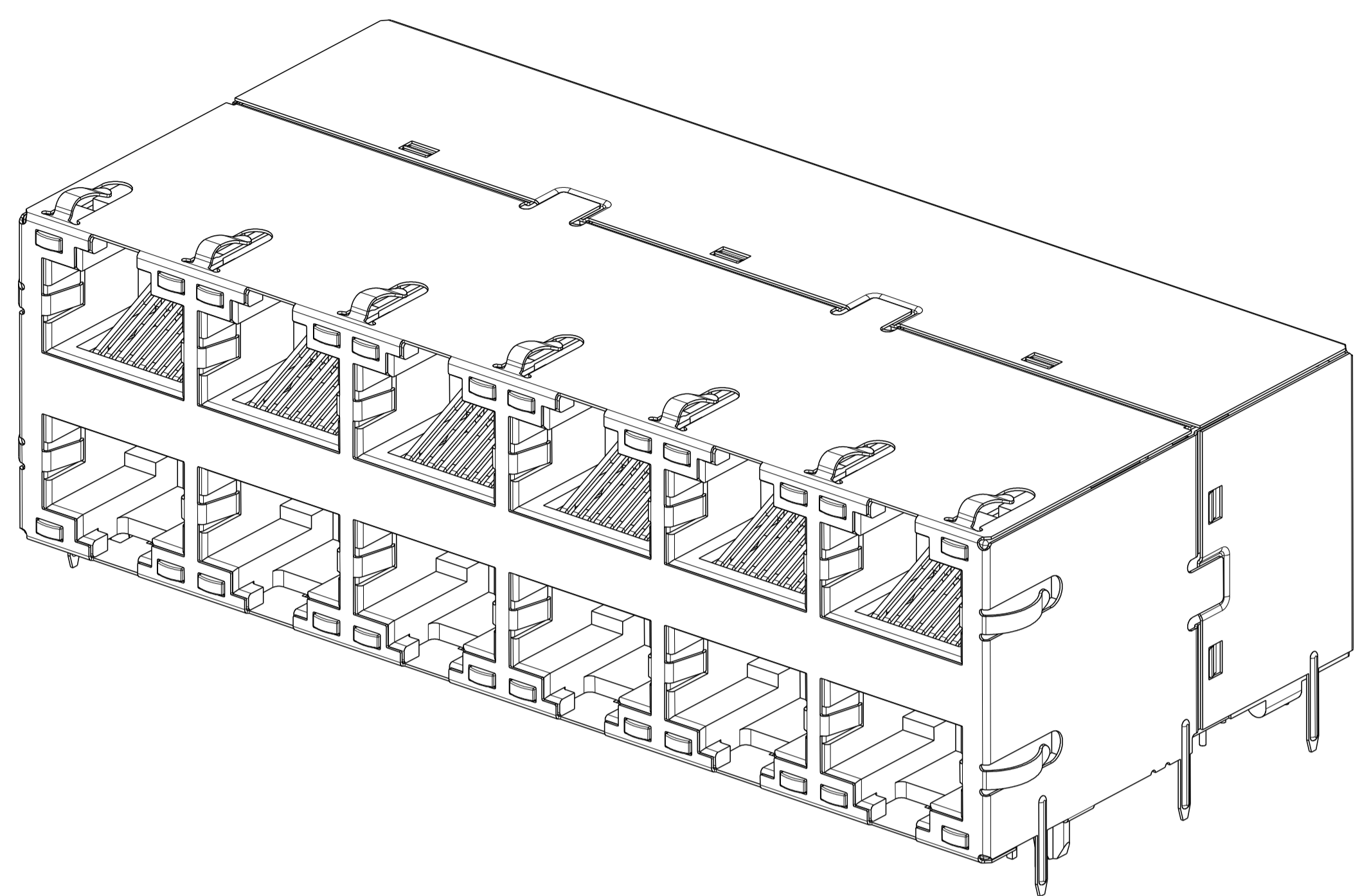


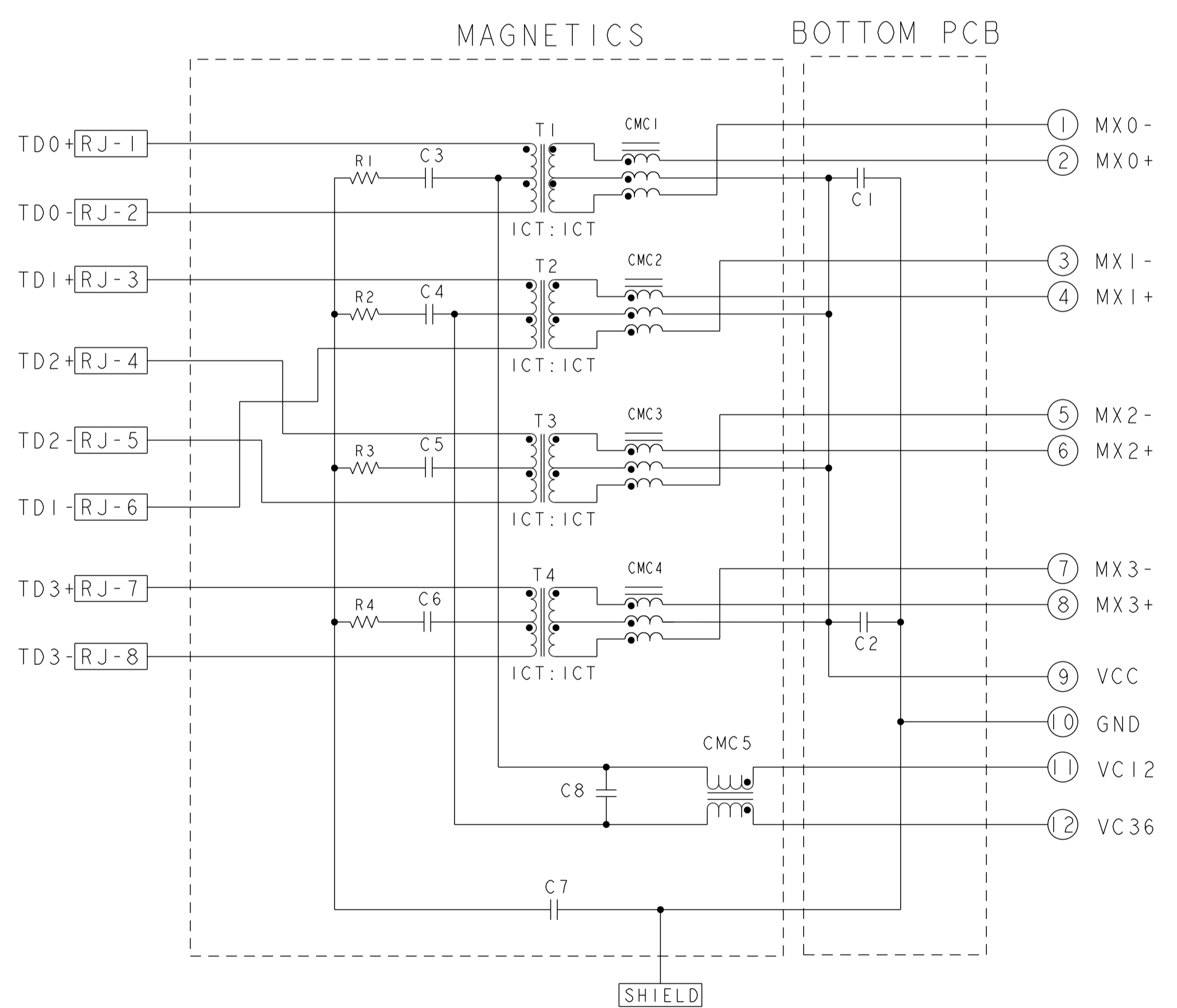
8 7 6 5 4 3 2 1  
 THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:  
 5736910 5939955 6425781 6428361 6554638 6840817 7123117  
 7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS					
P	LTR	DESCRIPTION	DATE	DRW	APPD
D		LOGO CHANGE	16APR2013	RL	KZ
E		EC-1412014 AND EC-1411035 LOGO CHANGE	11DEC2014	TR	TY



S9HG02C2 GIGABIT PoE PLUS CIRCUIT  $\Delta\Delta$   
 TOP AND BOTTOM PORTS



C1-C2=10nF, 50V, CAPACITORS  
 C3-C6=22nF, 100V, CAPACITORS  
 C7=1000pF, 2kV, CAPACITOR  
 C8=100nF, 100V, CAPACITOR  
 R1-R4=75 OHMS, 1/16W, RESISTORS

1. MATERIALS:  
 PLASTIC HOUSING: BLACK, THERMOPLASTIC 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, 1.27um MIN OVERALL NICKEL UNDERPLATE  
 WITH 1.27um MIN GOLD OR WITH SELECT 0.05um MIN GOLD OVER 0.76um  
 MIN PALLADIUM-NICKEL AT MATING INTERFACE AND 2.54um MIN MATTE  
 TIN ON SOLDER TAILS.  
 LED: DIFFUSED EPOXY LENS, CARBON STEEL LEAD FRAME TAILS OF LED  
 ARE PREPLATED WITH 2.03um MIN SILVER OVER 1.02um MIN NICKEL  
