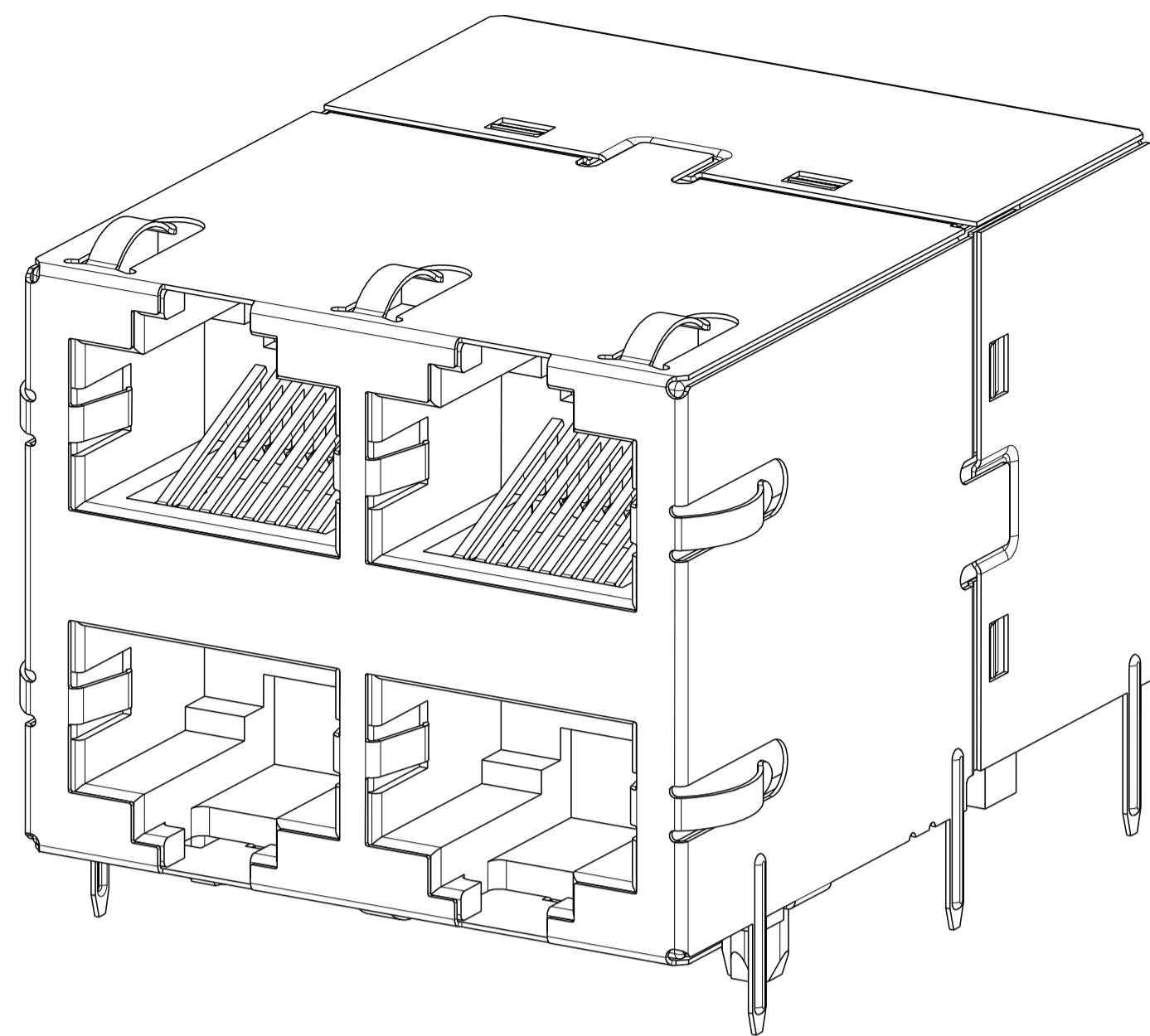


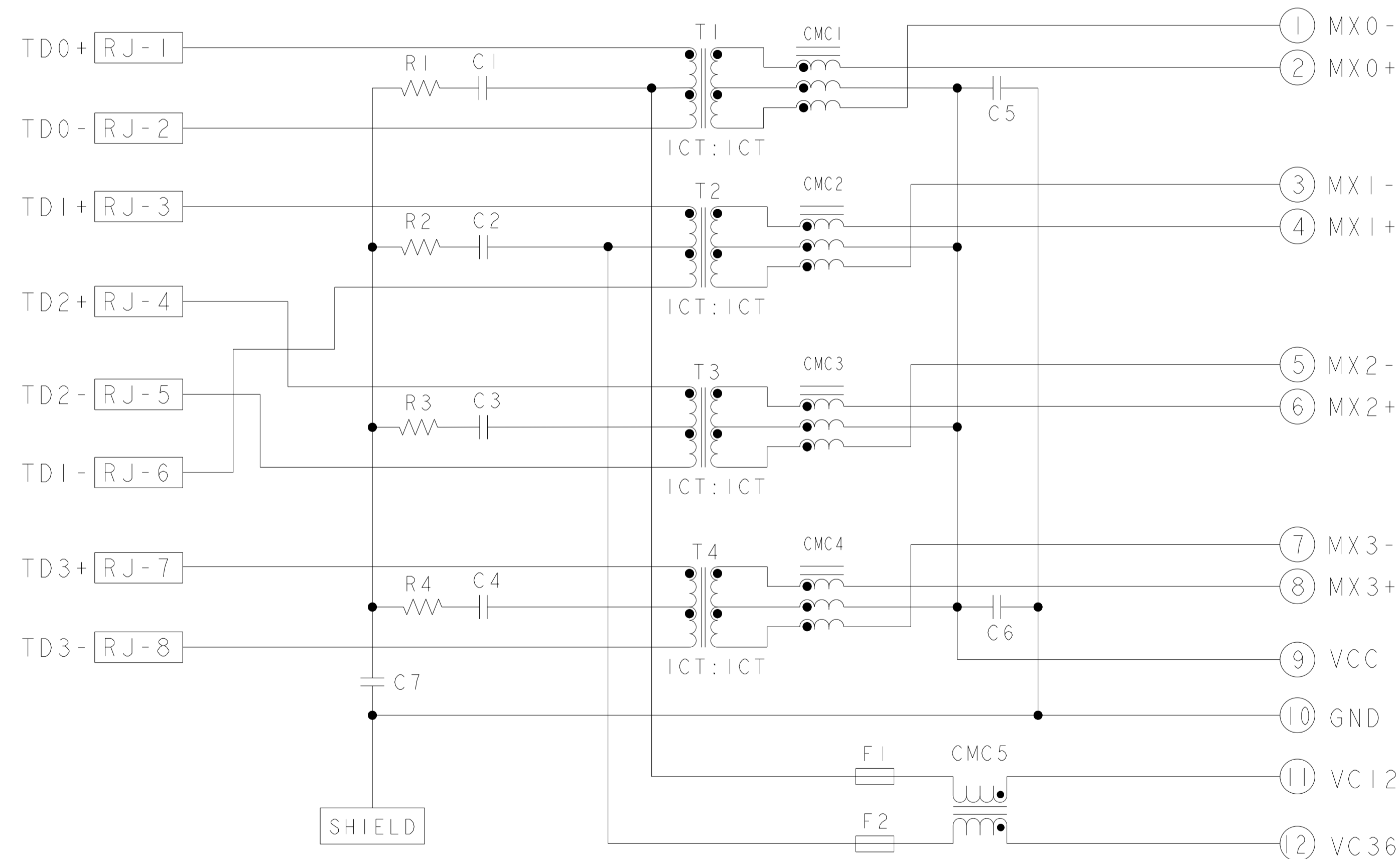
THIS DRAWING AND THE SUBJECT MATTER SHOWN THEREON ARE CONFIDENTIAL AND THE PROPERTY OF BEL/STEWART/TRP CONNECTOR AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF TRP CONNECTOR.

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 APVD |
| 3 | | EC-1411035 COMPANY LOGO CHANGE | 18DEC2014 | GZ TY |



S9HG153 GIGABIT POE PLUS CIRCUIT $\Delta\Delta$
 TOP AND BOTTOM PORTS



R1-R4 = 750ohms, 1/16 W, RESISTORS
 C1-C4 = 22nF, 100V, CAPACITORS
 C5 - C6 = 10nF, 50V, CAPACITOR
 C7 = 1000pF, 2kV, DECOUPLING CAPACITOR
 F1-F2 = 63V, 1.5A, FUSES

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 AT MATING INTERFACE AND
 2.54um MIN MATTE TIN ON SOLDER TAILS.

Δ 2 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
 350uH MIN @100kHz, 0.1VRMS WITH 8mADC BIAS FROM 0°C TO +70°C,
 120uH MIN @100kHz, 0.1VRMS WITH 19mADC BIAS FROM 0°C TO +70°C,
 ACROSS RJ1-RJ2 & RJ3-RJ6
 ALL FOUR PAIRS BI-DIRECTIONAL
 POE CURRENT: 600mADC MAX
 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.

Δ 3 PART NUMBER, DATE CODE AND COUNTRY OF ORIGIN ARE
 LOCATED IN APPROXIMATE AREA SHOWN.
 DATE CODE: YYWW WHERE "YY" IS YEAR, "WW" IS WORK WEEK, "D" IS DAY
 OF WEEK, WITH SUNDAY =1

Δ 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.

Δ 7 INDICATED MAGNETIC CONNECTIONS ARE SYMMETRICAL AND
 SUPPORT AUTO-MDI/MDIX.

