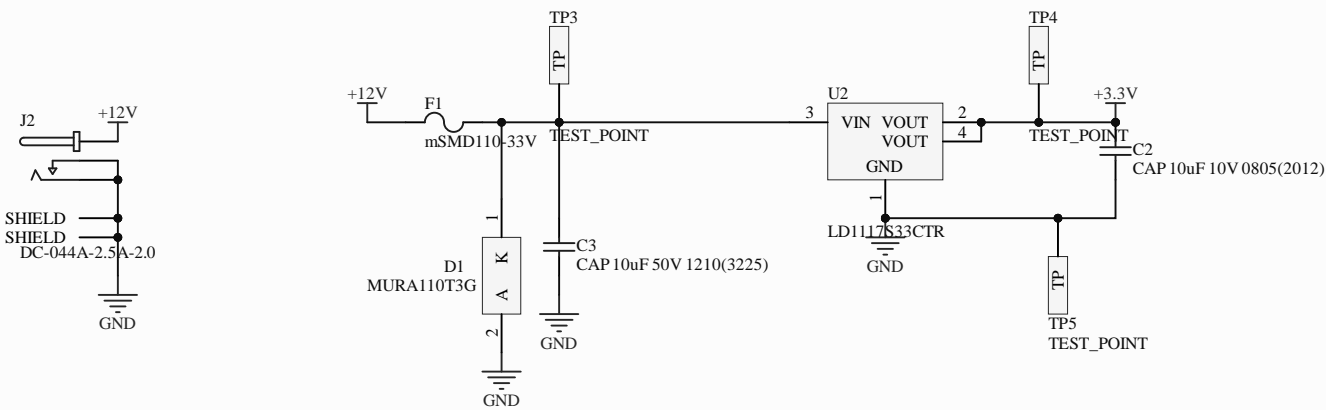
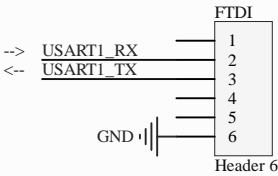