 UNDERPLATE OVER 1.02um MIN COPPER UNDERPLATE. POST-PLATED WITH  
 2.54um MIN MATTE TIN AND/OR SAC SOLDER DIP OR PURE TIN SOLDER DIP

- $\Delta$  MAGNETICS:  
 APPLICATION: 10/100/1000 BASE-T, PoE PLUS  
 IMPEDANCE: 100 OHMS  
 TURNS RATIO (CHIP:CABLE): 1:1 ALL FOUR PAIRS  
 OPEN CIRCUIT INDUCTANCE (OCL):  
 ALL CHANNELS 350 uH MIN @ 100kHz, 0.1 VRMS WITH 8mA DC BIAS FROM 0°C TO 70°C,  
 120 uH min @ 100kHz, 0.1 VRMS WITH 19 mA DC BIAS FROM 0°C TO 70°C, ACROSS  
 RJ1-RJ2 & RJ3-RJ6.  
 ALL FOUR PAIRS BI-DIRECTIONAL  
 POE CURRENT: 600mA DC MAX  
 PERFORMANCE @25°C:  
 INSERTION LOSS (IL): 1.1dB MAX FROM 1.0MHz TO 100MHz  
 RETURN LOSS (RL): 18dB MIN FROM 1.0MHz TO 40MHz  
 12-20LOG(f/80)dB MIN FROM 40.1MHz TO 100MHz  
 CROSSTALK ATTENUATION: 35dB MIN FROM 1.0MHz TO 40MHz  
 33-20LOG(f/50)dB MIN FROM 40.1MHz TO 100MHz  
 COMMON MODE REJECTION RATIO (CMRR):  
 30dB MIN FROM 1.0MHz TO 100MHz  
 ISOLATION VOLTAGE: 2250VDC(MAX) FOR 60 SECONDS WITH A RISE TIME OF 500V/SEC  
 AND WITH ALL PORTS CONNECTED.

