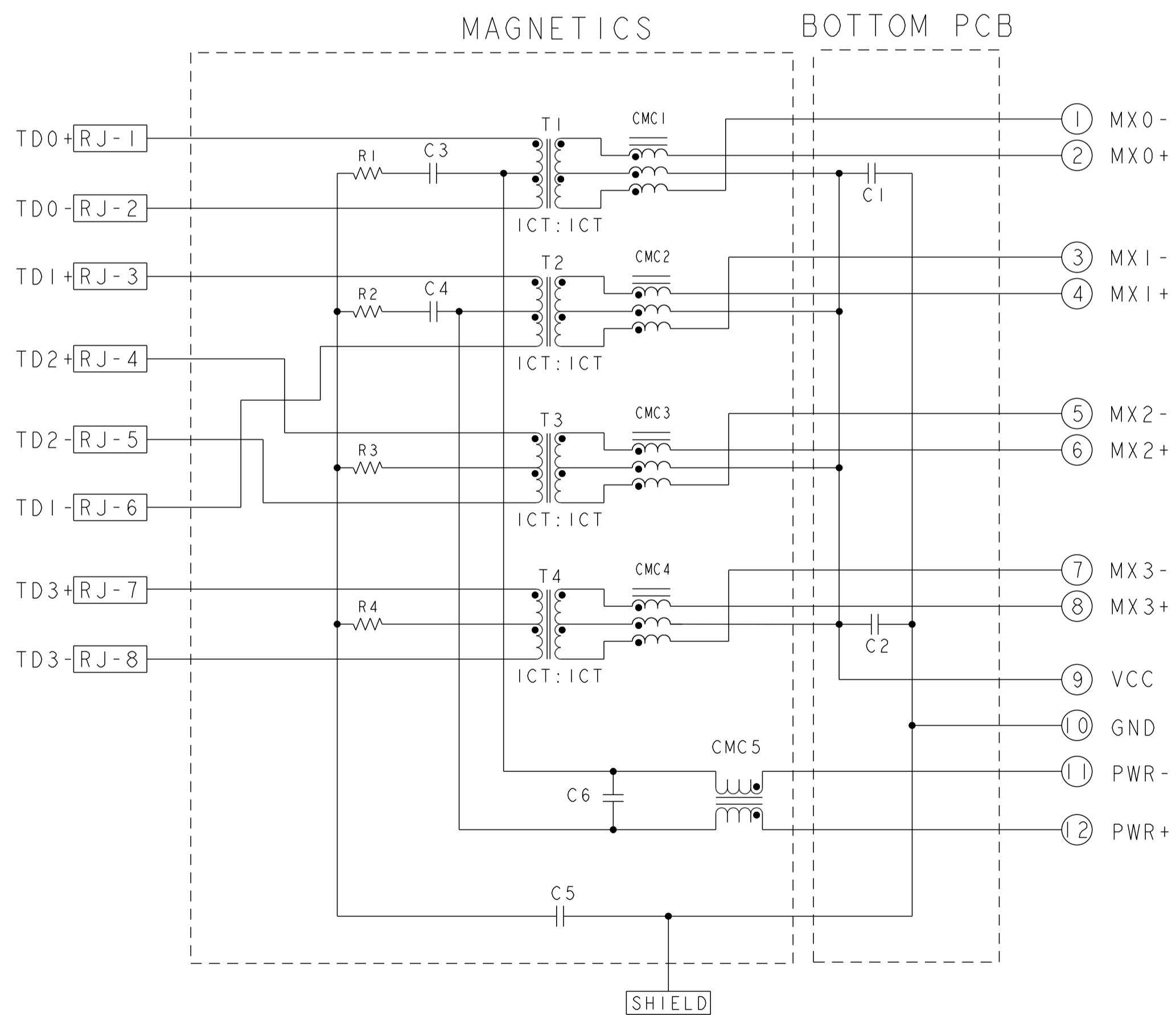


S9HG104 GIGABIT PoE PLUS CIRCUIT ²/₇
 TOP AND BOTTOM PORTS



C1-C2=10nF, 50V, CAPACITORS
 C3-C4=22nF, 100V, CAPACITORS
 C5=1000pF, 2kV, CAPACITOR
 C6=68nF, 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 OR PURE TIN SOLDER DIP ON
 SOLDER TAILS.
 CONTACTS: PHOSPHOR BRONZE, 1.27um MIN OVERALL NICKEL UNDERPLATE
 WITH SELECT 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
2. MAGNETICS:
 APPLICATION: 10/100/1000 BASE-T, PoE PLUS
 IMPEDANCE: 100ohms
 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.
3. PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN LOCATED IN APPROXIMATE AREA SHOWN
 DATE CODE: YYWW WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY OF WEEK,
 WITH SUNDAY = 1
4. 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.
7. INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.
8. DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.
9. DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE
 GREATER THAN 5.08mm.
10. 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