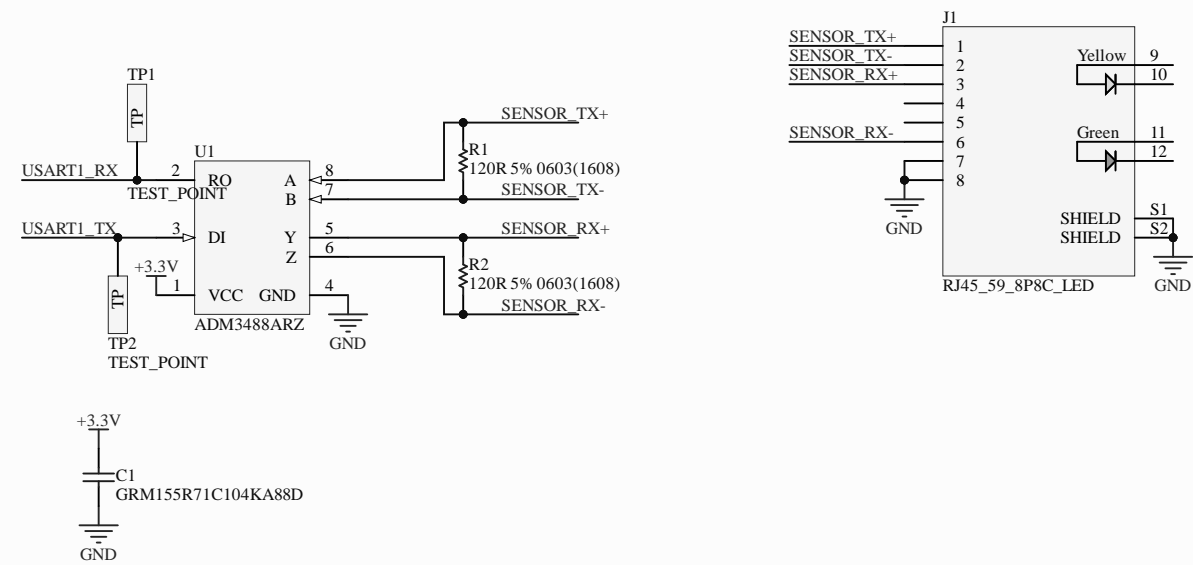
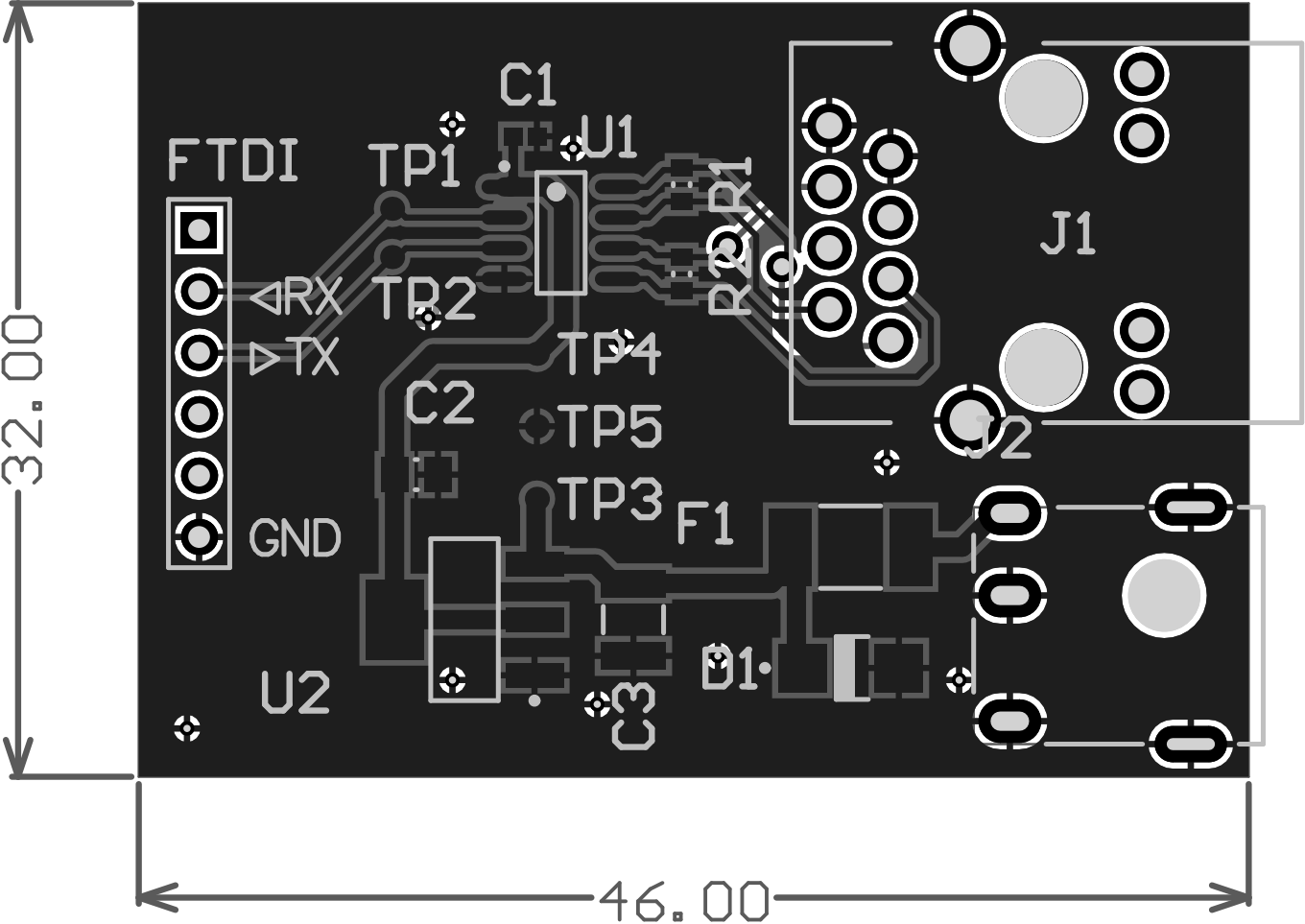


