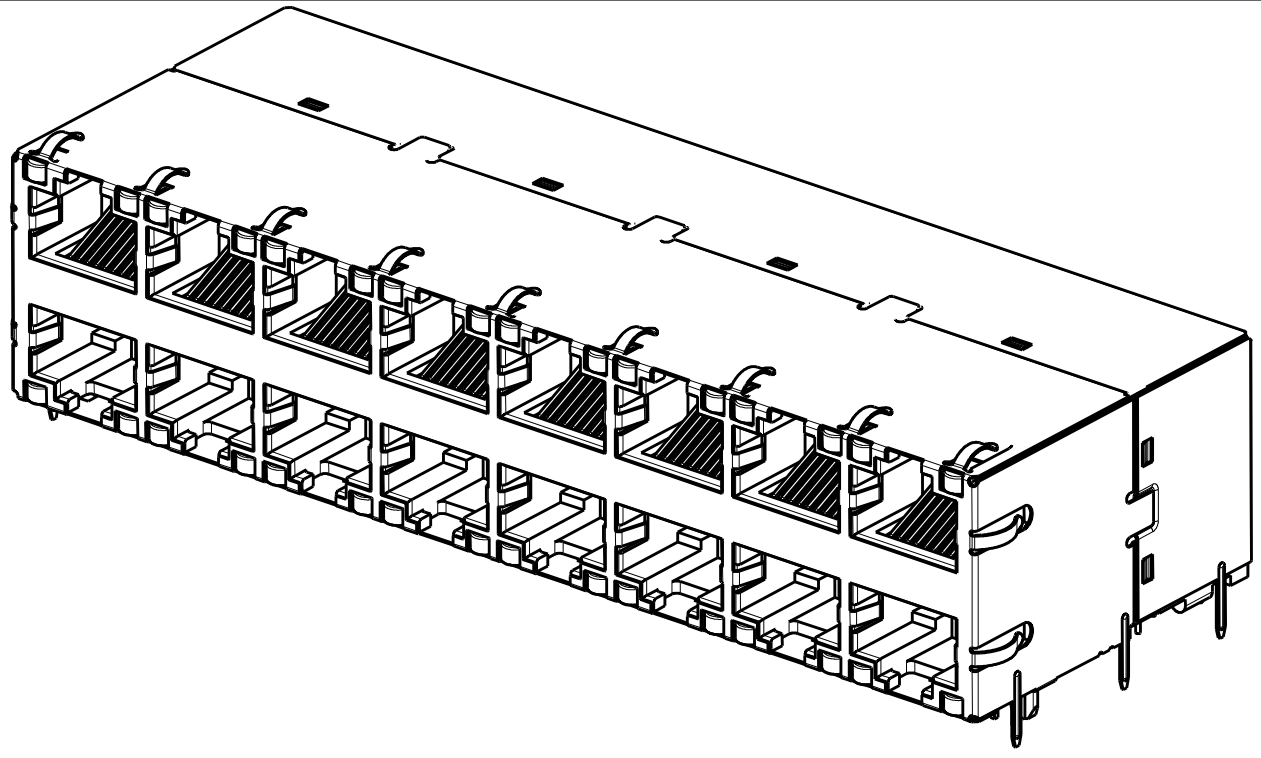


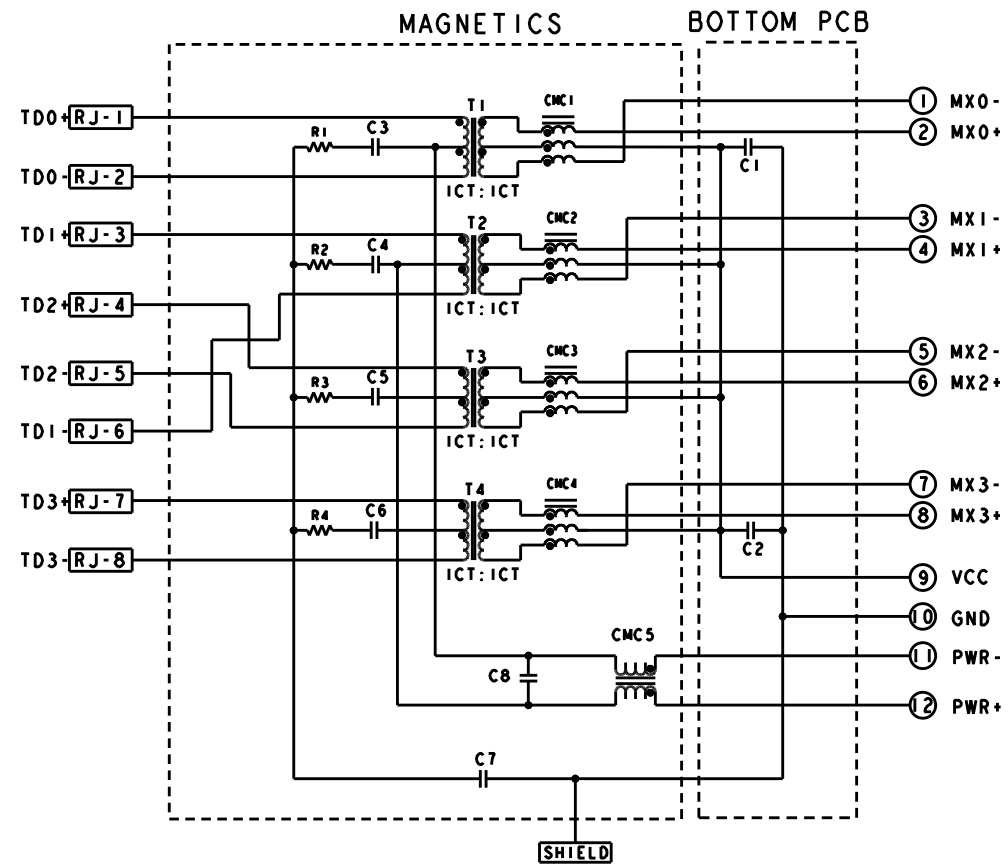
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

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					
NO.	DATE	DESCRIPTION	BY	CHK	APPV
8	13JAN2015	LOGO CHANGE	CZ	TY	



S9HG02 GIGABIT PoE PLUS CIRCUIT ⚠⚠
 TOP AND BOTTOM PORTS



C1-C2=10nF, 50V, CAPACITORS
 C3-C6=22nF, 100V, CAPACITORS
 C7=1000pF, 3kV, 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 OR PURE TIN SOLDER TIP 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
- ⚠ 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
 THE ELECTRICAL ISOLATION MEETS 1500VRMS & 2250VDC & 1500V IMPULSE (10/700us)
 AT 5,000 METERS ALTITUDE.

- ⚠ 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
- ⚠ 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.
- ⚠ INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND SUPPORT AUTO-MDI/MDIX.
- ⚠ DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.
- ⚠ DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE
 GREATER THAN 5.08mm.
- ⚠ 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 MAX.

2.60	GREEN	GREEN	GREEN	GREEN	2-1840863-1
2.60	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	2-1840863-4
3.81	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	GREEN/YELLOW	1-1840863-4
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.