3.81	GREEN/YELLOW	GREEN/YELLOW	1840839-4
DIM A	TOP LED 2	TOP LED 1	PART NO.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWR: 13JUN2012 RICK LI/LIGHT CHEN		trp CONNECTOR a bel group		DONGGUAN CHINA	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		MAGJACK		DESC: 2X8 S9HG104 GIGABIT PoE+ W/ LED	
0 PLC ±0.25		1 PLC ±0.25		STACK PoE+		SIZE: A1	
2 PLC ±0.25		3 PLC ±0.25		CUSTOMER DRAWING		CAGE CODE: 1840839	
4 PLC ±		ANGLES ±		SCALE: NTS		SHEET 1 OF 5	
PRODUCT SPEC: 108-104004		APPLICATION SPEC: -		REV: 3			

8

7

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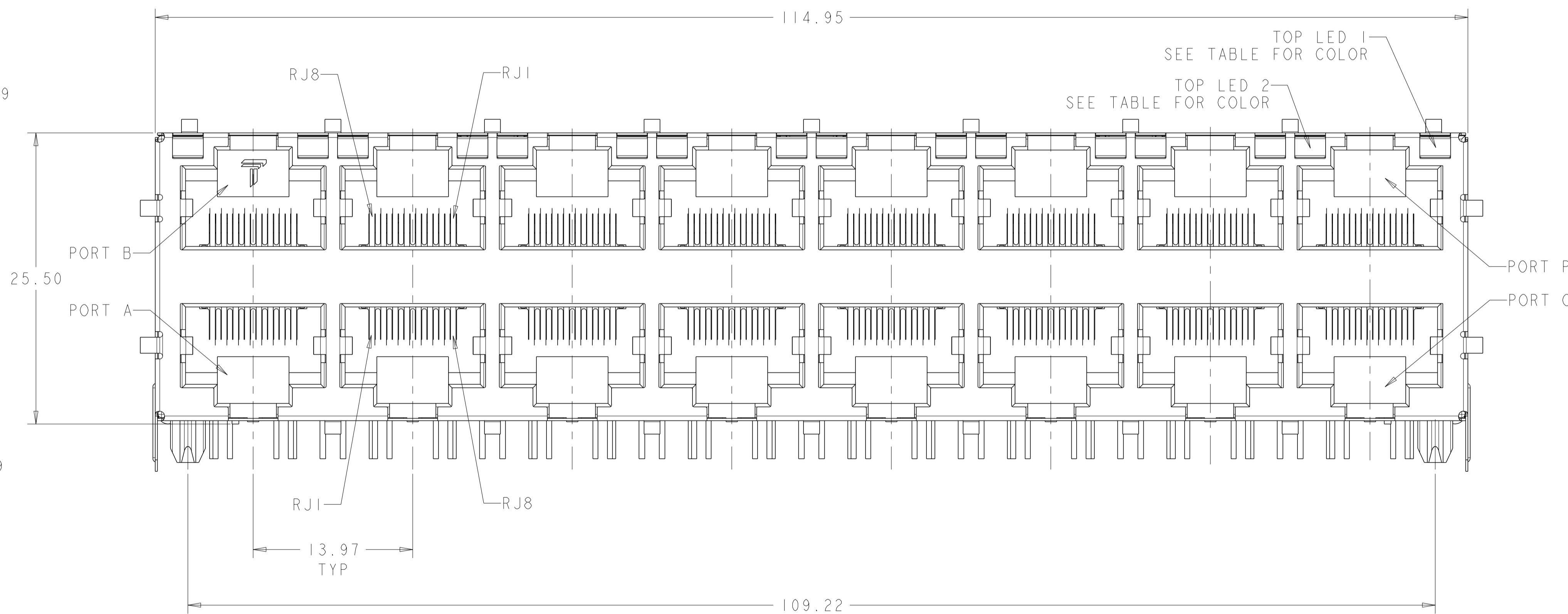
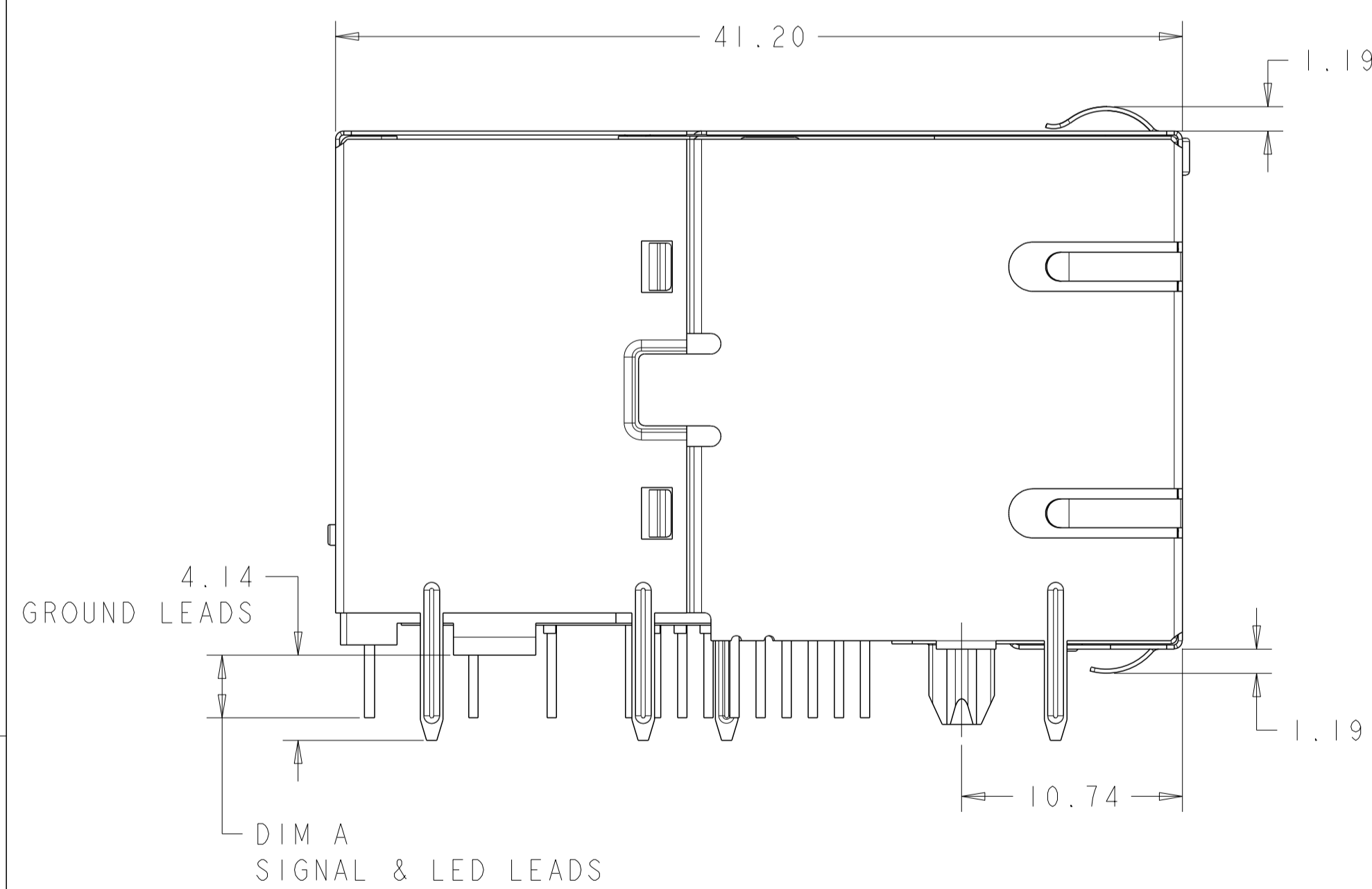