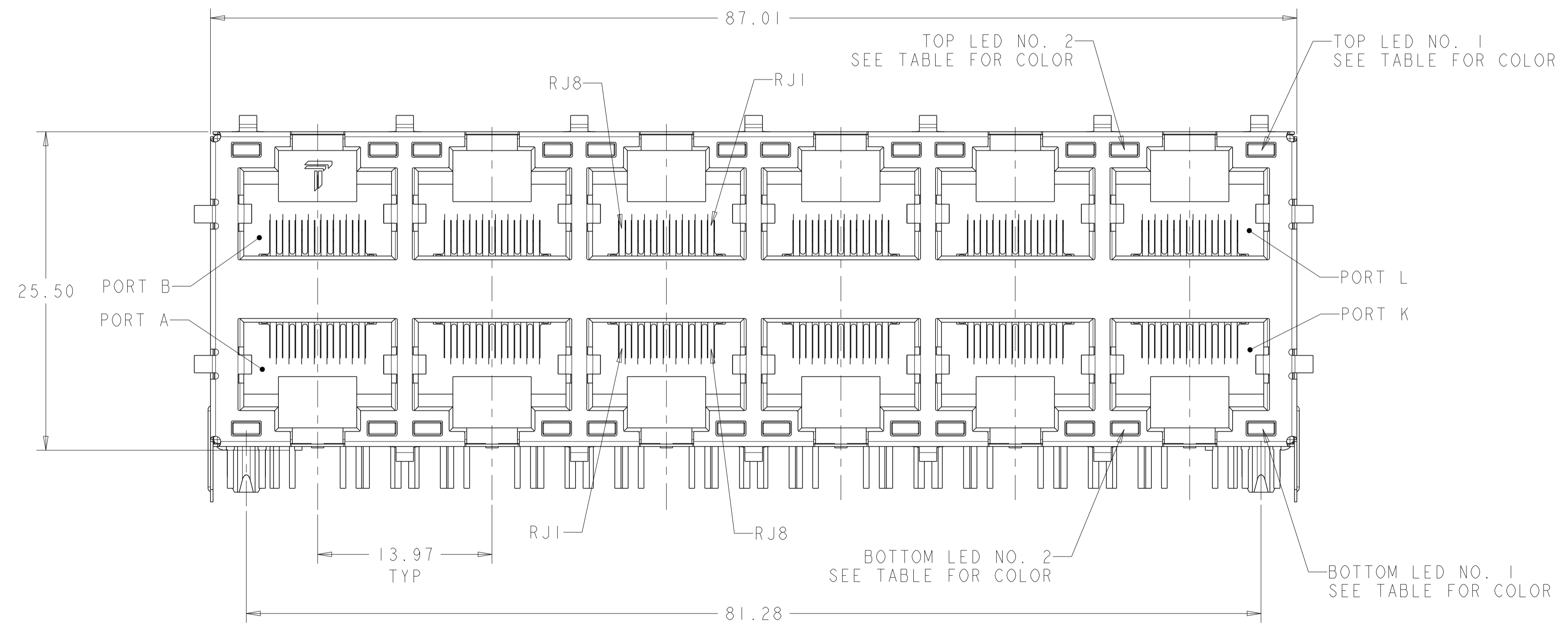
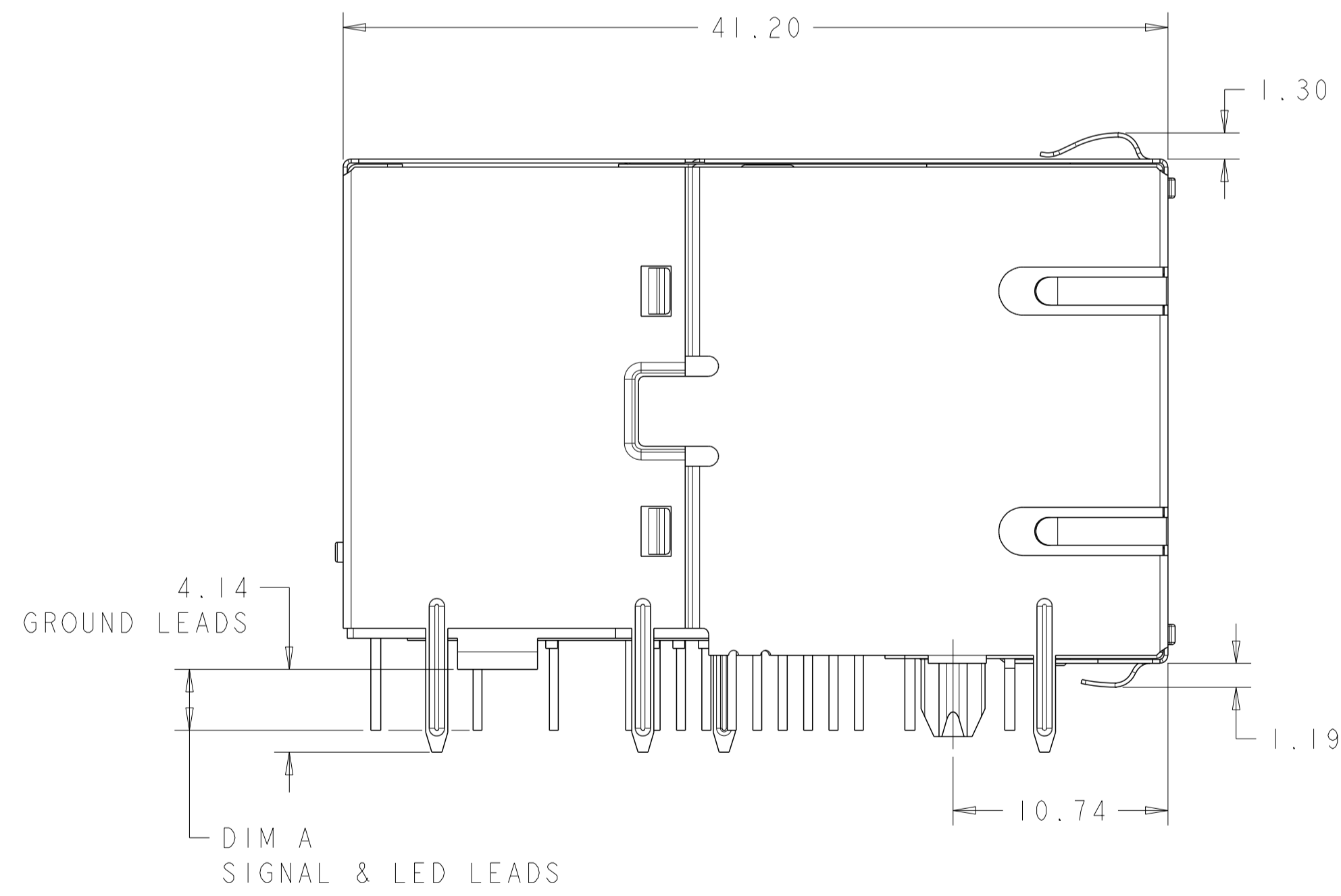
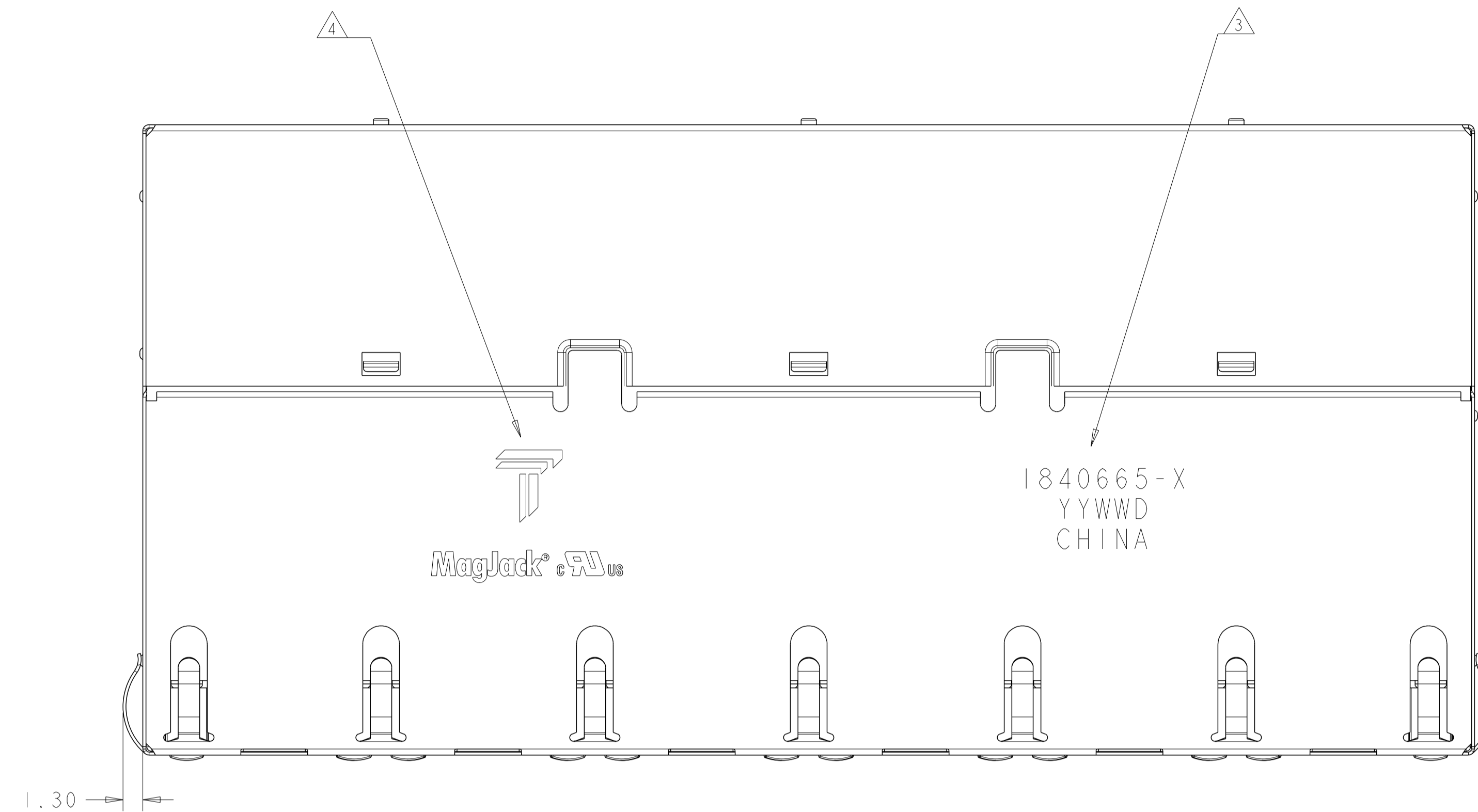
- $\Delta$  PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN LOCATED IN APPROXIMATE AREA SHOWN  
 DATE CODE: YYWD WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK,  
 WITH SUNDAY =1  
 $\Delta$  TRP CONNECTOR LOGO AND AGENCY APPROVAL LOGO ARE LOCATED  
 IN APPROXIMATE AREA SHOWN.