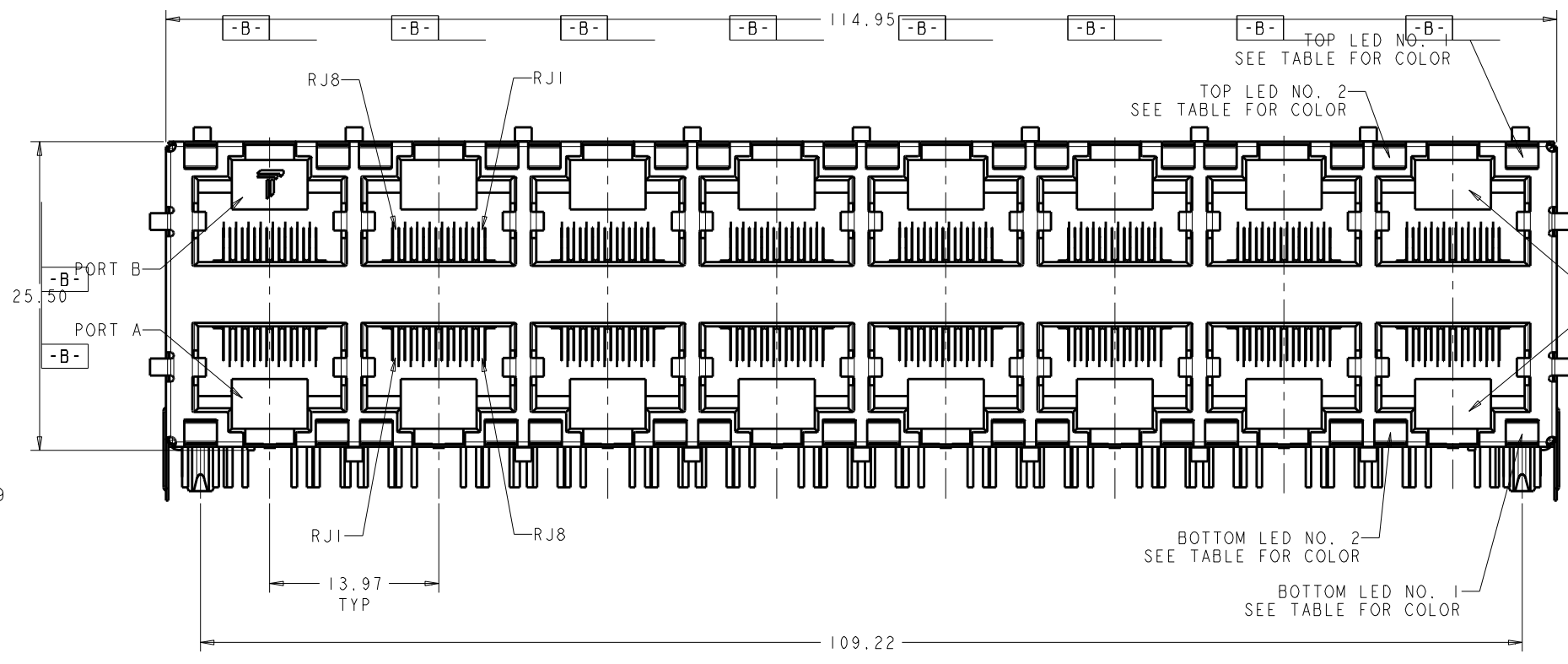
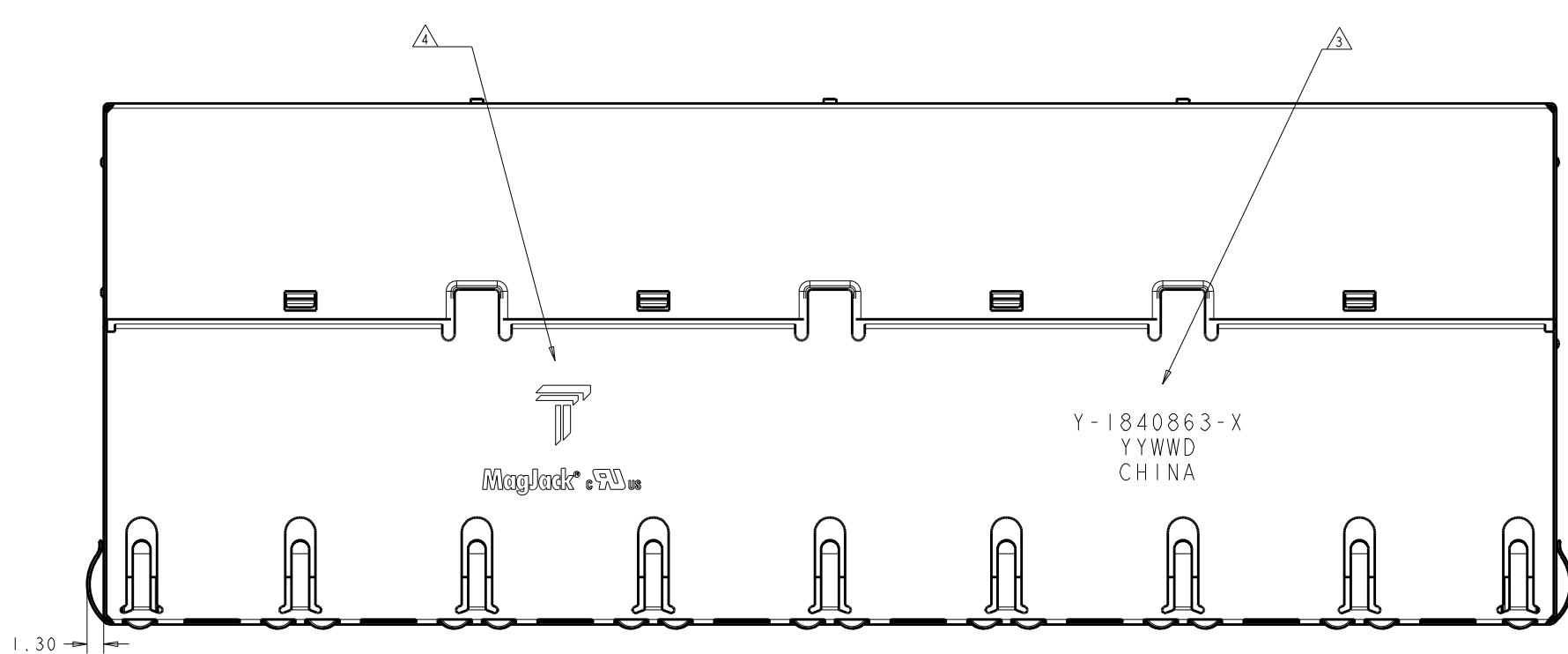
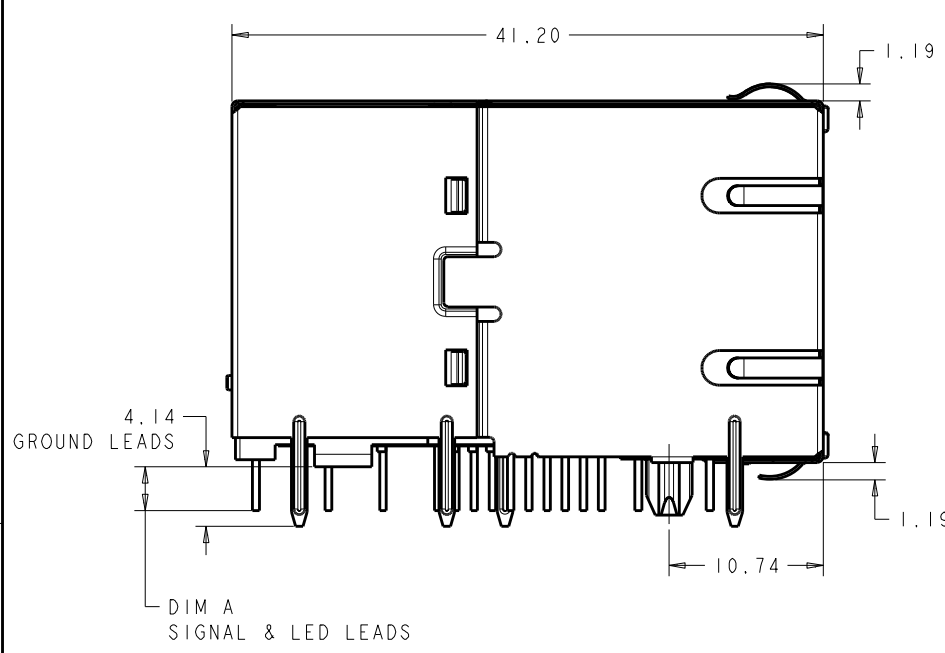
DIMENSIONS: mm 	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ± ANGLES ±	DWG: RICK LI/ALLEN ZHOU CHK: TONY YUAN APVD: KELTH ZHU DATE: 17FEB2011 DATE: 17FEB2011 DATE: 17FEB2011	DONGGUAN CHINA
PRODUCT SPEC:	APPLICATION SPEC:	MODEL NAME: MAGJACK STACK POE PLUS	DESC: 2X8 S9HG02 GIGABIT POE PLUS W/LED SIZE: A1 CAGE CODE: 1840863 DRAWING NO: 1840863 RESTRICTED TO:
CUSTOMER DRAWING		SCALE: NTS	SHEET 1 OF 4 REV 8