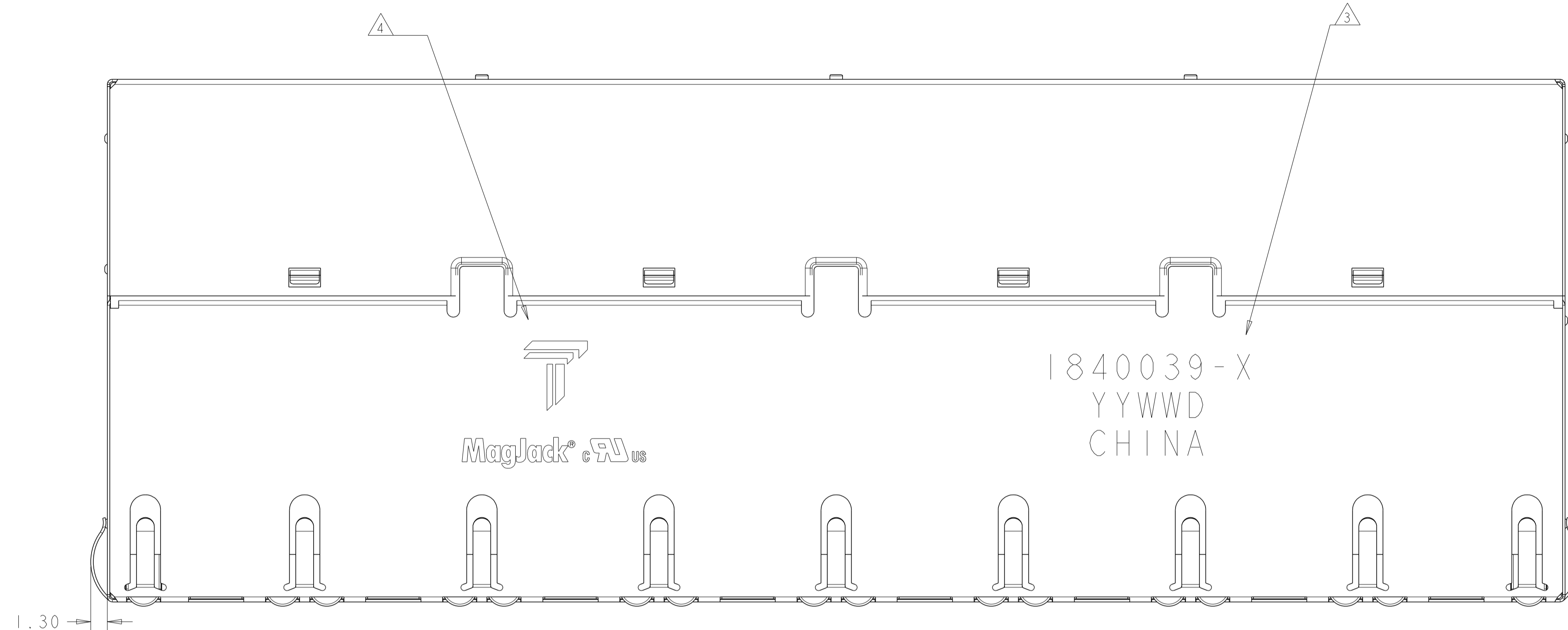
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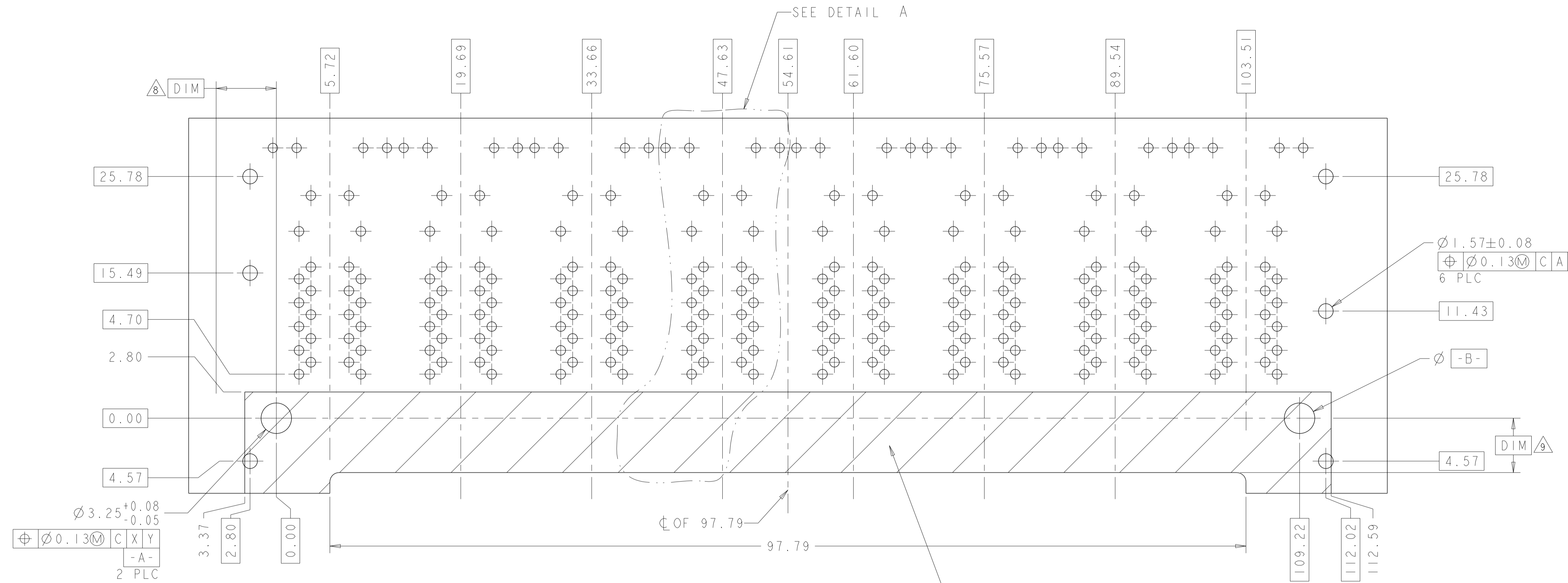
PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING US PATENTS:
5736910 5939955 6425781 6428361 6554638 6840817 7123117
7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS

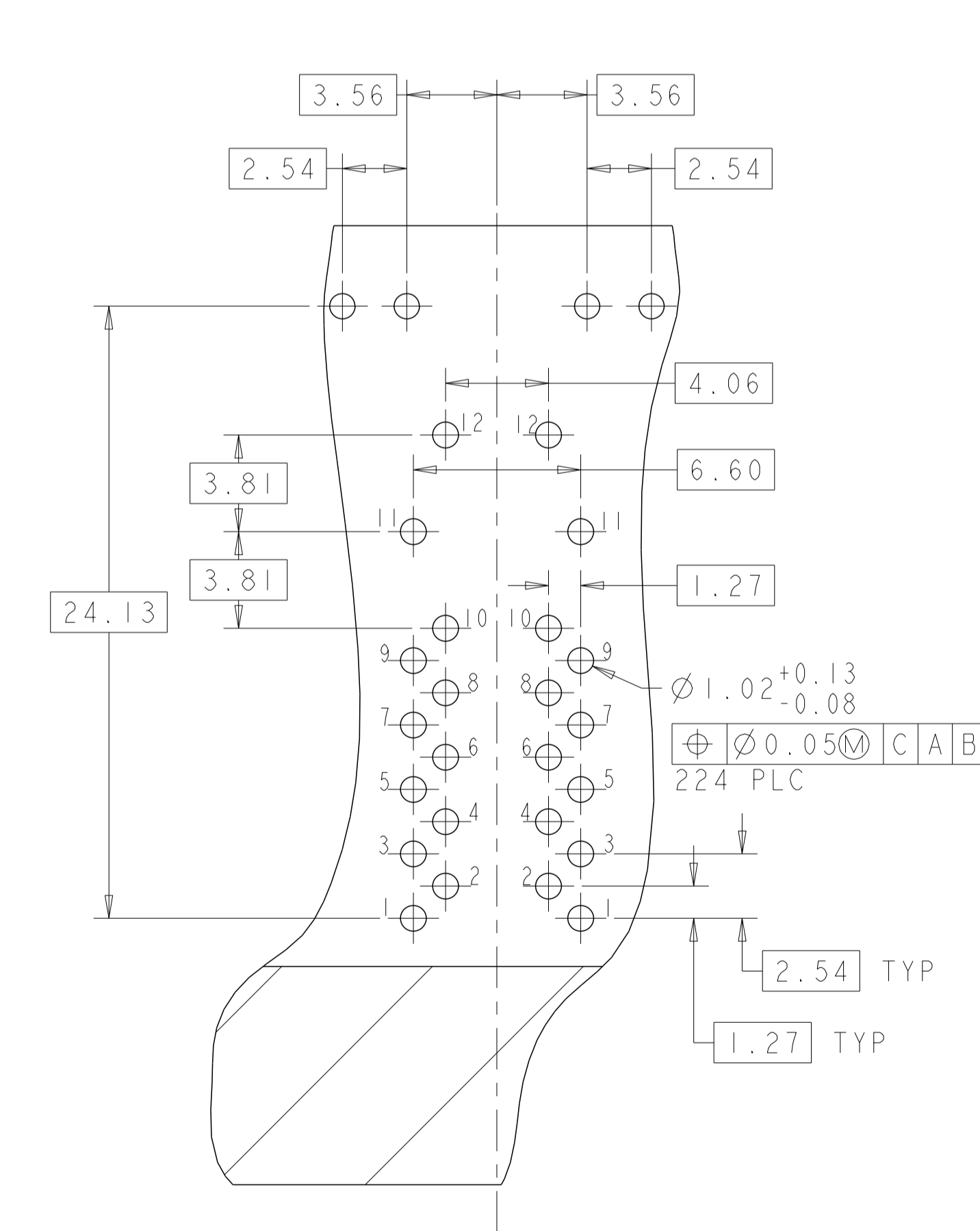
P	LTR	DESCRIPTION	DATE	DRW	APPD



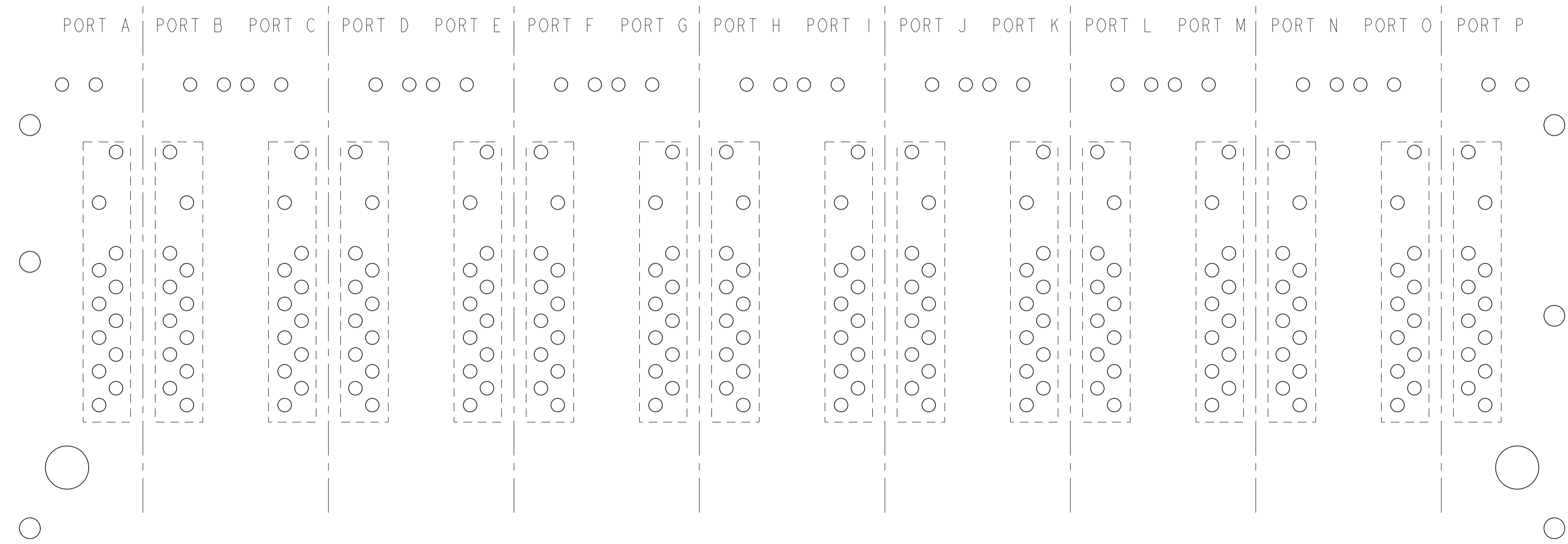
THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: RICK LI/LIGHT CHEN CHK: TOMMY REN APPD: KEITH ZHU	13 JUN 2012 13 JUN 2012 13 JUN 2012	 DONGGUAN CHINA
DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ± ANGLES ± APPLICATION SPEC ±	MODEL NAME: MAGJACK STACK PoE+	DESC: 2X8 S9HG104 GIGABIT PoE+ W/ LED	
PRODUCT SPEC: 108-104004		CAGE CODE: C=1840839	SIZE: A1	RESTRICTED TO: -
CUSTOMER DRAWING		SCALE: NTS	SHEET: 2 OF 5	REV: 3



