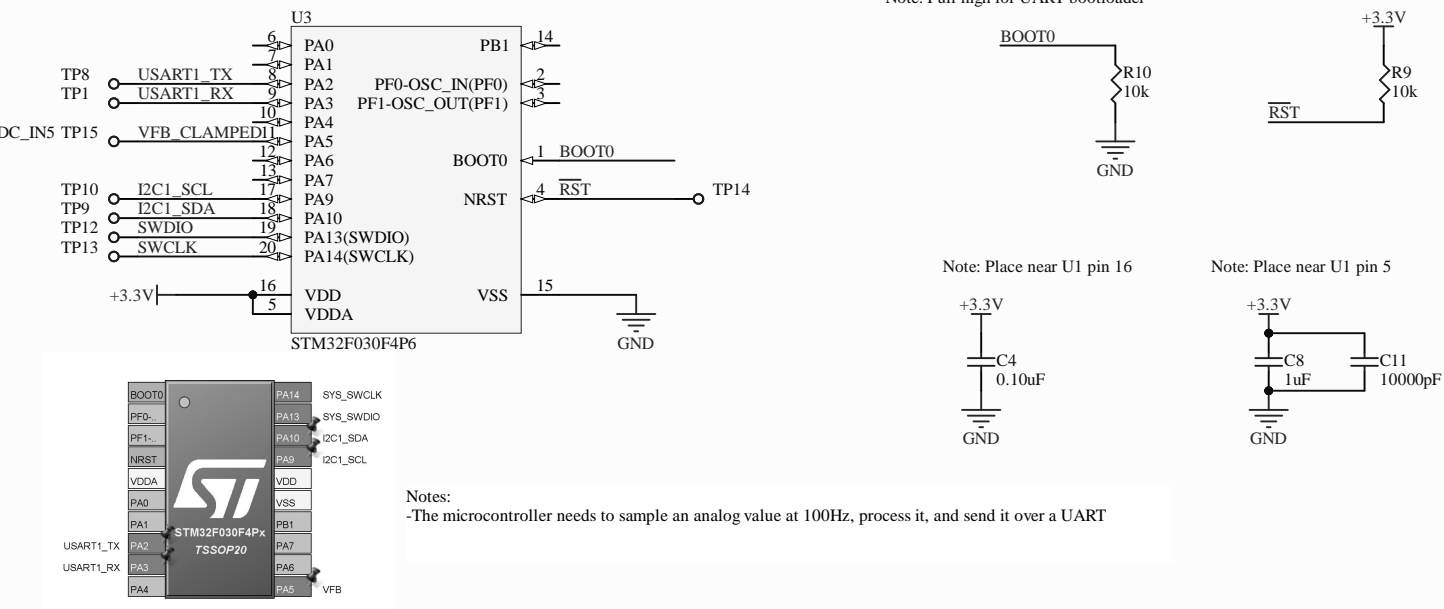
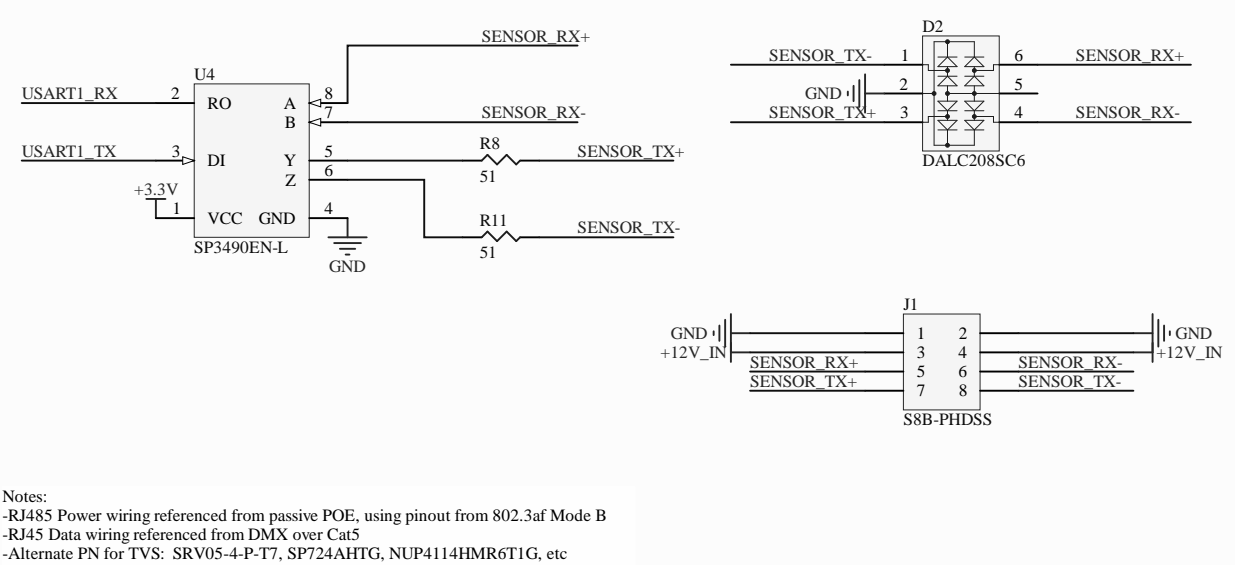


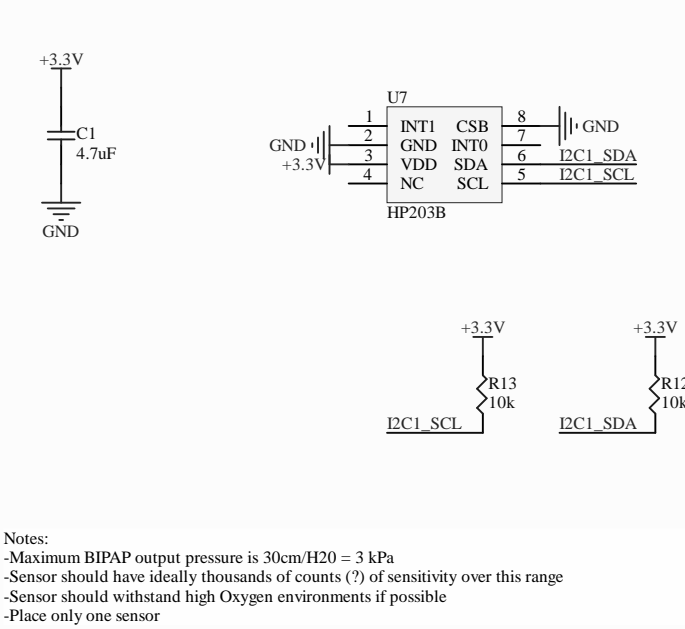