5. OPERATING TEMP: FROM 0°C TO 70°C.  
 6. RJ45 CAVITY CONFORMS TO FCC RULES AND REGULATION PART 68 SUBPART F.  
 $\Delta$  INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.  
 $\Delta$  DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.  
 $\Delta$  DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE  
 GREATER THAN 5.08mm.  
 $\Delta$  LEDs ARE DRIVEN WITH CONSTANT CURRENT AT APPROX 20mA  
 LED COLOR: DOMINANT WAVELENGTH (λD): GREEN 568 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): GREEN 2.2V TYP. @ IF=20mA  
 DOMINANT WAVELENGTH (λD): YELLOW 588 nm TYP. @ IF=20mA  
 FORWARD VOLTAGE (VF): YELLOW 2.1V TYP. @ IF=20mA

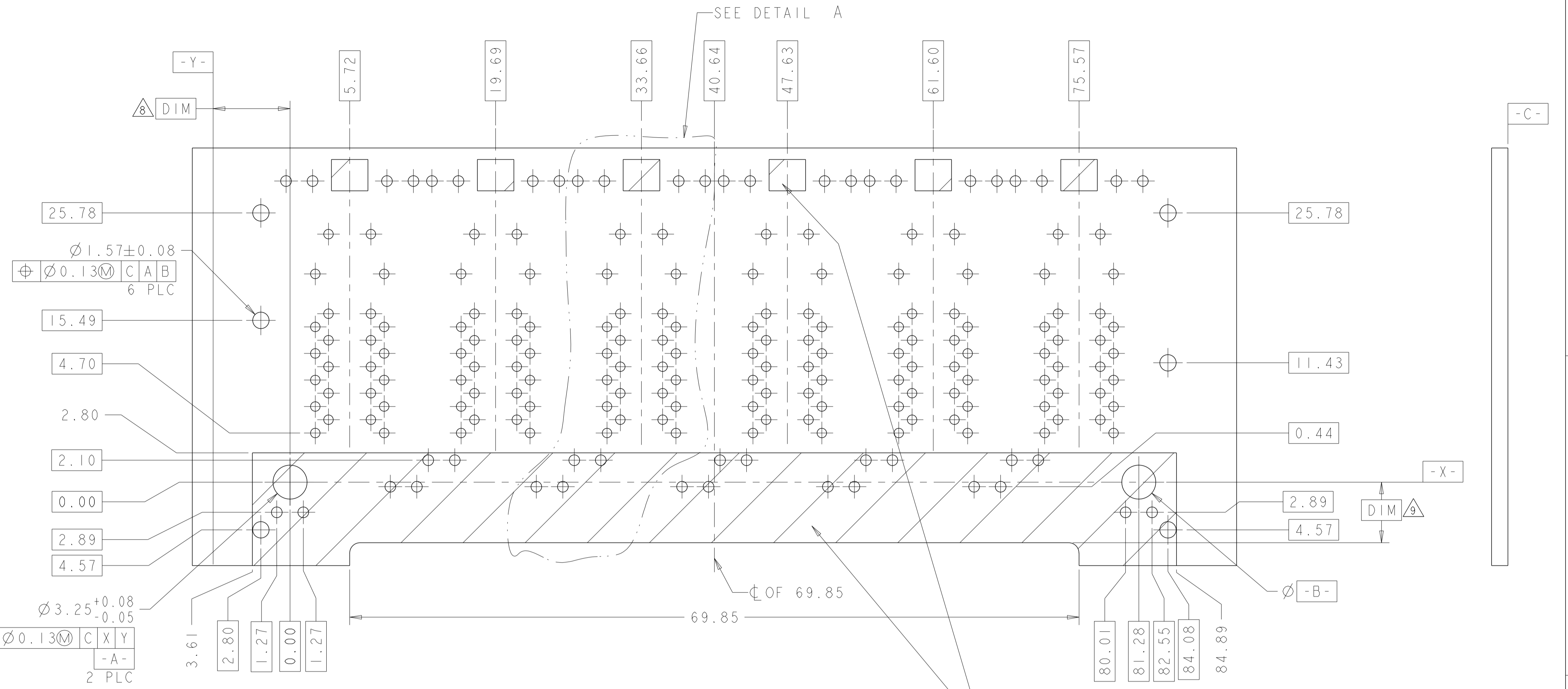
11. THESE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS, PEAK TEMPERATURE 260°C  
 FOR 10 SECONDS

2.60	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	1840665-2
3.04	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	1840665-1
DIM A	BOTTOM LED NO. 2	BOTTOM LED NO. 1	TOP LED NO. 2	TOP LED NO. 1	PART NO.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: RICK LIZEVAN, MA 03NOV2011	DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN 03NOV2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPD: KEITH ZHU 23OCT2013	MODEL NAME: MAGJACK STACK PoE+ DESC: 2X6 S9HG02C2 GIGABIT PoE+ W/ LED SIZE: A1 CAGE CODE: 1840665 DRAWING NO: 1840665
PRODUCT SPEC: 108-104004		APPLICATION SPEC:	CUSTOMER DRAWING SCALE: 4:1 SHEET 1 OF 4 REV E