D

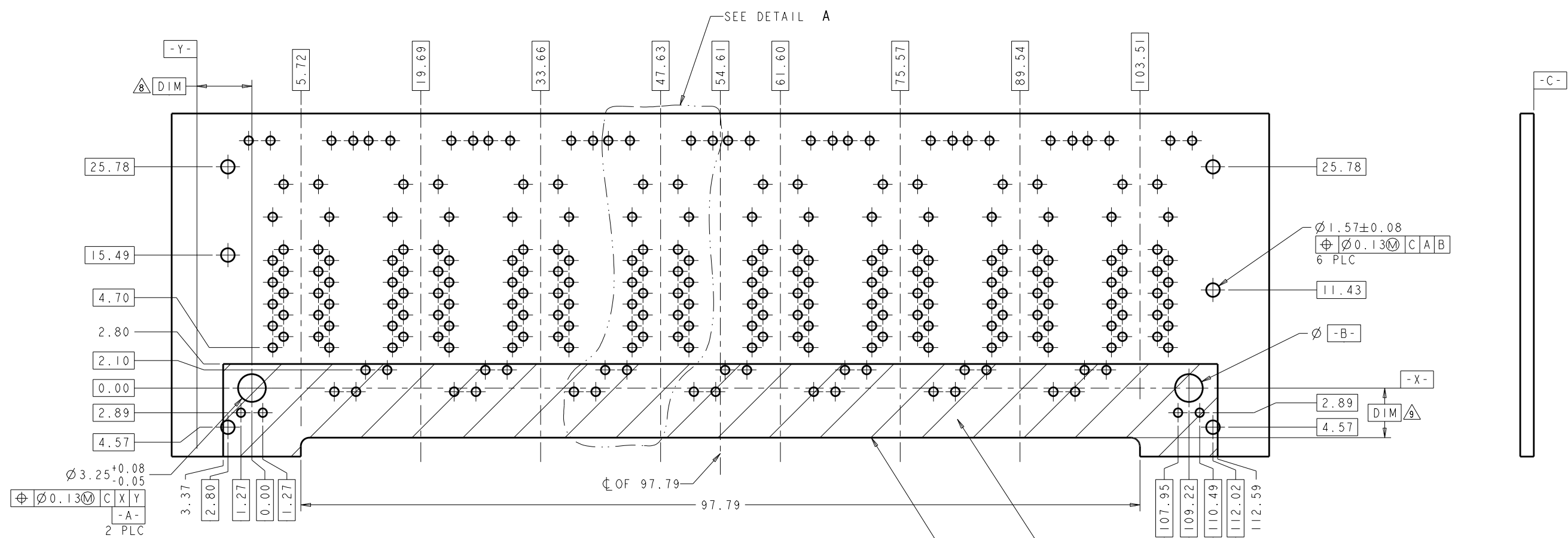
C

B

A



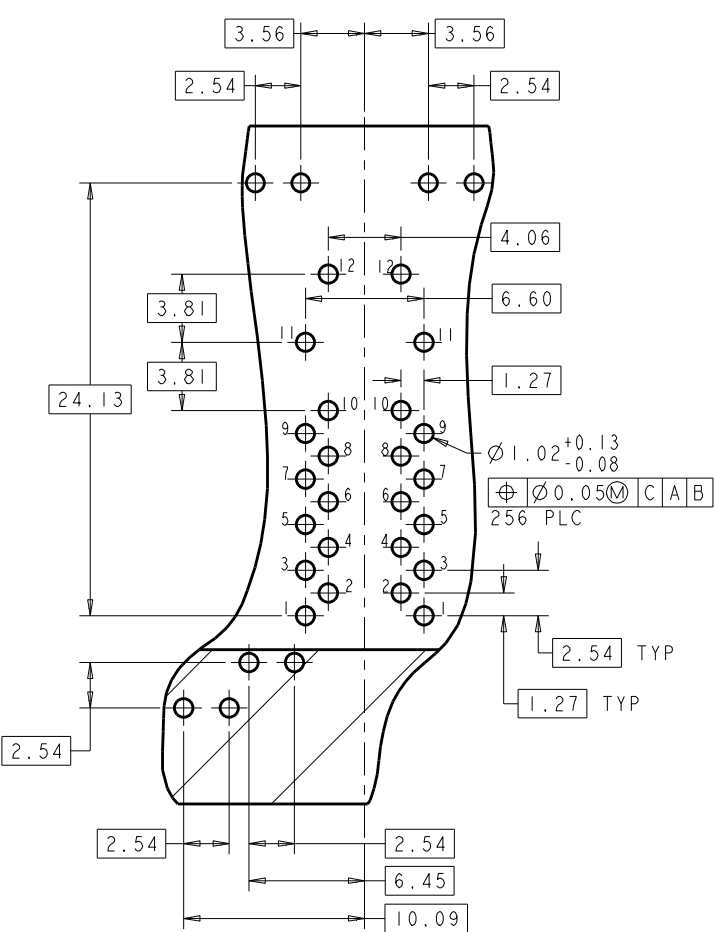
THIS DRAWING IS A CONTROLLED DOCUMENT.		DWG: RICK LI/ALLEN ZHOU 17FEB2011 CHK: TONY YUAN 17FEB2011 APVD: KEITH ZHU 17FEB2011	DONGGUAN CHINA
DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ±	