Sensor board connector





## Design Rules Verification Report

Filename : C:\Users\matt\Dropbox\Ventilator Shit\PCB\sensor\_module\sensor\_to\_uart\PCB3.

Warnings 0  
Rule Violations 24

| Warnings |   |
|----------|---|
| Total    | 0 |

| Rule Violations  |    |
|--|----|
| Clearance Constraint (Gap=0.254mm) (All),(All)   | 1  |
| Short-Circuit Constraint (Allowed=No) (All),(All)                                      | 0  |
| Un-Routed Net Constraint ( All )   | 0  |
| Modified Polygon (Allow modified: No), (Allow shelved: No)                             | 0  |
| Width Constraint (Min=0.254mm) (Max=0.8mm) (Preferred=0.254mm) (All)                   | 0  |
| Power Plane Connect Rule(Relief Connect )(Expansion=0.508mm) (Conductor Width=0.254mm) | 0  |
| Hole Size Constraint (Min=0.025mm) (Max=2.54mm) (All)                                  | 3  |
| Hole To Hole Clearance (Gap=0.254mm) (All),(All)                                       | 0  |
| Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)                                   | 1  |
| Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)                                  | 17 |
| Silk to Silk (Clearance=0.254mm) (All),(All)   | 2  |
| Net Antennae (Tolerance=0mm) (All)   | 0  |
| Room Sheet3 (Bounding Region = (102.5mm, 90mm, 152.5mm, 125.503mm)                     | 0  |
| Height Constraint (Min=0mm) (Max=25.4mm) (Preferred=12.7mm) (All)                      | 0  |
| Total  | 24 |

| Clearance Constraint (Gap=0.254mm) (All),(All)  |  |
|---|--|
| Clearance Constraint: (0.22mm < 0.254mm) Between Pad C1-1(16.5mm,26.5mm) on Top Layer And Pac |  |

| Hole Size Constraint (Min=0.025mm) (Max=2.54mm) (All)   |  |
|---|--|
| Hole Size Constraint: (3.2mm > 2.54mm) Pad J1-POS1(37.5mm,16.935mm) on Multi-Layer Actual Hole Size = 3.2mm |  |
| Hole Size Constraint: (3.2mm > 2.54mm) Pad J1-POS2(37.5mm,28.065mm) on Multi-Layer Actual Hole Size = 3.2mm |  |
| Hole Size Constraint: (3mm > 2.54mm) Pad J2-MNT(42.5mm,7.5mm) on Multi-Layer Actual Hole Size = 3mm         |  |

| Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)  |  |
|---|--|
| Minimum Solder Mask Sliver Constraint: (0.017mm < 0.254mm) Between Pad C1-1(16.5mm,26.5mm) on Top Layer And Pac |  |

| Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)  |  |
|--|--|
| Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad C2-1(12.4mm,12.5mm) on Top Layer And Trac        |  |
| Silk To Solder Mask Clearance Constraint: (0.193mm < 0.254mm) Between Pad C2-1(12.4mm,12.5mm) on Top Layer And Trac        |  |
| Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad C2-2(10.6mm,12.5mm) on Top Layer And Trac        |  |
| Silk To Solder Mask Clearance Constraint: (0.175mm < 0.254mm) Between Pad C2-2(10.6mm,12.5mm) on Top Layer And Trac        |  |
| Silk To Solder Mask Clearance Constraint: (Collision < 0.254mm) Between Pad J1-S1(34.45mm,14.75mm) on Multi-Layer And Trac |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad R1-1(22.5mm,23.8mm) on Top Layer And Trac          |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad R1-1(22.5mm,23.8mm) on Top Layer And Trac          |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad R1-2(22.5mm,25.2mm) on Top Layer And Trac          |  |
| Silk To Solder Mask Clearance Constraint: (0.216mm < 0.254mm) Between Pad R1-2(22.5mm,25.2mm) on Top Layer And Trac        |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad R2-1(22.5mm,21.5mm) on Top Layer And Trac          |  |
| Silk To Solder Mask Clearance Constraint: (0.216mm < 0.254mm) Between Pad R2-1(22.5mm,21.5mm) on Top Layer And Trac        |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad R2-2(22.5mm,20.1mm) on Top Layer And Trac          |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad R2-2(22.5mm,20.1mm) on Top Layer And Trac          |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U2-1(16.4mm,4.2mm) on Top Layer And Trac           |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U2-2(16.4mm,6.5mm) on Top Layer And Trac           |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U2-3(16.4mm,8.8mm) on Top Layer And Trac           |  |
| Silk To Solder Mask Clearance Constraint: (0.2mm < 0.254mm) Between Pad U2-4(10.6mm,6.5mm) on Top Layer And Trac           |  |

**Silk to Silk (Clearance=0.254mm) (All),(All)**

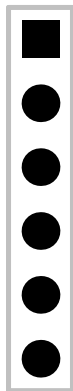
Silk To Silk Clearance Constraint: (Collision < 0.254mm) Between Text "<RX" (4.5mm,19mm) on Top Overlay And Trac

Silk To Silk Clearance Constraint: (Collision < 0.254mm) Between Text ">TX" (4.5mm,16.5mm) on Top Overlay And Trac

## Electrical Rules Check Report

| Class   | Document      | Message   |
|---------|---------------|---|
| Warning | Sheet3.SchDoc | Net SENSOR_TX+ has no driving source (Pin J1-1, Pin R1-2, Pin U1-8)   |
| Warning | Sheet3.SchDoc | Net SENSOR_TX- has no driving source (Pin J1-2, Pin R1-1, Pin U1-7)   |
| Warning | Sheet3.SchDoc | Net USART1_TX has no driving source (Pin FTDI-3, Pin TP2-1, Pin U1-3) |

FTDI



◁RX

▷TX

GND

U2

TP1

TP2

C2

C1

U1

TP4

TP5

TP3

F1

D1

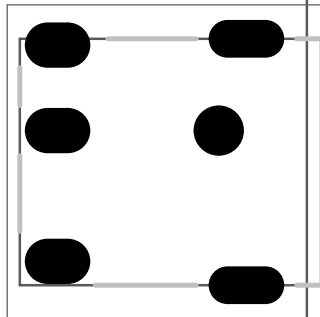
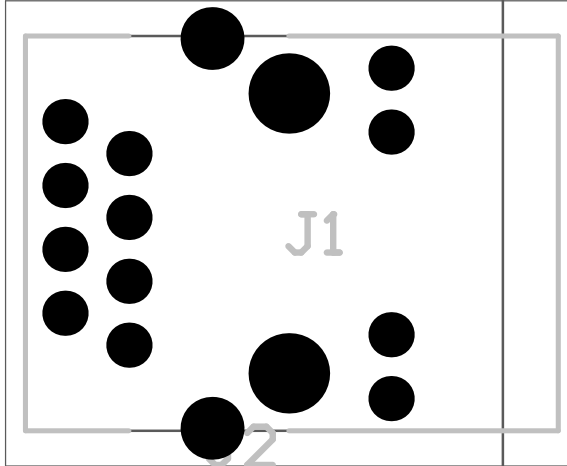
Q1

Q2

J1

U2

C3



RevA  
2020-04-07  
Comms  
Sensor Board

