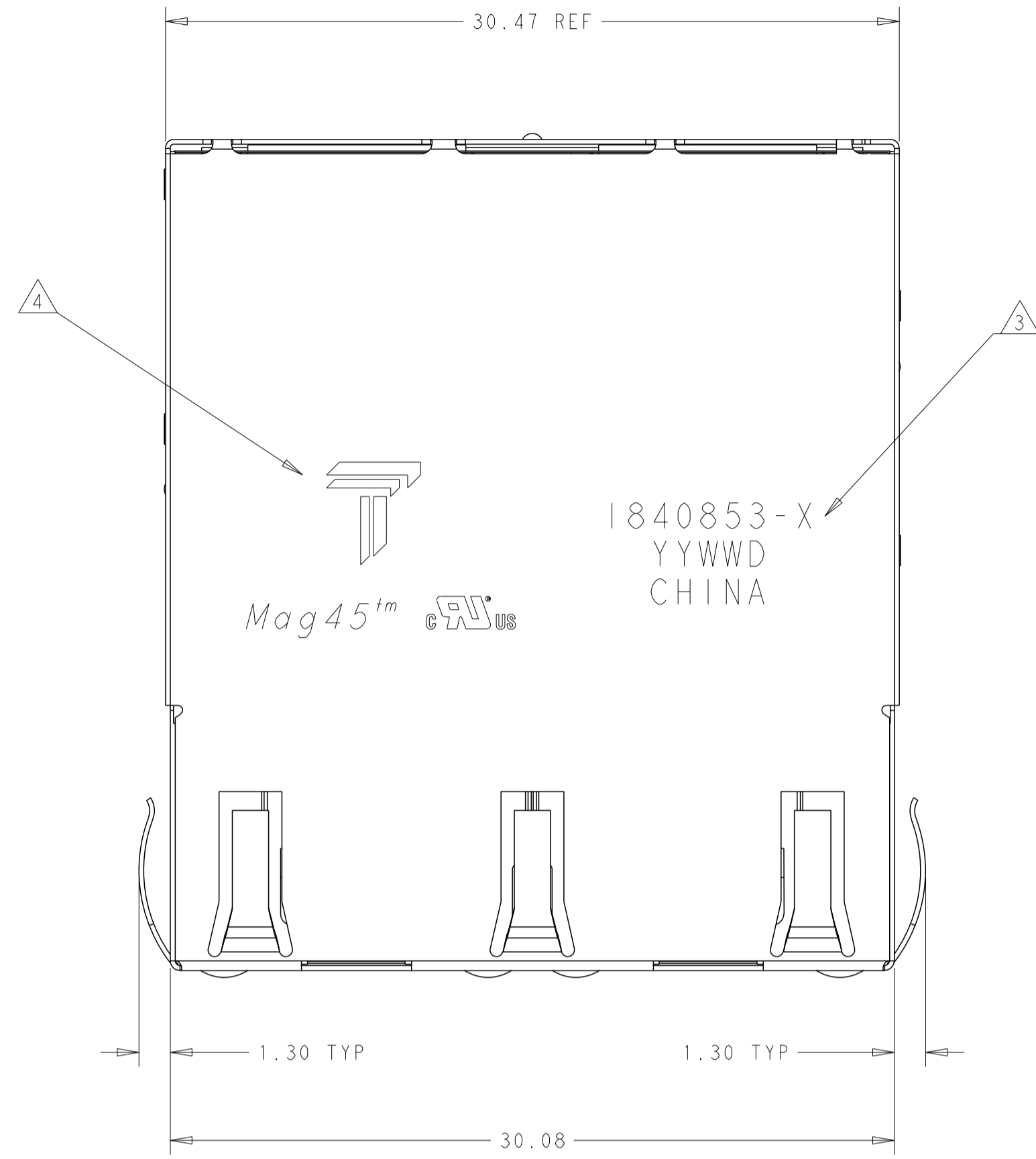
- INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.

- DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.