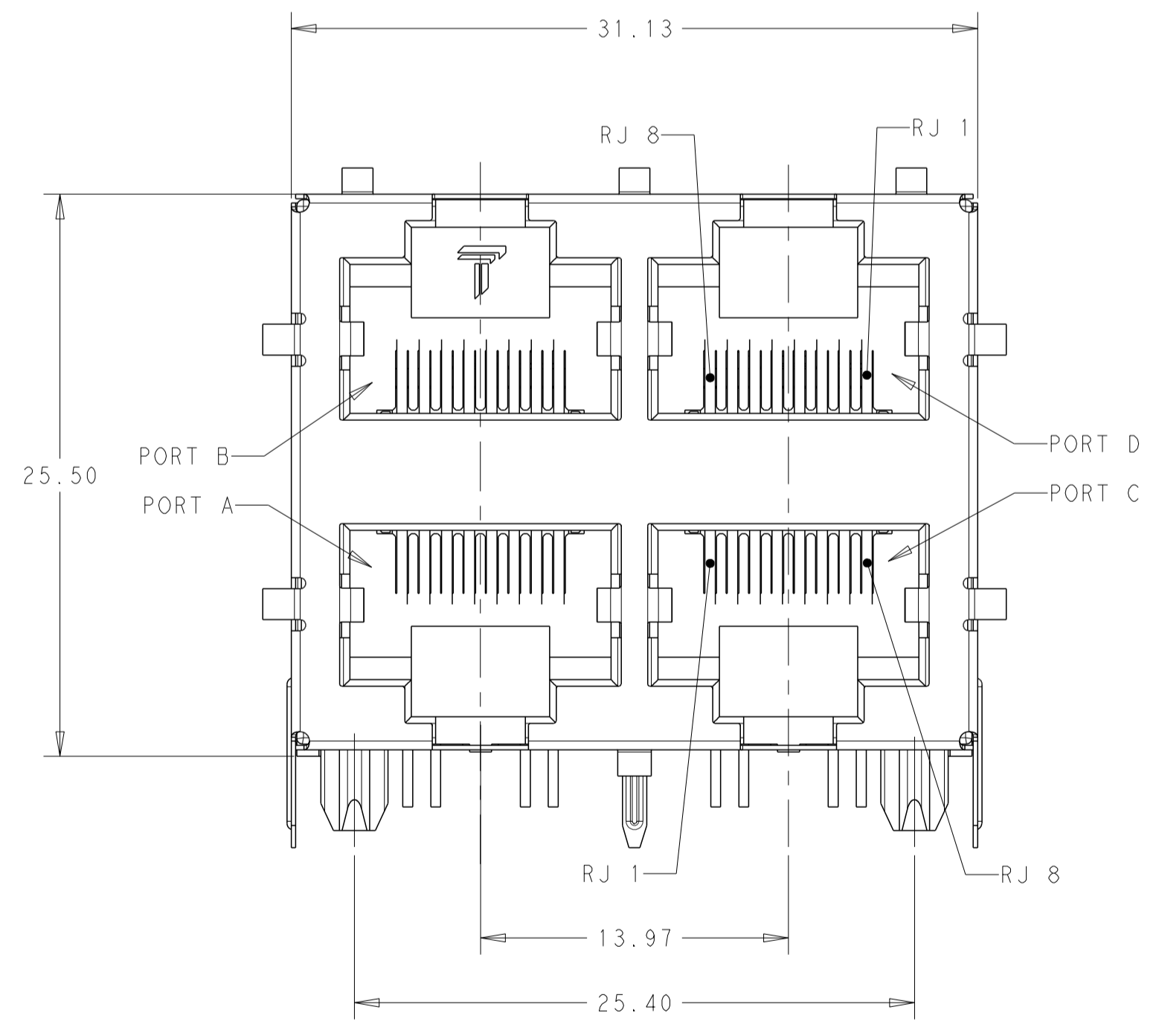
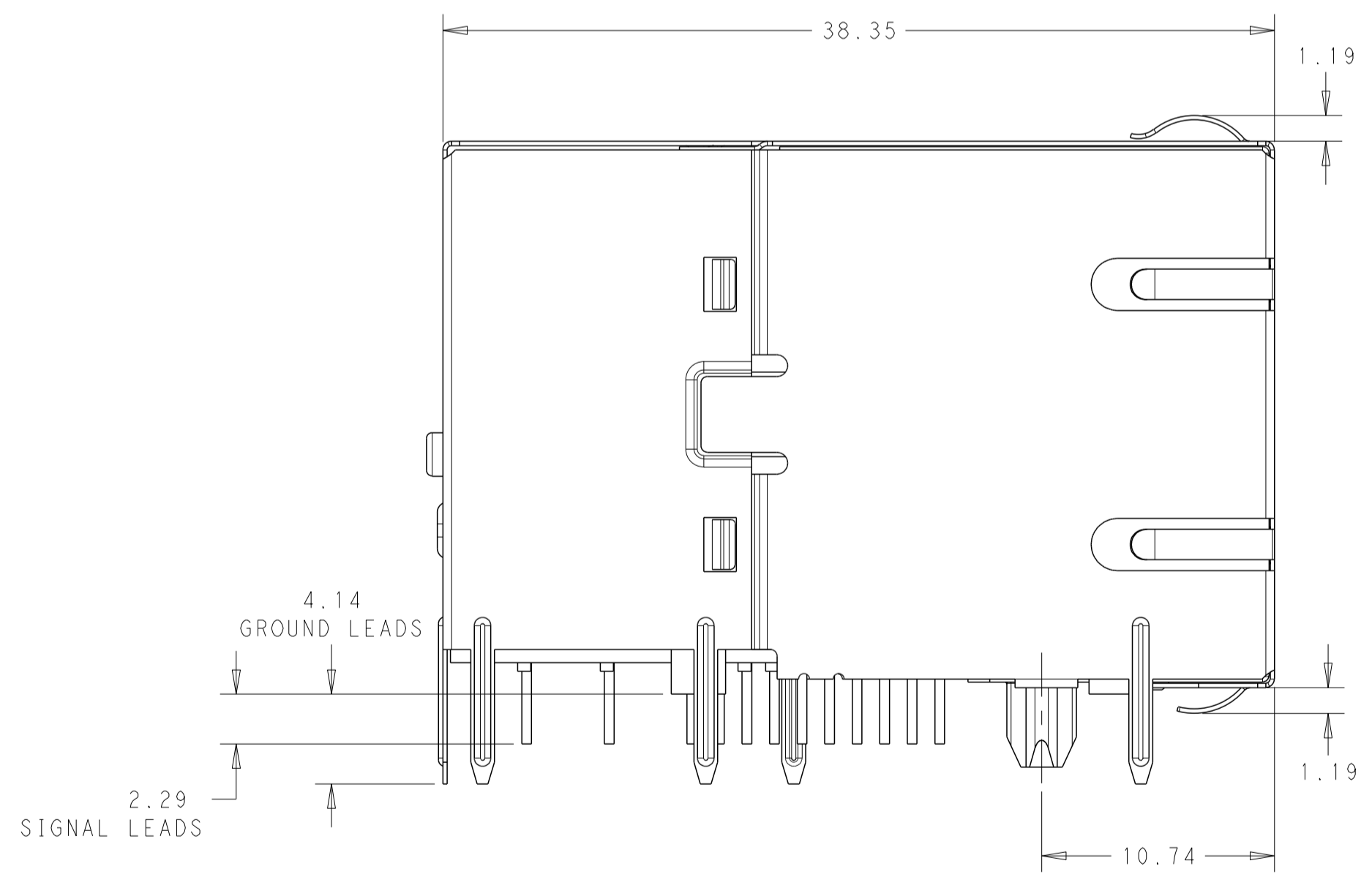