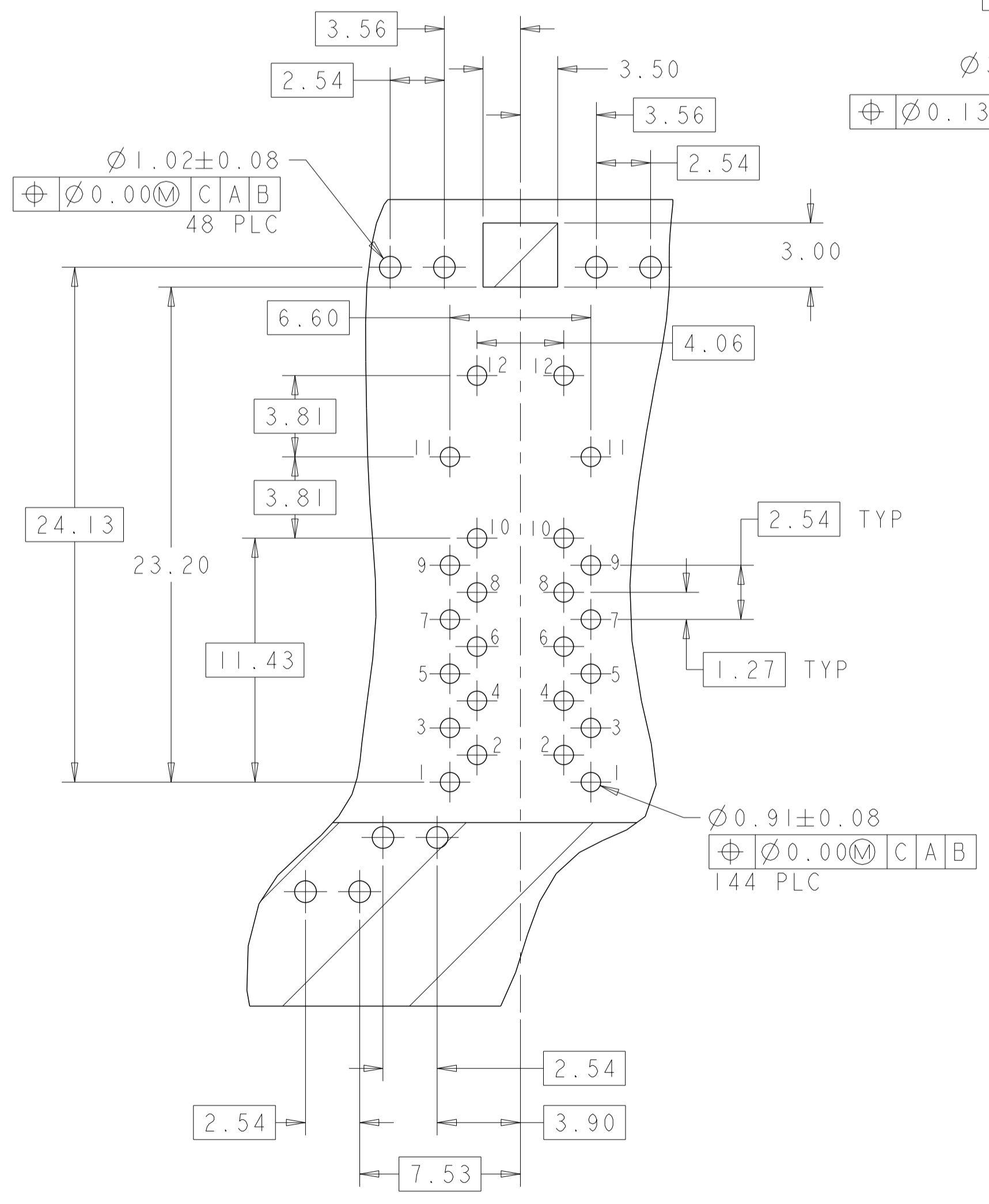


THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: RICK LI/ZEVAN, MA 03NOV2011	<p>TRP CONNECTOR a bel group</p>	DONGGUAN CHINA
		CHK: TONY YUAN 03NOV2011		
		APRD: KEITH ZHU 23OCT2013	DESC: 2X6 S9HG02C2 GIGABIT PoE+ W/ LED	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:	SIZE: A1	RESTRICTED TO: -
		0 PLC ±0.25	CAGE CODE: C=1840665	DRAWING NO: 1840665
PRODUCT SPEC: 108-104004		1 PLC ±0.25	SCALE: 4:1	SHEET 2 OF 4
		2 PLC ±0.25	REV: E	
		3 PLC ±		
		4 PLC ±		
		ANGLES		
		APPLICATION SPEC		