- OPERATING TEMPERATURE: FROM 0 °C TO 70 °C

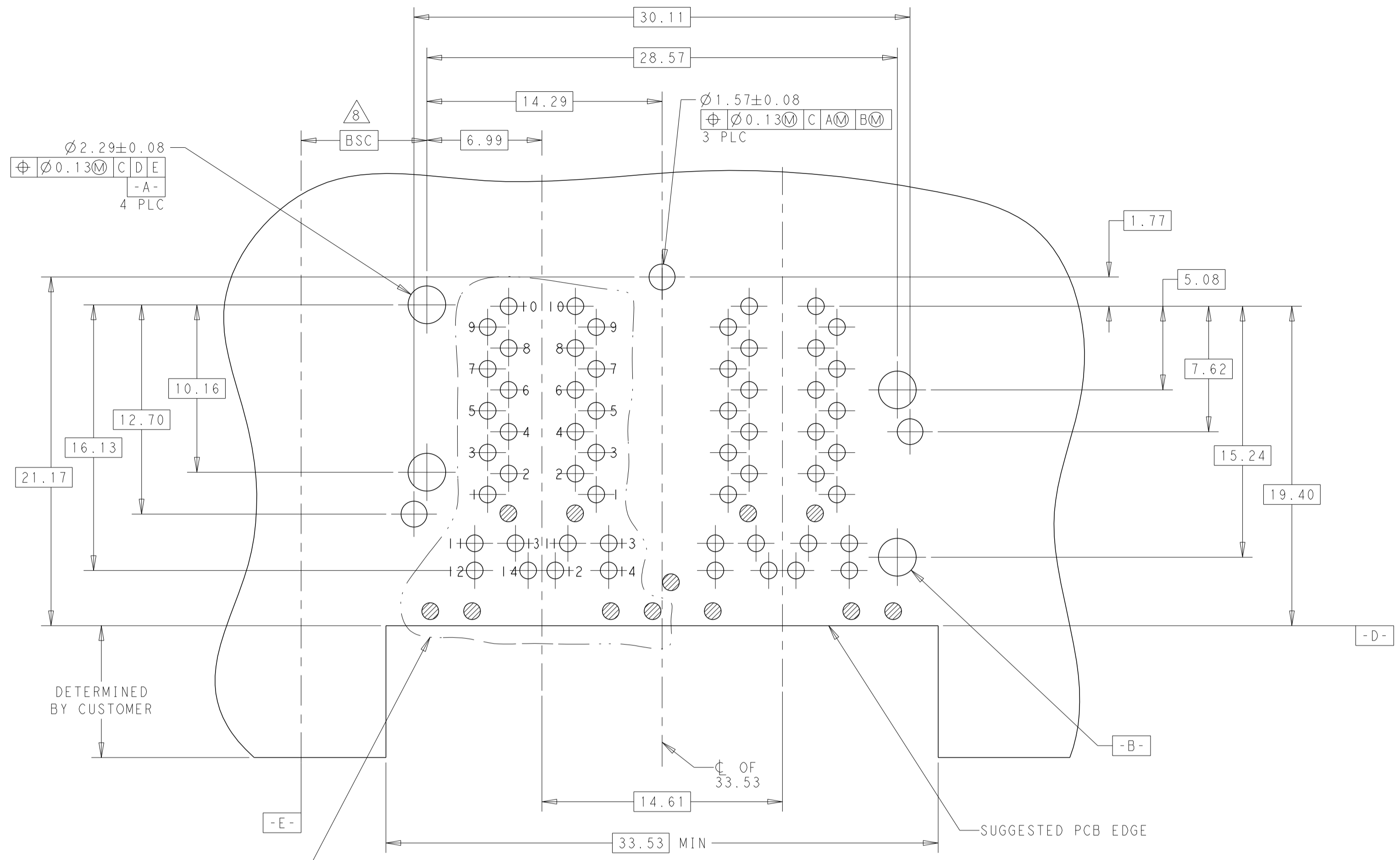
- THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260 °C MAX. 10 SECONDS MAX.

GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	1	1840853-1
BOTTOM LEFT LED	BOTTOM RIGHT LED	TOP LEFT LED	TOP RIGHT LED	REAR PCB GND TABS	PART NUMBER
THIS DRAWING IS A CONTROLLED DOCUMENT.					
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWN: TONOV2010 CH: TOM_HSU/YI LIU APVD: TONY YUAN KEITH ZHU	
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		PRODUCT SPEC: 108-104004 APPLICATION SPEC:		NAME: 2X2 MAG45(TM), OFFSET S8G56A GIGABIT CIRCUIT, W/ LED SIZE: A1 CAGE CODE: 1840853 DRAWING NO:	
MATERIAL: -		FINISH: -		WEIGHT: - CUSTOMER DRAWING:	
SCALE: NTS			SHEET 1 OF 4 REV B		