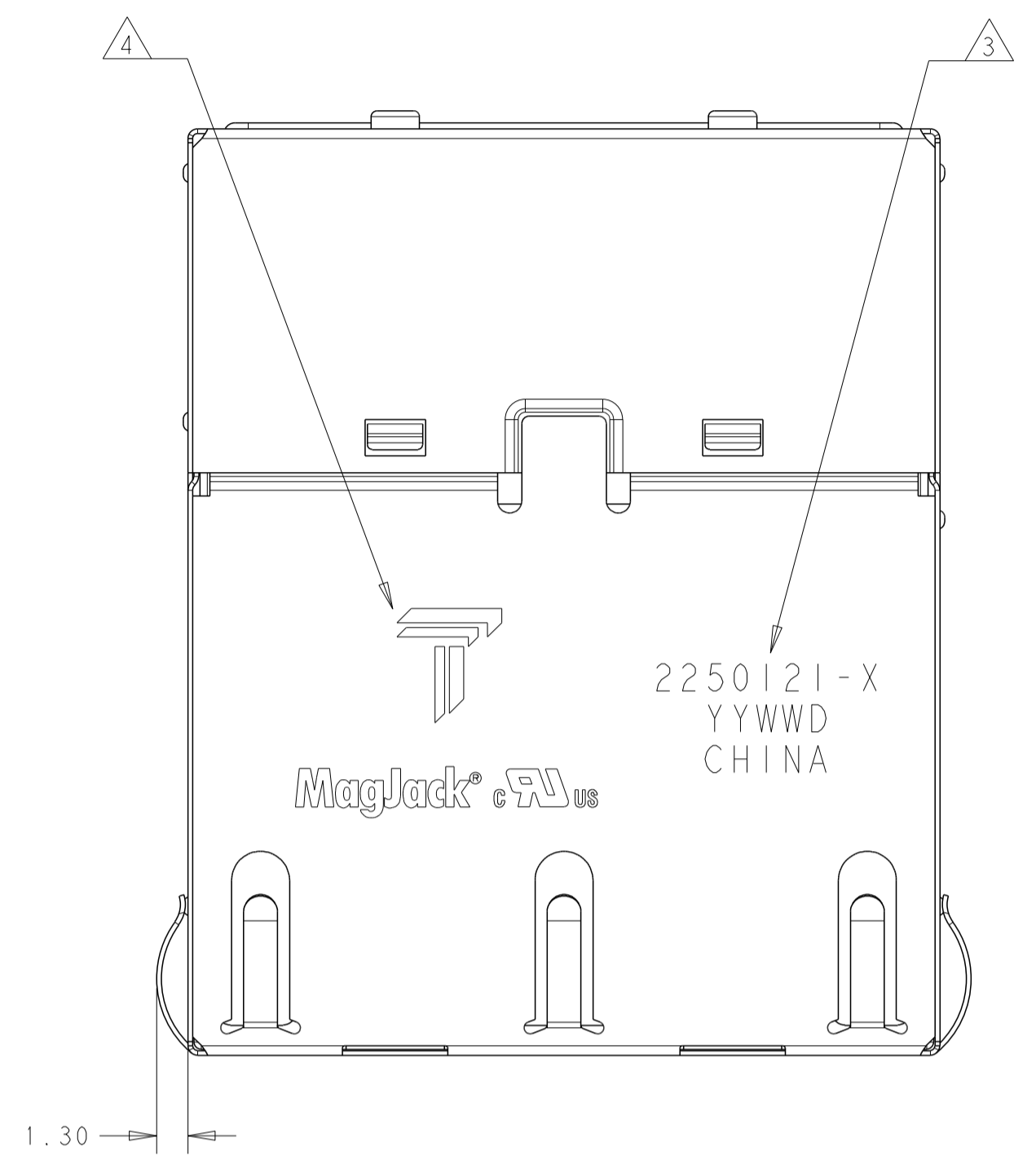
Δ 8 DATUM AND BASIC DIMENSION ESTABLISHED BY CUSTOMER.