MODEL NAME MAGJACK	DESC 2X8 S9HG02 GIGABIT POE PLUS W/LED
PRODUCT SPEC	APPLICATION SPEC	SIZE STACK POE PLUS	RESTRICTED TO -
CUSTOMER DRAWING		SCALE NTS	SHEET 2 OF 4 REV 8



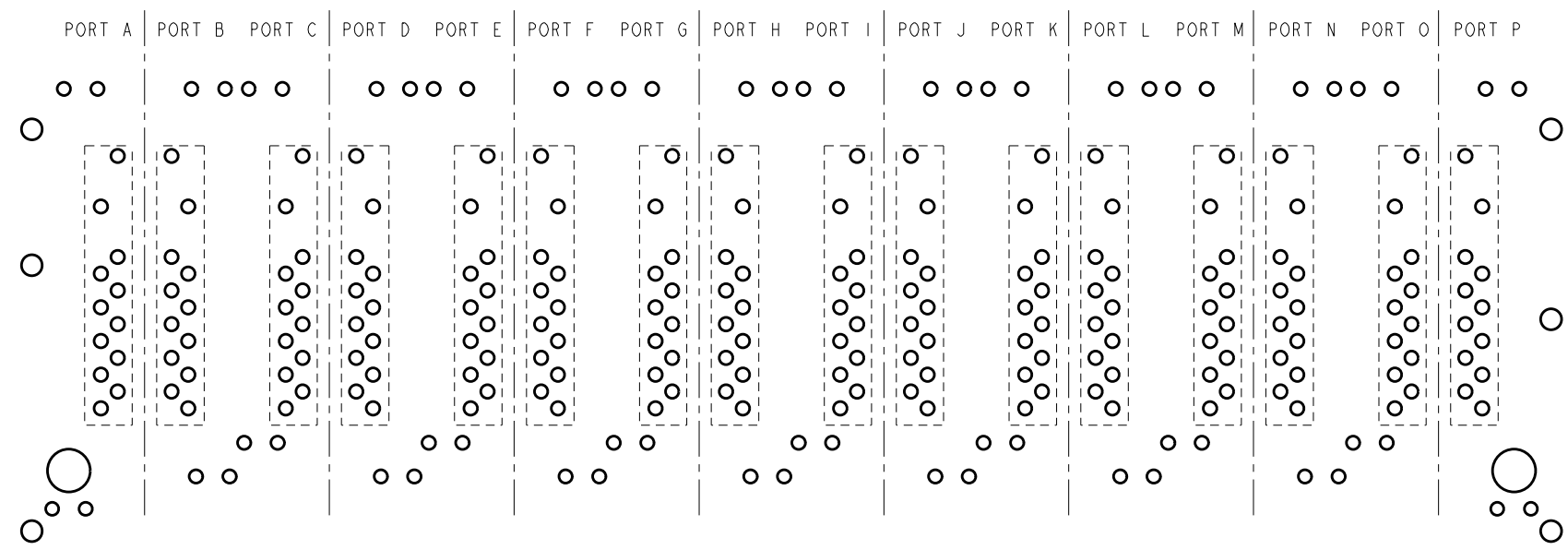
SUGGESTED CUSTOMER PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE

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

RECOMMENDED PCB FRONT EDGE CUTOUT: THE BOTTOM SHIELD GROUND TABS(FRONT) SHOULD NOT BE SEATED ON THE TOP OF THE PCB

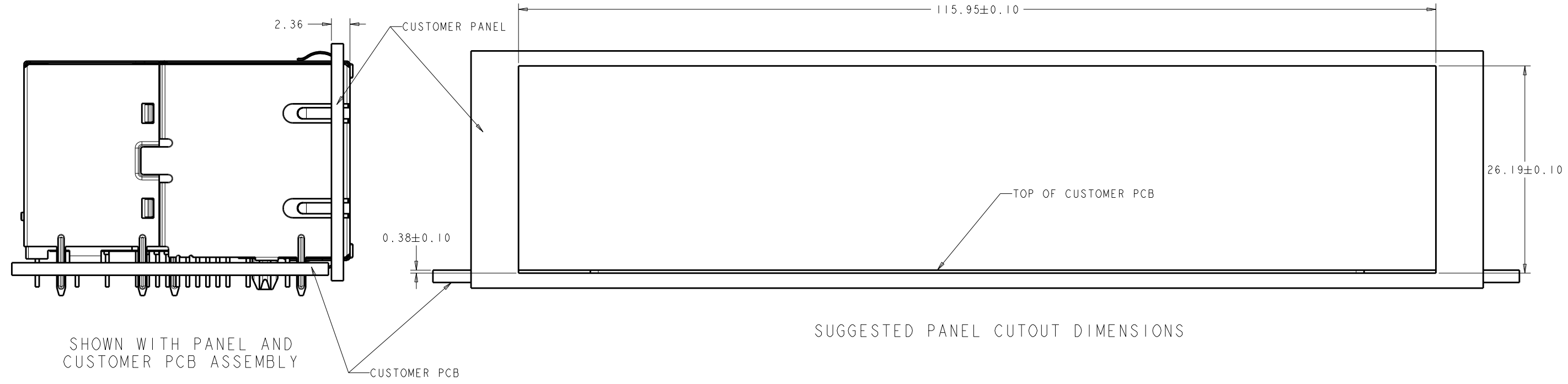
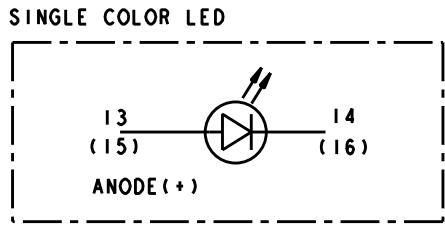
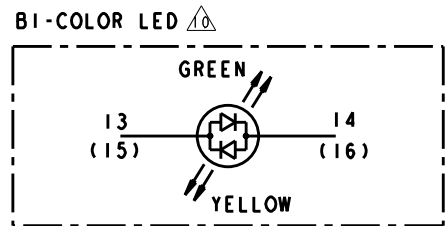
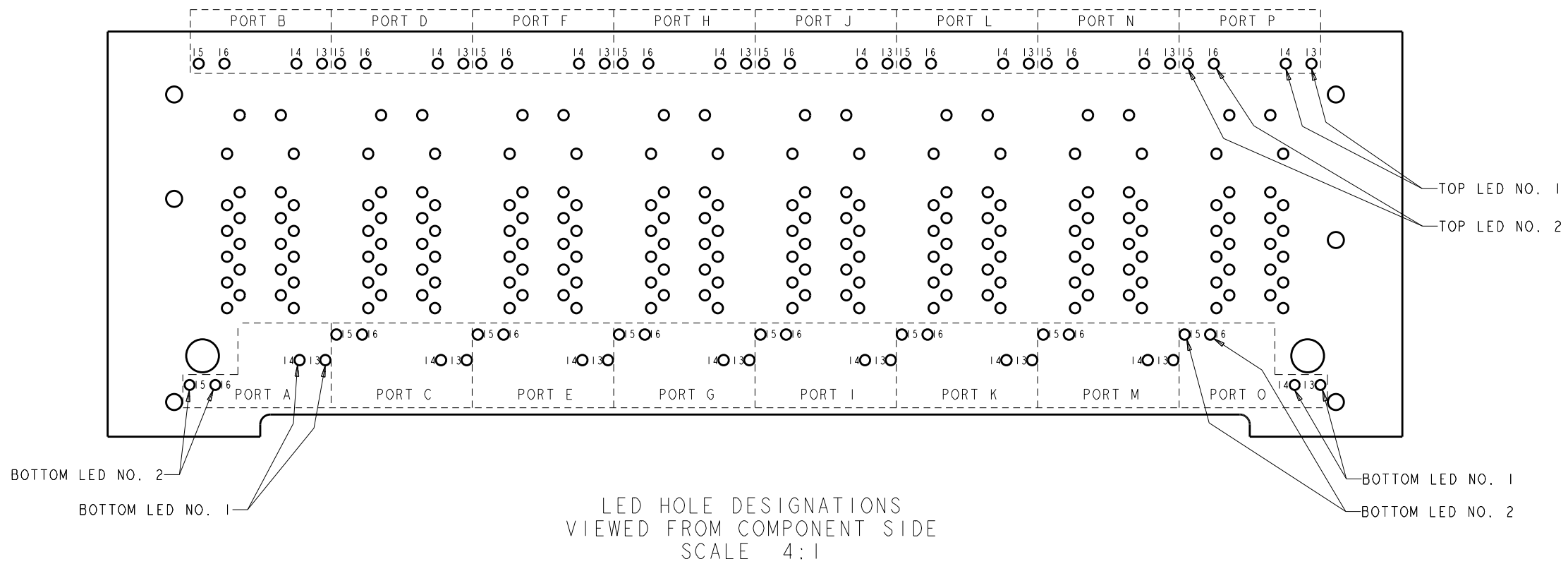