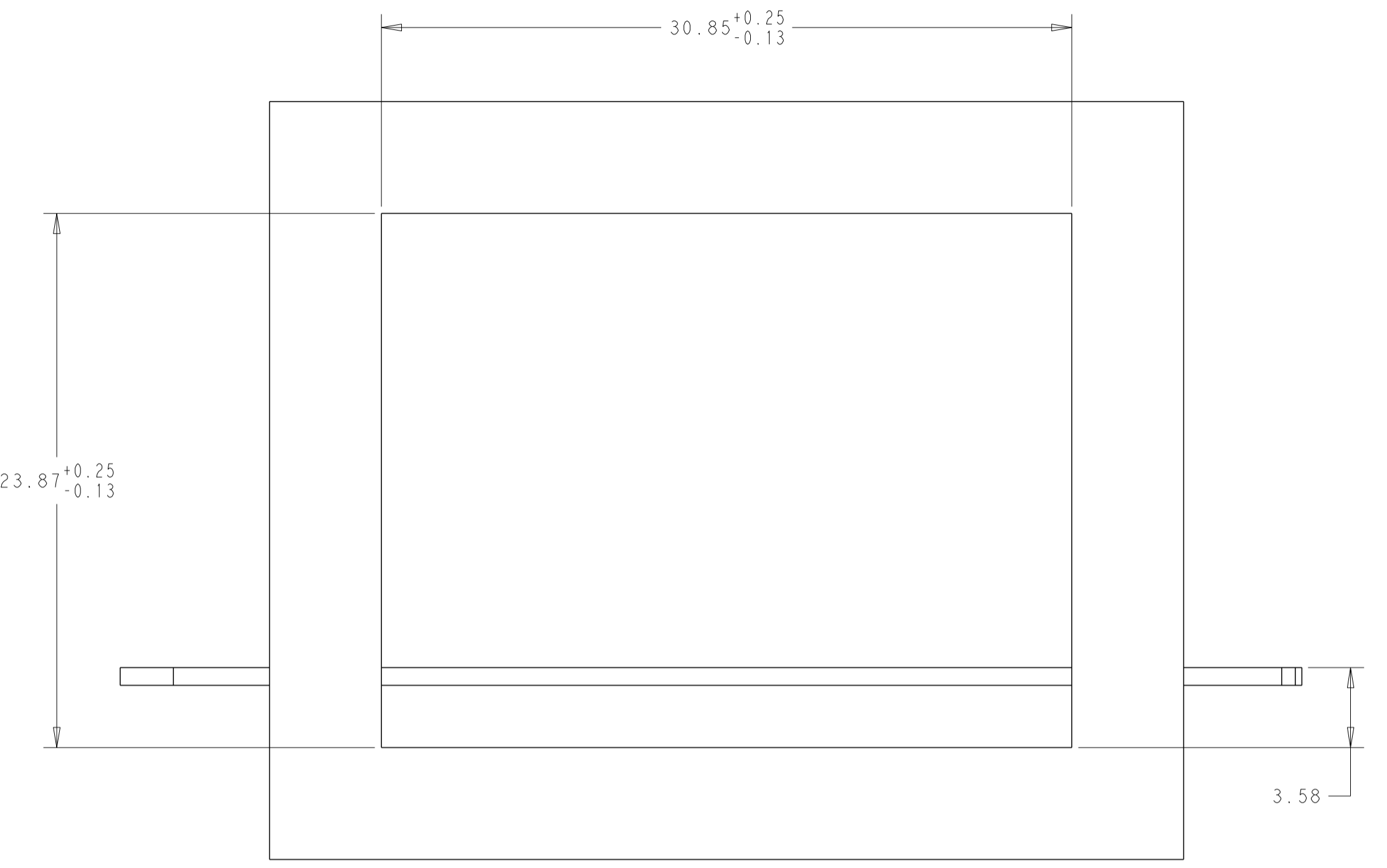


THIS DRAWING IS A CONTROLLED DOCUMENT.