Δ 9 BASIC DIMENSION ESTABLISHED BY CUSTOMER, BUT MAY NOT BE
 GREATER THAN 5.08mm.

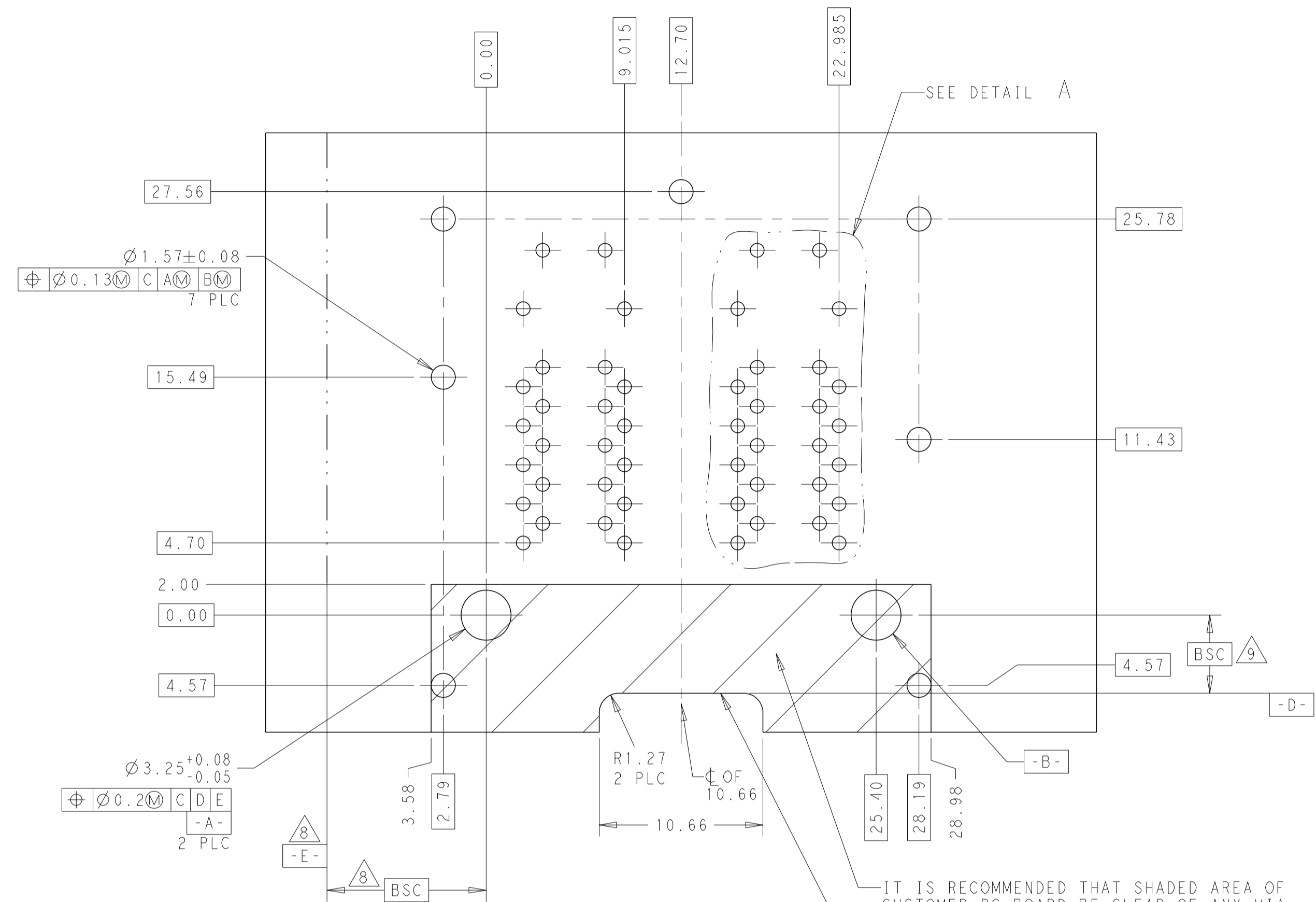
10. THE PARTS ARE RECOMMENDED FOR WAVE SOLDERING PROCESS,
 PEAK TEMPERATURE 260°C MAX, 10 SECONDS MAX.

2250121-1
 PART NUMBER

| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DRW: TOMMY REN 22OCT2013 | DONGGUAN CHINA | | | | | | | | | | | | | |
|---|-------|--|--|--|-------|-------|-------|-------|-------|-------|-------|---|-------|---|--------|---|
| DIMENSIONS: mm | | CHK: TONY YUAN 22OCT2013 | | | | | | | | | | | | | | |
| <table border="1"> <tr> <th>TOLERANCES UNLESS OTHERWISE SPECIFIED:</th> <th></th> </tr> <tr> <td>0 PLC</td> <td>±0.25</td> </tr> <tr> <td>1 PLC</td> <td>±0.25</td> </tr> <tr> <td>2 PLC</td> <td>±0.25</td> </tr> <tr> <td>3 PLC</td> <td>±</td> </tr> <tr> <td>4 PLC</td> <td>±</td> </tr> <tr> <td>ANGLES</td> <td>±</td> </tr> </table> | | TOLERANCES UNLESS OTHERWISE SPECIFIED: | | | 0 PLC | ±0.25 | 1 PLC | ±0.25 | 2 PLC | ±0.25 | 3 PLC | ± | 4 PLC | ± | ANGLES | ± |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | | | | | | | | | | | | | | | |
| 0 PLC | ±0.25 | | | | | | | | | | | | | | | |
| 1 PLC | ±0.25 | | | | | | | | | | | | | | | |
| 2 PLC | ±0.25 | | | | | | | | | | | | | | | |
| 3 PLC | ± | | | | | | | | | | | | | | | |
| 4 PLC | ± | | | | | | | | | | | | | | | |
| ANGLES | ± | | | | | | | | | | | | | | | |
| PRODUCT SPEC: 108-104004 | | MODEL NAME: MAGJACK STACK PoE+ | DESC: 2X2 S9HG153 GIGABIT PoE+ W/O LED | | | | | | | | | | | | | |
| APPLICATION SPEC: - | | SIZE: A1 | CAGE CODE: - | | | | | | | | | | | | | |
| | | DRAWING NO: 2250121 | RESTRICTED TO: - | | | | | | | | | | | | | |
| | | CUSTOMER DRAWING | SCALE: 4:1 SHEET 1 OF 4 REV 3 | | | | | | | | | | | | | |