SUGGESTED CUSTOMER PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE



DETAIL A SCALE 5:1



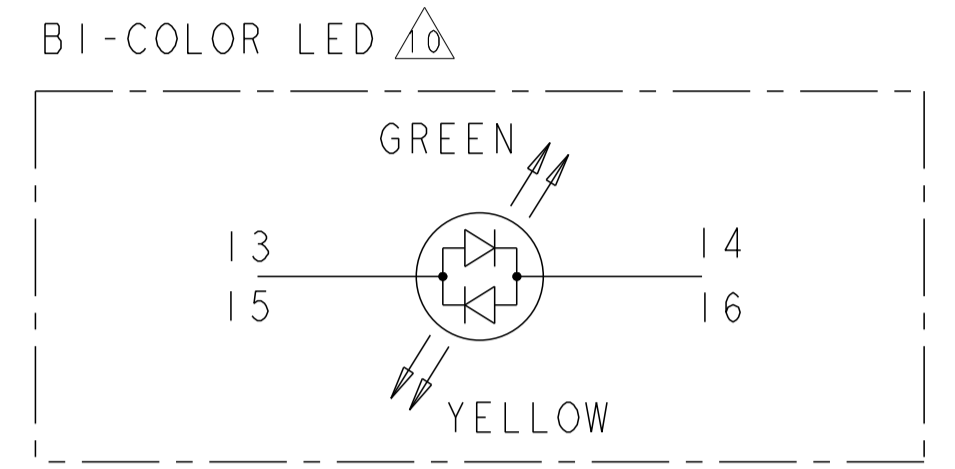
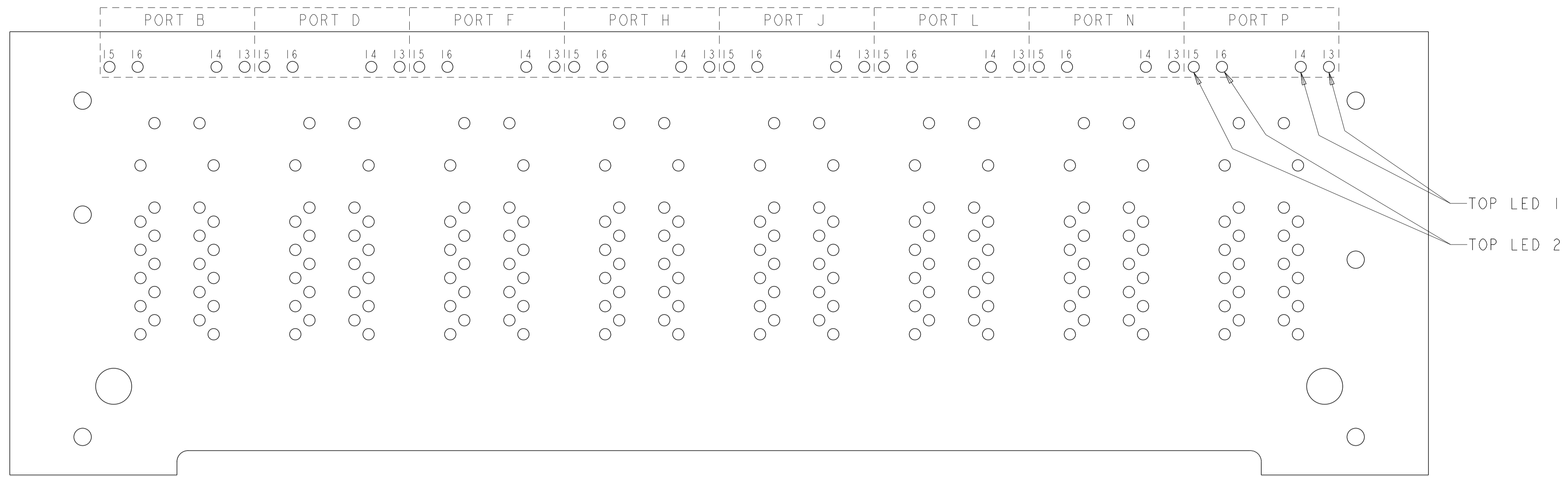
PORT ASSIGNMENT VIEWED FROM COMPONENT SIDE

THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: RICK LI/LIGHT CHEN 13JUN2012	DONGGUAN CHINA
		CHK: TOMMY REN 13JUN2012	
		APPR: KEITH ZHU 13JUN2012	DESC: 2X8 S9HG104 GIGABIT PoE+ W/ LED SIZE: A1 CAGE CODE: C=1840839 DRAWING NO: 108-104004 RESTRICTED TO: - SCALE: NTS SHEET 3 OF 5 REV 3
DIMENSIONS: mm TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ± ANGLES ± PRODUCT SPEC: 108-104004 APPLICATION SPEC: -		MODEL NAME: MAGJACK STACK PoE+ CUSTOMER DRAWING	