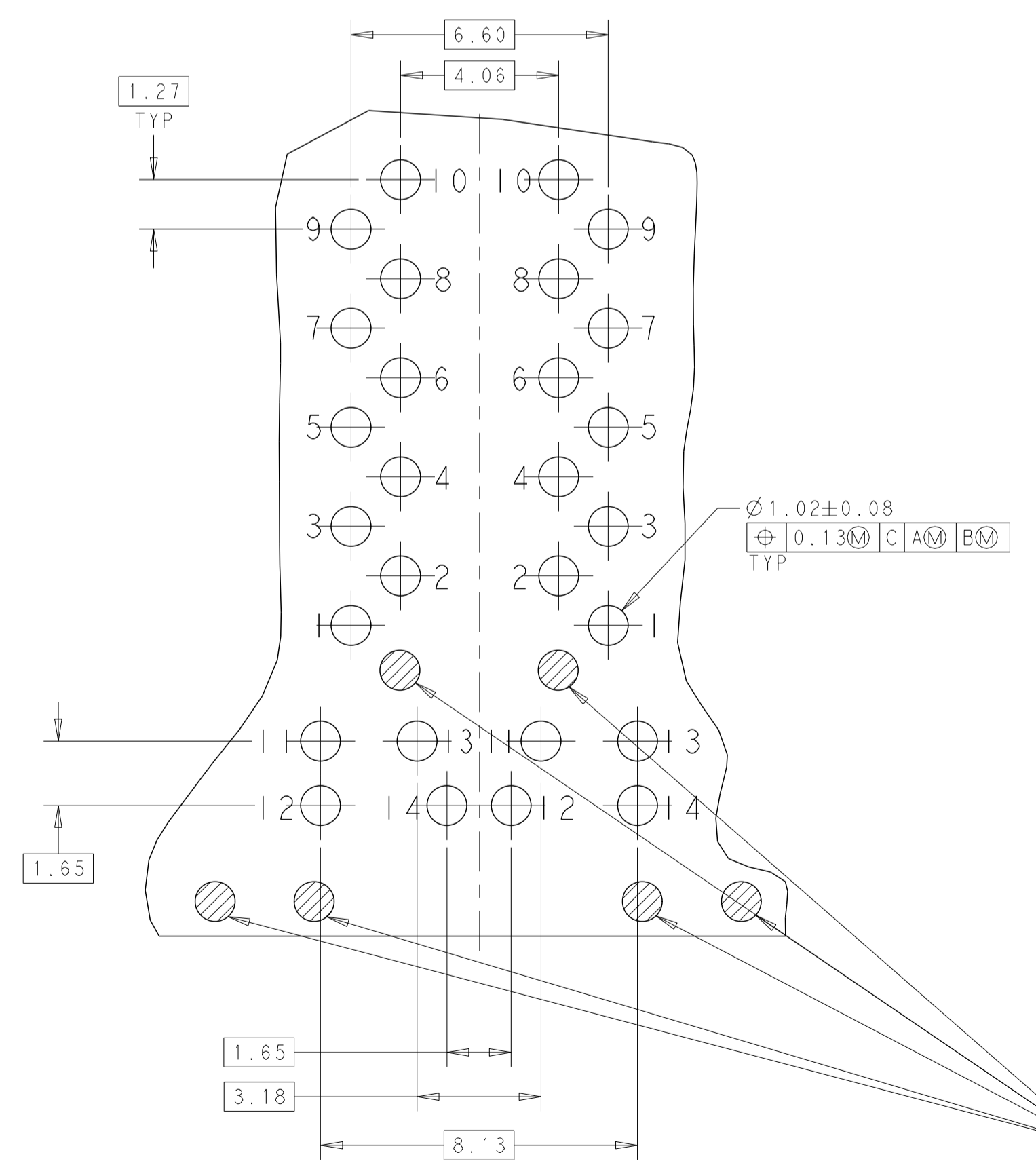
DIMENSIONS: mm 		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ± FINISH		DWN: TOM HSU/YI LIU CHK: TONY YUAN APVD: KEITH ZHU TONOV2010 TONOV2010 TONOV2010		TRP connector Dongguan China 	
MATERIAL: - FINISH: -		PRODUCT SPEC: 108-104004 APPLICATION SPEC: -		NAME: 2X2 MAG45(TM), OFFSET S8G56A GIGABIT CIRCUIT, W/ LED		SIZE: A1 CAGE CODE: - DRAWING NO: C=1840853 RESTRICTED TO: -	
CUSTOMER DRAWING		WEIGHT: -		SCALE: NTS		SHEET 2 OF 4 REV B	