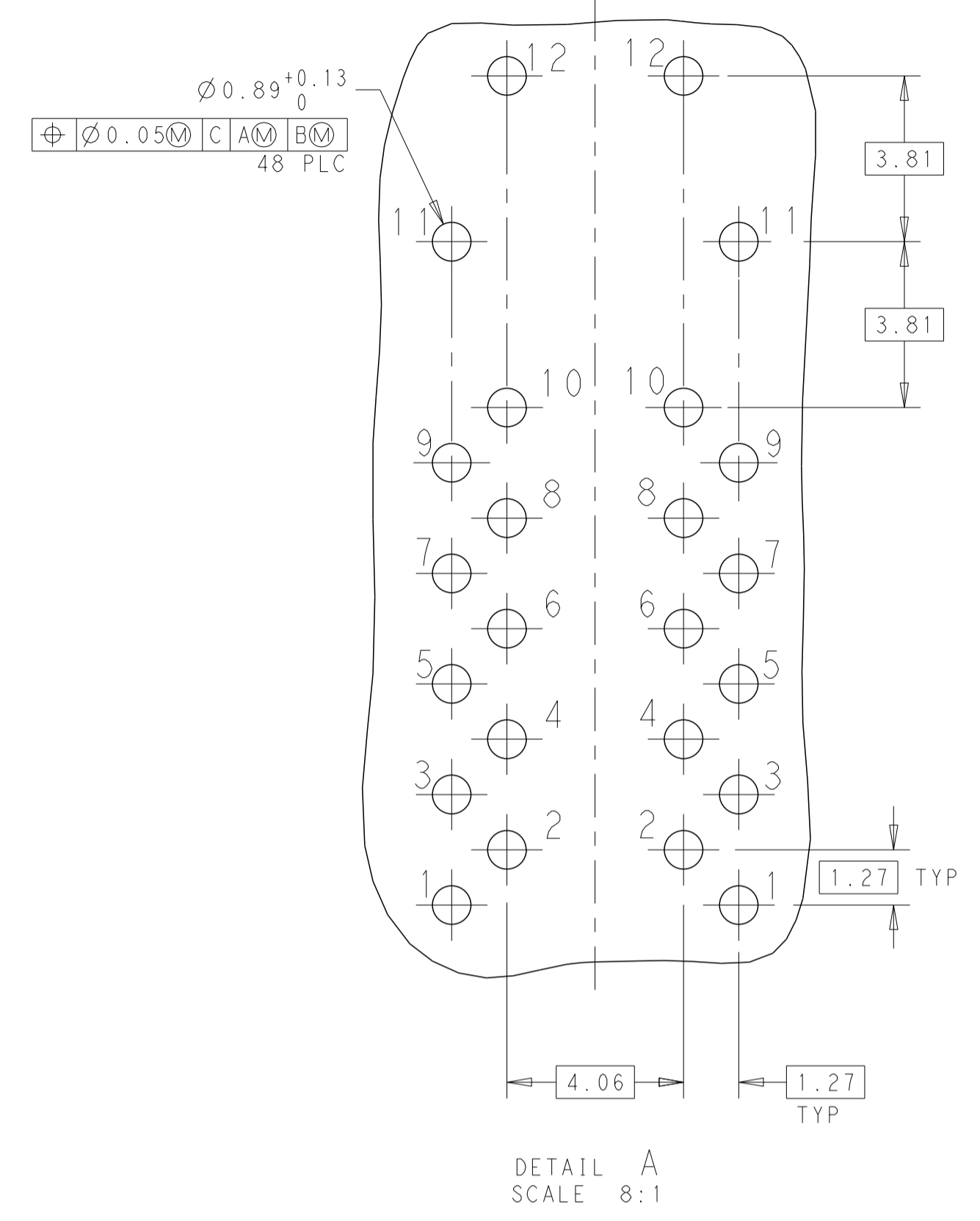
| | | | |
|---|--------------------------------|--|---|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DRW: TOMMY REN 22OCT2013 |  trp CONNECTOR a bel group DONGGUAN CHINA |
| DIMENSIONS: mm | | CHK: TONY YUAN 22OCT2013 | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | APP'D: KEITH ZHU 22OCT2013 | |
| 0 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: 2X2 S9HG153 GIGABIT PoE+ W/O LED | RESTRICTED TO: - |
| PRODUCT SPEC: 108-104004 | APPLICATION SPEC: - | SIZE: A1 | CAGE CODE: - DRAWING NO: 2250121 SCALE: 4:1 SHEET 2 OF 4 REV 3 |