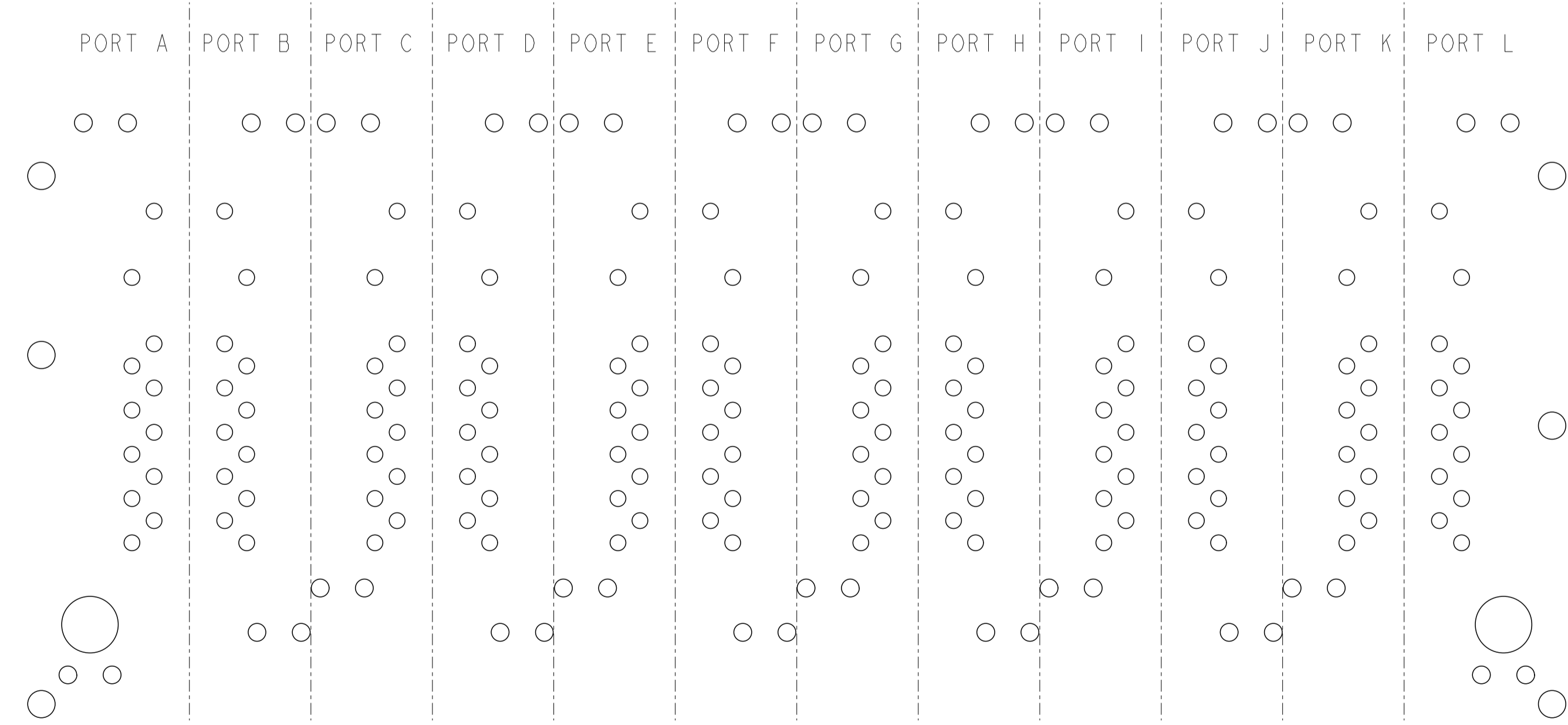


RECOMMENDED CUSTOMER PCB LAYOUT  
 VIEWED FROM COMPONENT SIDE

IT IS RECOMMENDED THAT SHADED AREAS ON CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT, CIRCUIT TRACE WHICH HAS EQUAL POTENTIAL WITH CABLE SIDE SIGNAL AND POE SIGNAL