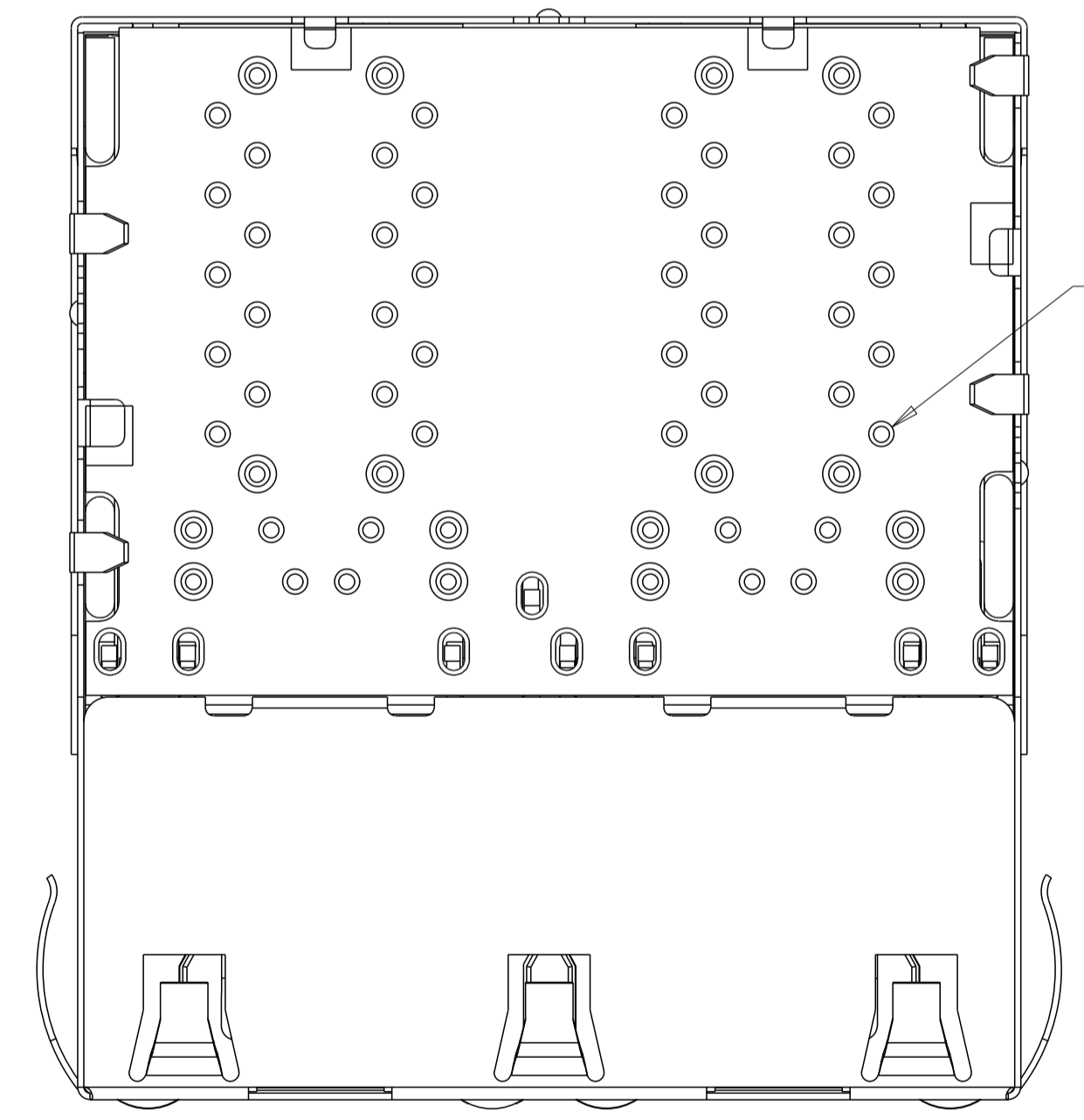
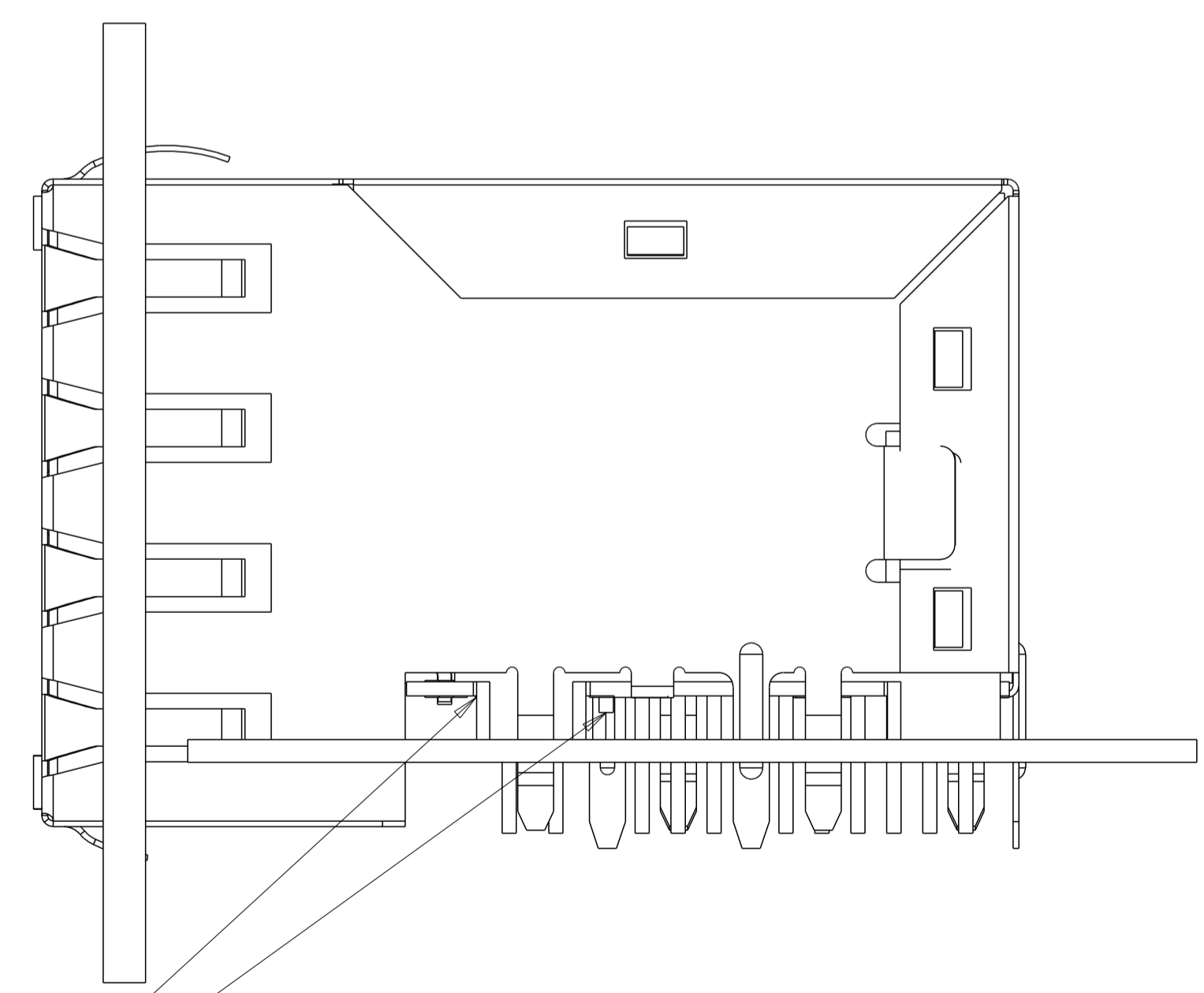
RECOMMENDED PCB LAYOUT VIEWED FROM COMPONENT SIDE