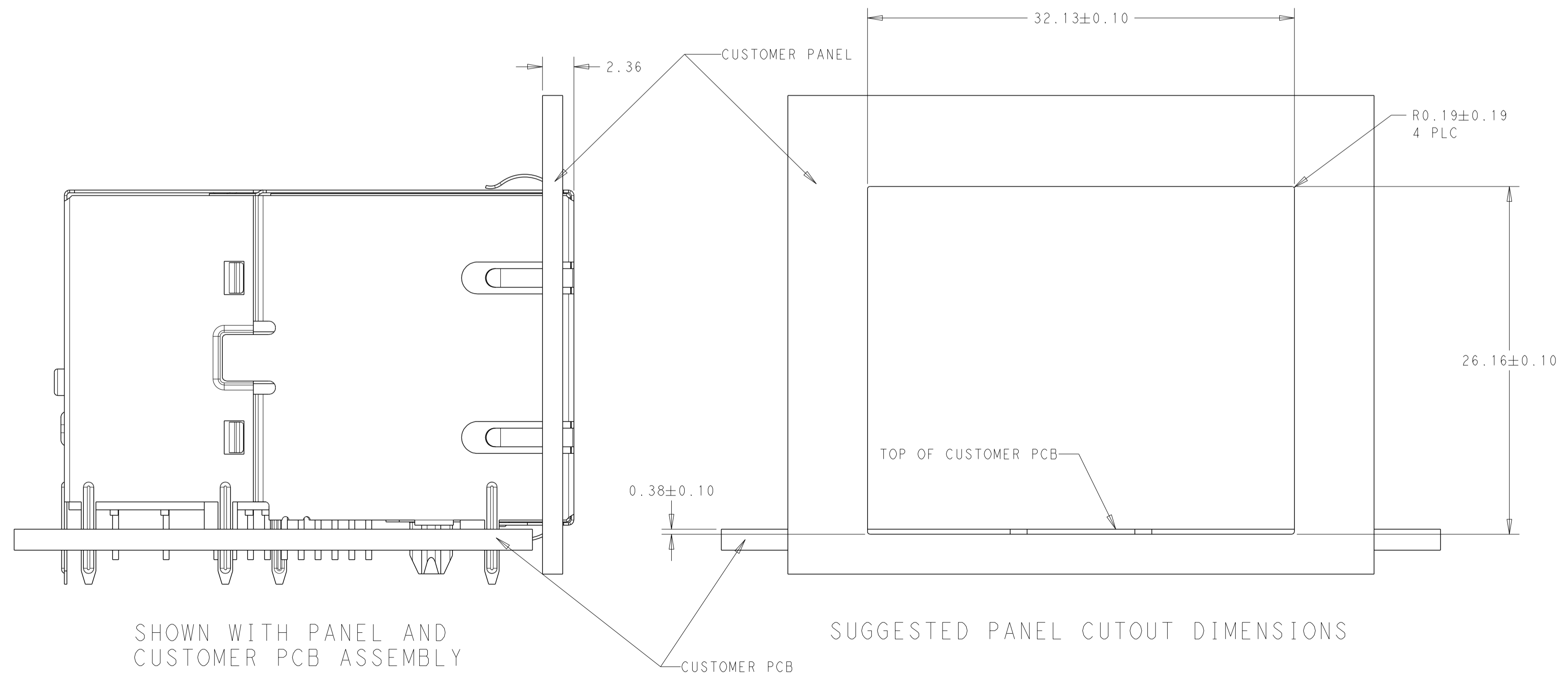
RECOMMENDED PCB LAYOUT COMPONENT SIDE VIEW