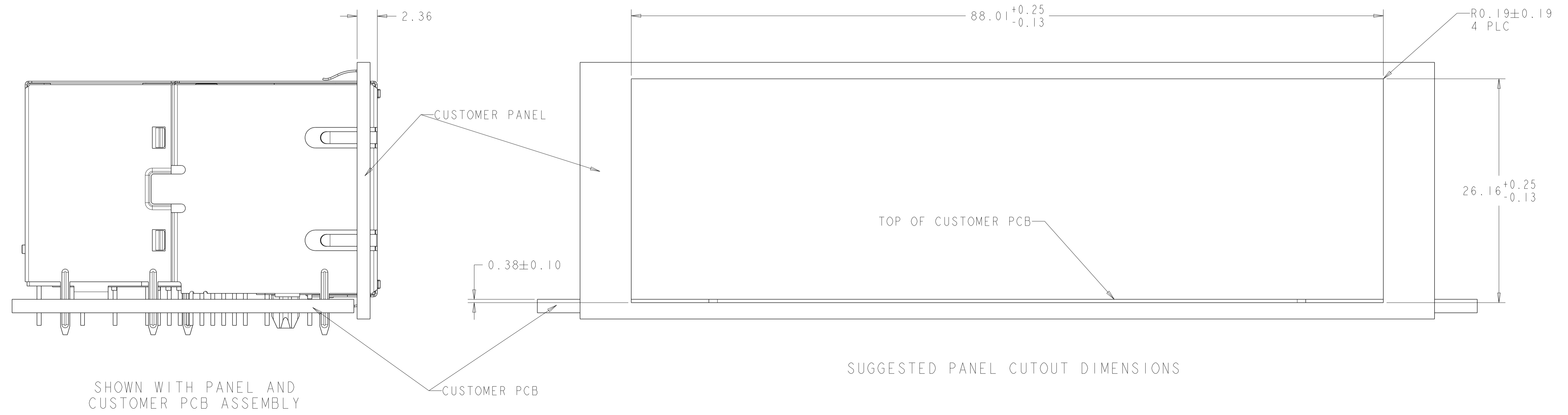
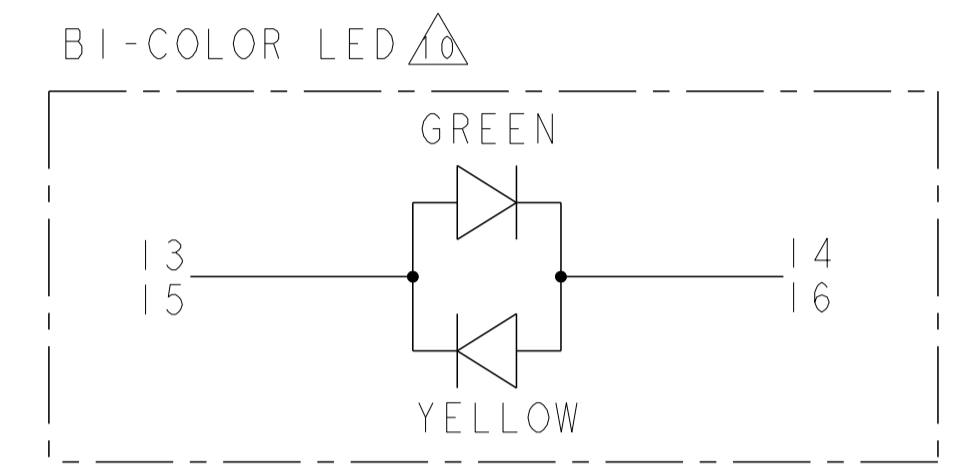
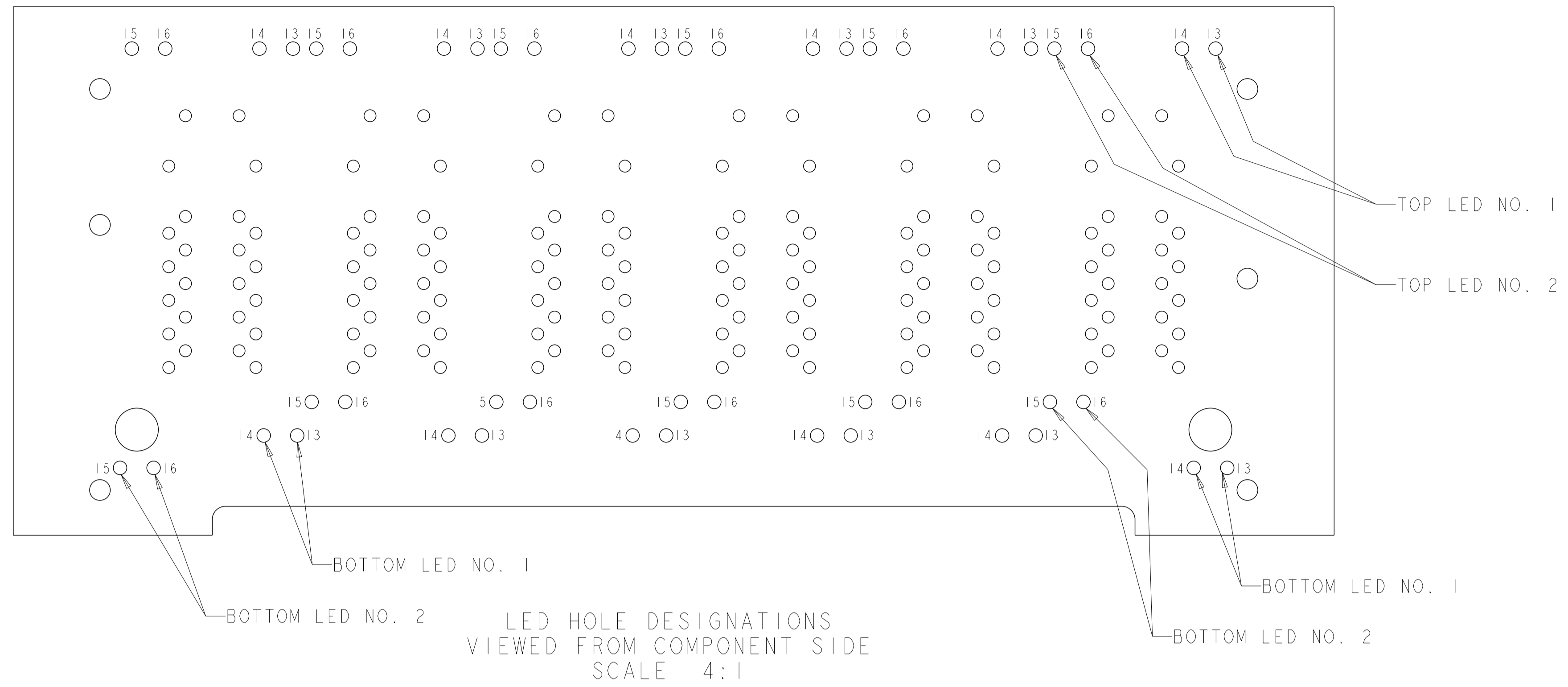


DETAIL A  
 SCALE 5:1



PORT ASSIGNMENT  
 VIEWED FROM COMPONENT SIDE  
 SCALE 4:1

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWO: RICK LI/LEVAN, MA 03NOV2011		DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN 03NOV2011		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APRD: KEITH ZHU 23OCT2013		MODEL NAME: MAGJACK STACK PoE+
0 PLC ±0.25		DESC: 2X6 S9HG02C2 GIGABIT PoE+ W/ LED		
1 PLC ±0.25		SIZE: A1		CAGE CODE: 1840665 DRAWING NO: 108-104004
2 PLC ±0.25		SCALE: 4:1		
3 PLC ±		SHEET: 3 OF 4		RESTRICTED TO: - REV: E
4 PLC ±		CUSTOMER DRAWING		



SUGGESTED PANEL CUTOUT DIMENSIONS

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: RICK LI/LEVAN MA 03NOV2011		<b>TRP CONNECTOR</b> <small>a bel group</small>		DONGGUAN CHINA	
DIMENSIONS: mm		CHK: TONY YUAN 03NOV2011				DESC: 2X6 S9HG02C2 GIGABIT PoE+ W/ LED	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APRD: KEITH ZHU 23OCT2013		MODEL NAME: MAGJACK		SIZE: A1	
0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		APPLICATION SPEC		CAGE CODE: 1840665		SCALE: 4:1	
PRODUCT SPEC: 108-104004		CUSTOMER DRAWING		SHEET 4 OF 4		REV E	