RECOMMENDED PANEL CUT-OUT

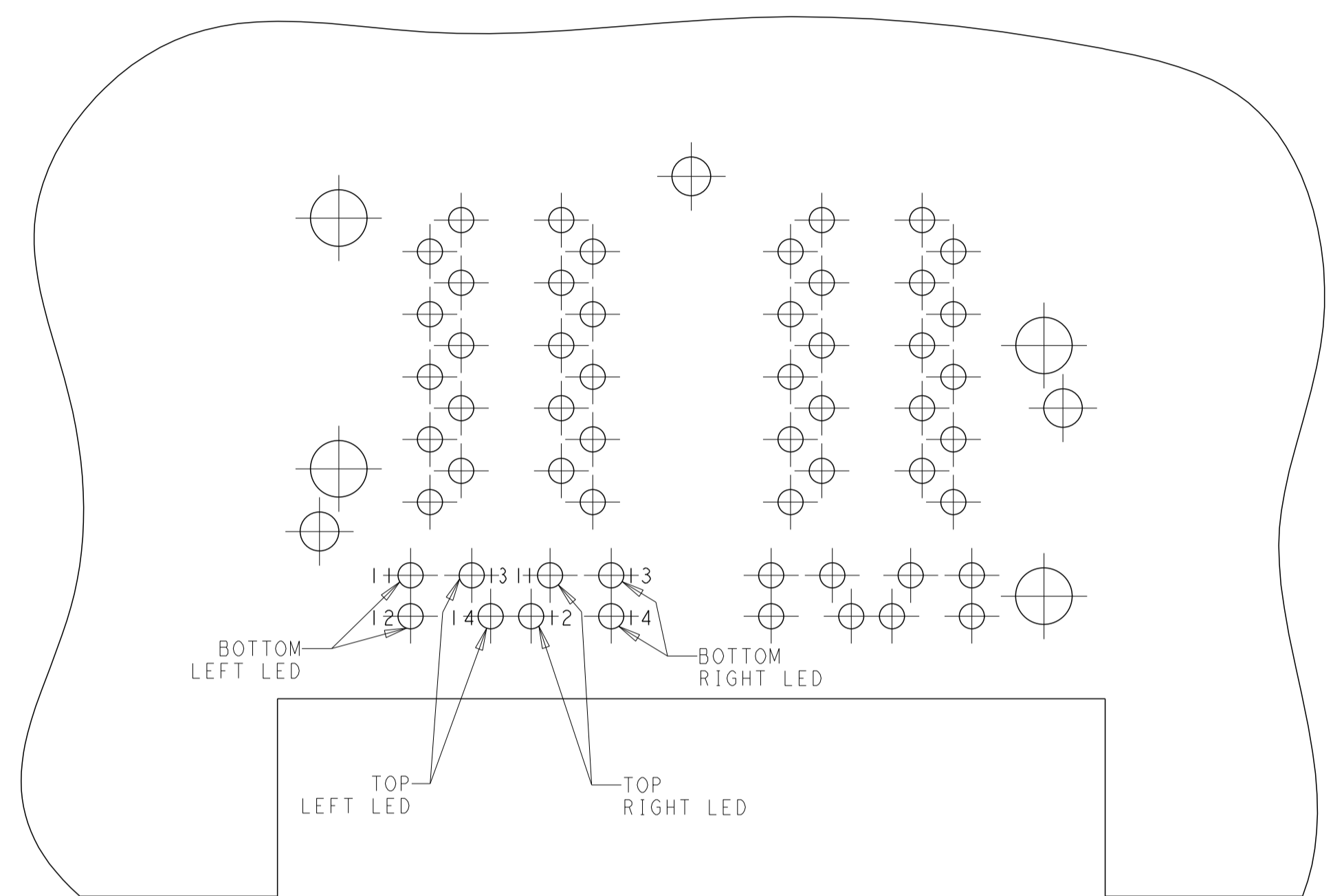


DETAIL G SCALE 8:1

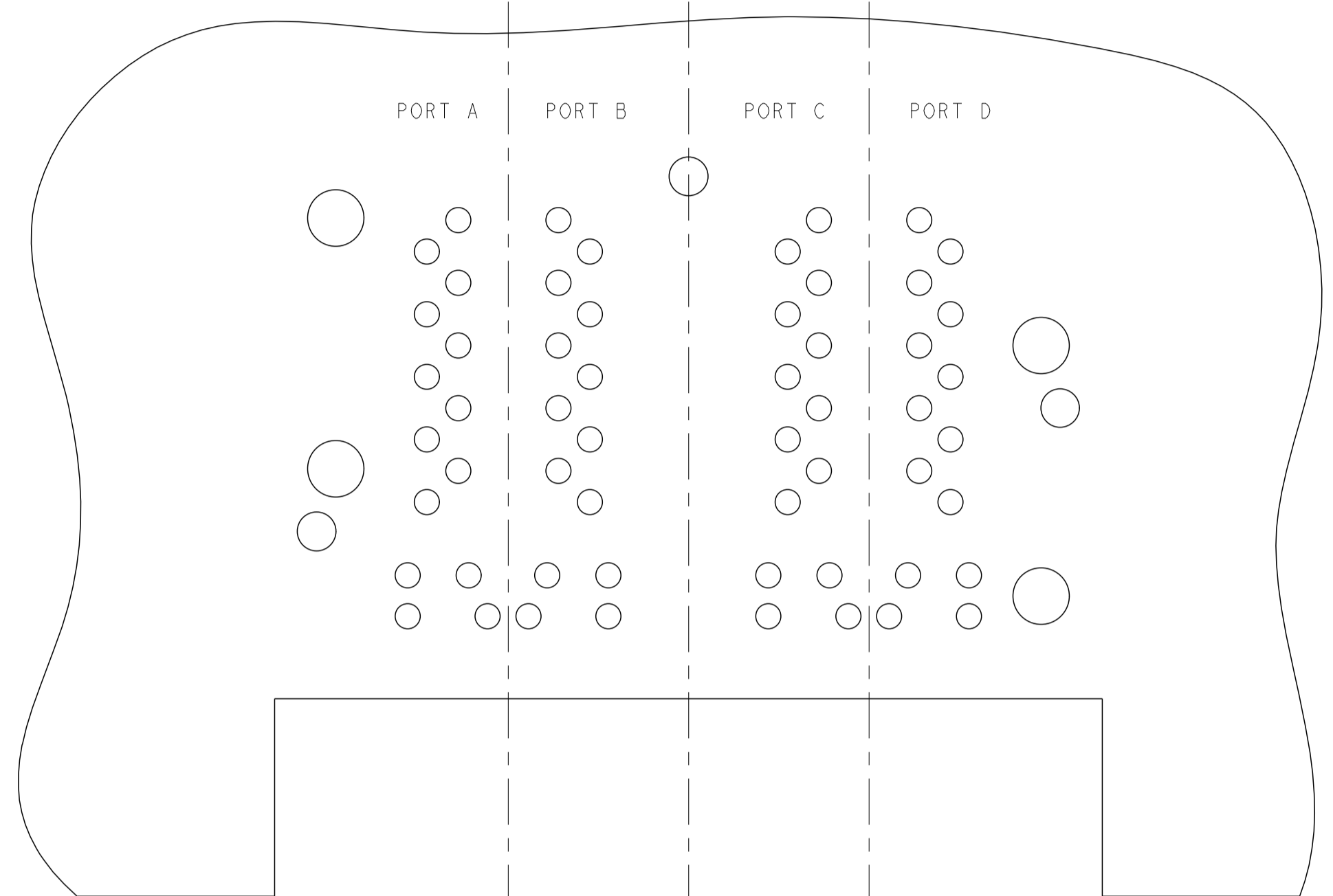


ALL PINS MUST BE SOLDERED WITH BOTTOM PCB. PRECAUTIONS SHOULD BE TAKEN IN PCB DESIGN TO GUARD AGAINST SHORTING TRACES.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: TONOV2010 TOM HSU/YI LIU		TRP connector Dongguan China	
DIMENSIONS: mm		CHK: TONY YUAN APVD: KEITH ZHU		NAME: 2X2 MAG45(TM), OFFSET S8G56A GIGABIT CIRCUIT, W/ LED	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		PRODUCT SPEC: 108-104004		SIZE: A1	
0 PLC ±		APPLICATION SPEC		CAGE CODE: 1840853	
1 PLC ±		WEIGHT: -		RESTRICTED TO: -	
2 PLC ±0.25		CUSTOMER DRAWING		SCALE: NTS	
3 PLC ±		SCALE: NTS		SHEET 3 OF 4	
4 PLC ±		SCALE: NTS		REV B	