IT IS RECOMMENDED THAT SHADED AREA OF CUSTOMER PC BOARD BE CLEAR OF ANY VIA HOLE, COMPONENT AND CIRCUIT TRACE

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

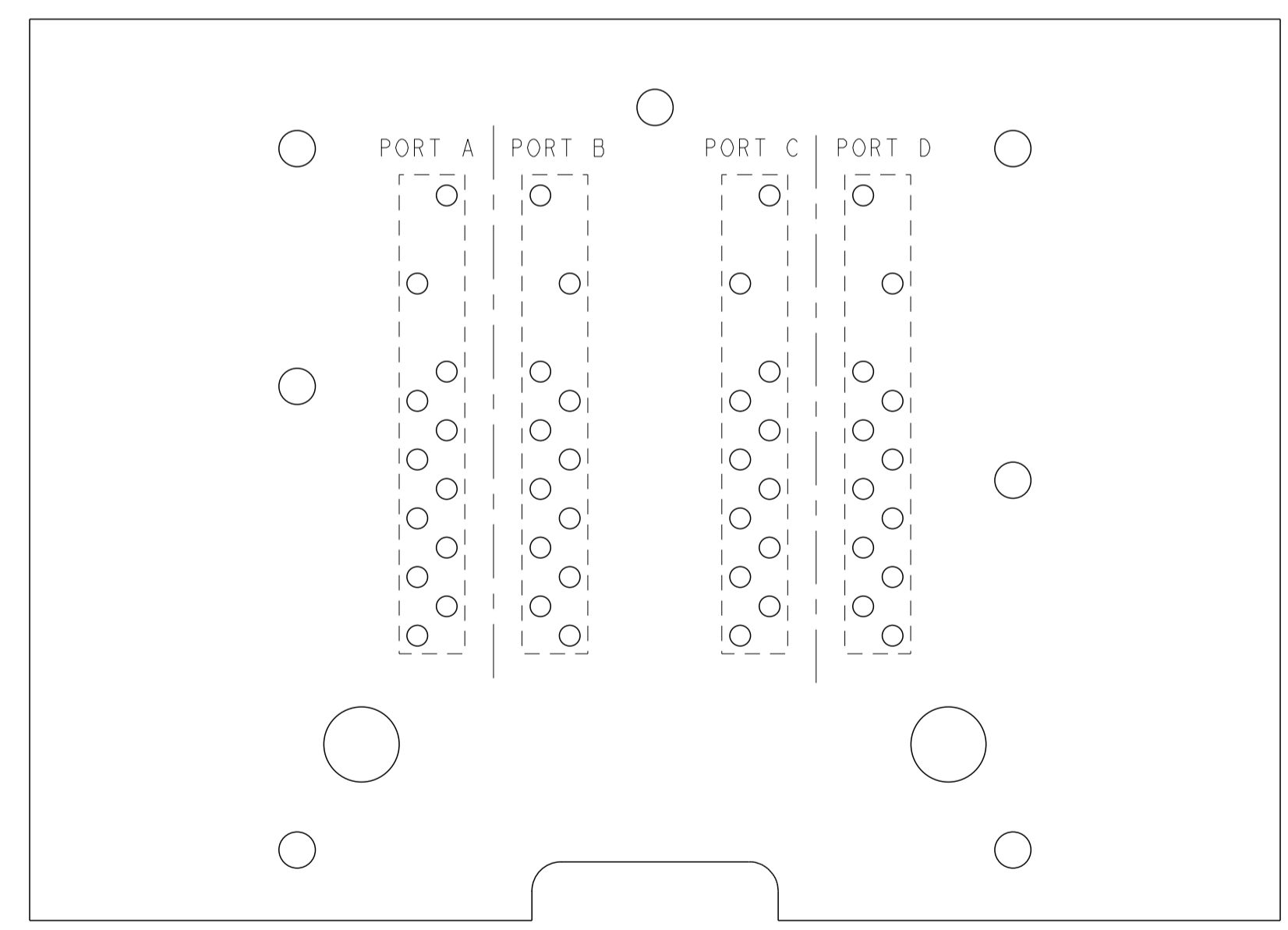


DETAIL A SCALE 8:1



SHOWN WITH PANEL AND CUSTOMER PCB ASSEMBLY


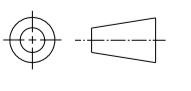
SUGGESTED PANEL CUTOUT DIMENSIONS



PORT ASSIGNMENT COMPONENT SIDE VIEW

| | | | |
|---|--|--------------------------------|--|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DRW: TOMMY REN 22OCT2013 | DONGGUAN CHINA |
| DIMENSIONS: mm | | CHK: TONY YUAN 22OCT2013 | |
| TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25 1 PLC ±0.25 2 PLC ±0.25 3 PLC ±0.25 4 PLC ±0.25 ANGLES ±° APPLICATION SPEC ±° | | APPR: KEITH ZHU 22OCT2013 | |
| PRODUCT SPEC: 108-104004 | | MODEL NAME: MAGJACK STACK PoE+ | DESC: 2X2 S9HG153 GIGABIT PoE+ W/O LED |
| | | SIZE: A1 | CAGE CODE: C=2250121 |
| | | CUSTOMER DRAWING | SCALE: 4:1 SHEET 3 OF 4 REV 3 |

| 2250121 | | | | | STOCK DISPOSITION | | | |
|------------------|-----|---|--------------------|----------|----------------------------|---------------------------------|-------------------------------|--------------------------------|
| | | | | | 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,F) | SUPPLIER ORDERS (A,E,F) | OPEN CUST ORDERS (A,E,F) |
| 22OCT2013 | 1 | INITIAL RELEASE | INITIAL RELEASE | TY | - | - | - | - |
| 09MAY2014 | 2 | SHEET 1 REMOVE PALLADIUM-NICKEL PLATING OPTION ON CONTACT AREA. | ENGINEERING CHANGE | TY | - | - | - | - |

| | | | | | |
|---|--|----------------------------|--|--|------------------|
| THIS DRAWING IS A CONTROLLED DOCUMENT. | | DRW: TOMMY REN 22OCT2013 |  trp CONNECTOR <small>a bel group</small> | DONGGUAN CHINA | |
| DIMENSIONS: mm | | CHK: TONY YUAN 22OCT2013 | | DESC: 2X2 S9HG153 GIGABIT PoE+ W/O LED | RESTRICTED TO: - |
|  | | APP'D: KEITH ZHU 22OCT2013 | | MODEL NAME: MAGJACK STACK PoE+ | SIZE: A1 |
| PRODUCT SPEC: 108-104004 | TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±0.25, 1 PLC ±0.25, 2 PLC ±0.25, 3 PLC ±, 4 PLC ±, ANGLES ± | APPLICATION SPEC: - | CAGE CODE: C=2250121 | SCALE: 4:1 | |
| CUSTOMER DRAWING | | | SHEET 4 OF 4 | REV 3 | |