DETAIL A SCALE 5:1



PORT ASSIGNMENT VIEWED FROM COMPONENT SIDE

THIS DRAWING IS A CONTROLLED DOCUMENT.		DATE: 17FEB2011	DRW: RICK LI/ALLEN ZHOU		DONGGUAN CHINA
DIMENSIONS: mm		CHK: TONY YUAN	DATE: 17FEB2011		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD: KEITH ZHU	DATE: 17FEB2011	MODEL NAME: MAGJACK SIZE: 2X8 S9HG02 GIGABIT POE PLUS W/LED PRODUCT SPEC: STACK POE PLUS APPLICATION SPEC:	
0 PLC ± 1 PLC ± 2 PLC ±0.25 3 PLC ± 4 PLC ±		MODEL NAME: MAGJACK SIZE: 2X8 S9HG02 GIGABIT POE PLUS W/LED PRODUCT SPEC: STACK POE PLUS APPLICATION SPEC:		SCALE: NTS SHEET: 3 OF 4 REV: 8	



THIS DRAWING IS A CONTROLLED DOCUMENT.		DRN RICK LI/ALLEN ZHOU 17FEB2011	 DONGGUAN CHINA
DIMENSIONS: mm		CHK TONY YUAN 17FEB2011	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD KELTH ZHU 17FEB2011	DESC MAGJACK
0 PLC ±	1 PLC ±	2 PLC ±0.25	3 PLC ±
4 PLC ±	ANGLES		SIZE A1
PRODUCT SPEC	APPLICATION SPEC	CAGE CODE 1840863	DRAWING NO 1840863
CUSTOMER DRAWING		SCALE NTS	SHEET 4 OF 4
		REV 8	