ANGLES: *		SCALE: NTS		REV B	
FINISH: -		SCALE: NTS		REV B	

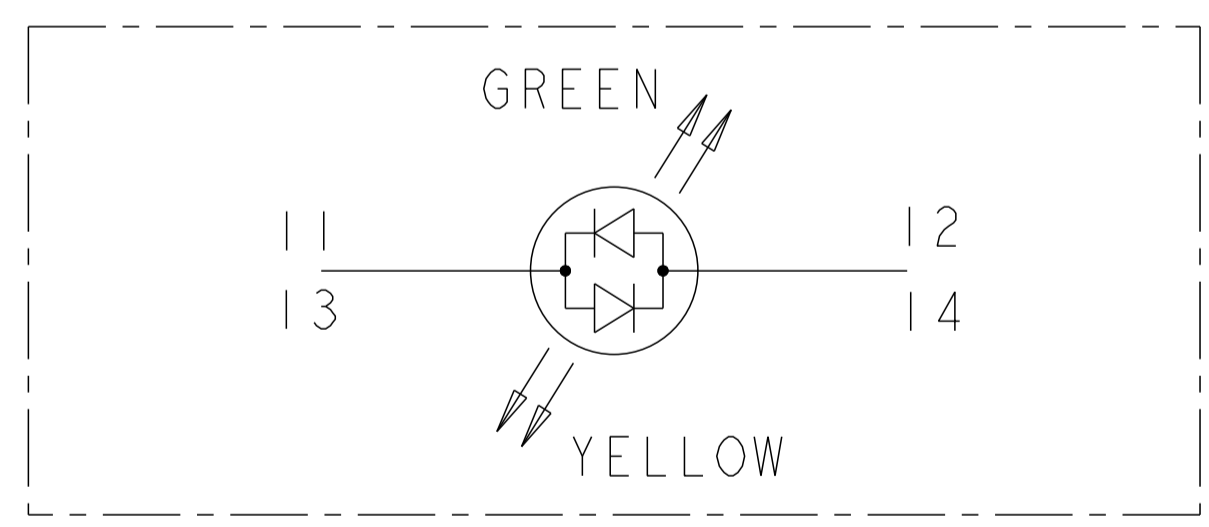


LED HOLE DESIGNATIONS
 VIEWED FROM COMPONENT SIDE



PORT ASSIGNMENT
 VIEWED FROM COMPONENT SIDE

BI-COLOUR LED



THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN: TOM HSU/YI LIU CHK: TONY YUAN APVD: KEITH ZHU	TONOV2010 TONOV2010 TONOV2010	TRP connector Dongguan China
DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLG ± 1 PLG ± 2 PLG ±0.25 3 PLG ± 4 PLG ± ANGLES ± FINISH ±	PRODUCT SPEC 108-104004 APPLICATION SPEC	NAME 2X2 MAG45(TM), OFFSET S8G56A GIGABIT CIRCUIT, W/ LED	
MATERIAL	FINISH	WEIGHT	SIZE: A1 CAGE CODE: C=1840853 DRAWING NO:	RESTRICTED TO:
CUSTOMER DRAWING		SCALE: NTS	SHEET: 4 OF 4	REV: B