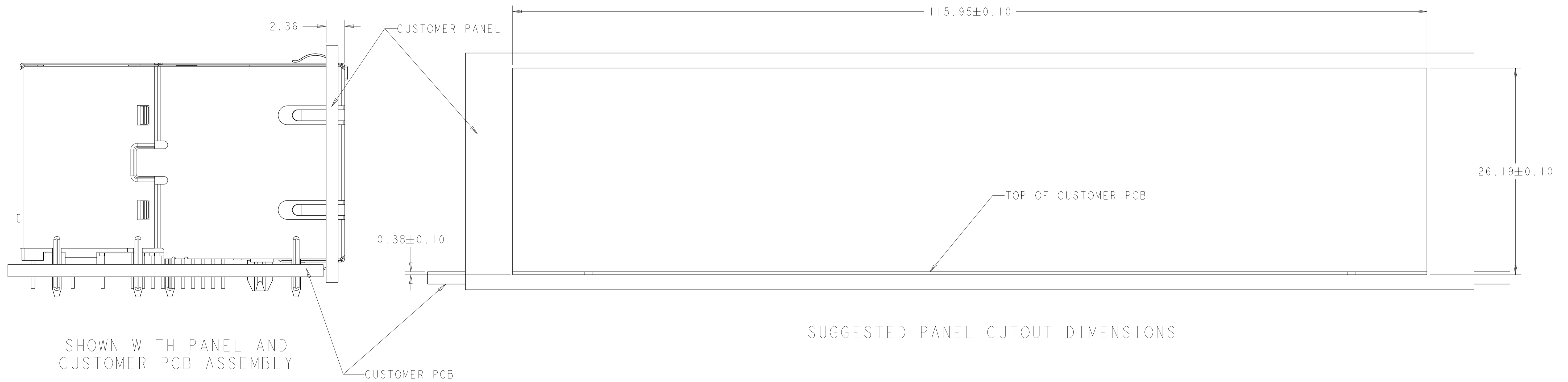
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 7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS				
P	LTR	DESCRIPTION	DATE	APPD



LED HOLE DESIGNATIONS
 VIEWED FROM COMPONENT SIDE
 SCALE 4:1



SHOWN WITH PANEL AND CUSTOMER PCB ASSEMBLY

SUGGESTED PANEL CUTOUT DIMENSIONS


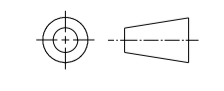
THIS DRAWING IS A CONTROLLED DOCUMENT.		DRW: RICK LI/LIGHT CHEN 13JUN2012	 DONGGUAN CHINA
DIMENSIONS: mm		CHK: TOMMY REN 13JUN2012	
		APPD: KEITH ZHU 13JUN2012	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ± APPLICATION SPEC ±		MODEL NAME: MAGJACK STACK PoE+	DESC: 2X8 S9HG104 GIGABIT PoE+ W/ LED
PRODUCT SPEC: 108-104004		SIZE: A1	CAGE CODE: C=1840839
CUSTOMER DRAWING		SCALE: NTS	SHEET 4 OF 5 REV 3

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 7429195 7717749 7808751 6217391 6149050 7924130

REVISIONS				
P	LTR	DESCRIPTION	DATE	APPD

1840839				STOCK DISPOSITION				
2X8 MAG45(TM), GIGABIT S9HG104 PoE PLUS CIRCUIT, WAVE PANEL, GROUND SHIELD, W/TOP LEDS, AUTO-WELDING				A: CONTINUE AS IS D: USE OLD FIRST B: REWORK E: PARTS TO CONFORM C: SCRAP F: OTHER				
REVISION HISTORY								
DATE	REV	CHANGES	REASON	APPROVAL	INVENTORY (A.B.C.D.E.F)	WORK IN PROCESS (A.B.C.D)	SUPPLIER ORDERS (A.E.F.)	OPEN CUST ORDERS (A.E.F)
13JUN2012	1	INITIAL RELEASE	INITIAL RELEASE	KZ	-	-	-	-
04JUL2013	2	LOGO CHANGE	MARKET REQUIREMENTS	TY	-	-	-	-

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWR RICK LI/LIGHT CHEN 13JUN2012		 DONGGUAN CHINA	
DIMENSIONS: mm		TOLERANCES UNLESS OTHERWISE SPECIFIED:		CHK TOMMY REN 13JUN2012 APD KEITH ZHU 13JUN2012	
		0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±		MODEL NAME MAGJACK STACK PoE+	
PRODUCT SPEC 108-104004		APPLICATION SPEC		DESC 2X8 S9HG104 GIGABIT PoE+ W/ LED SIZE A1 CAGE CODE C=1840839 DRAWING NO 1840839 RESTRICTED TO - CUSTOMER DRAWING SCALE NTS SHEET 5 OF 5 REV 3	