Microcontroller



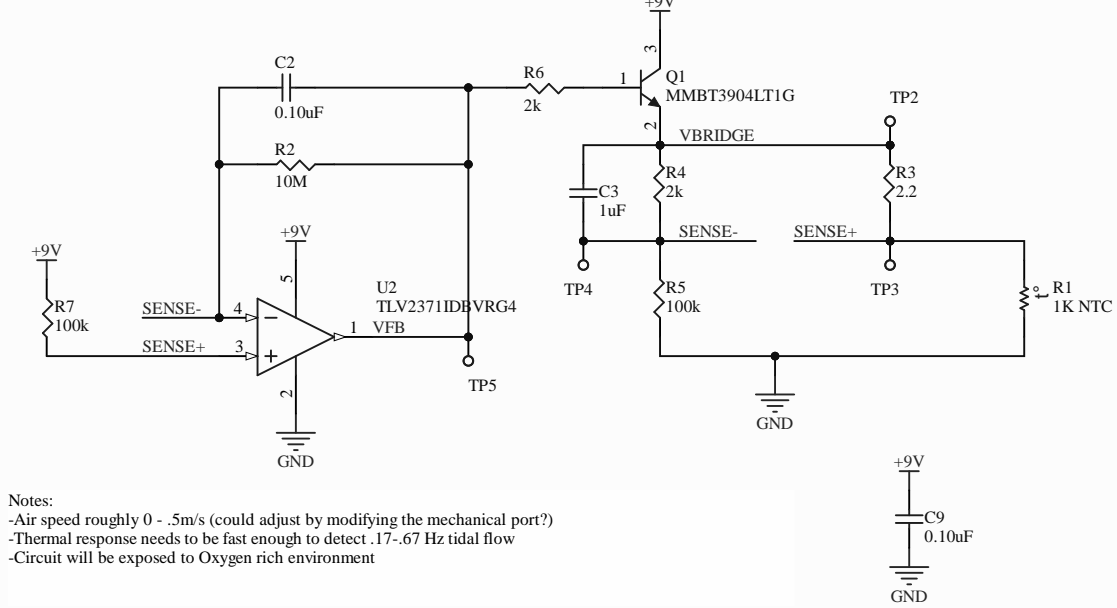
Sensor board connector



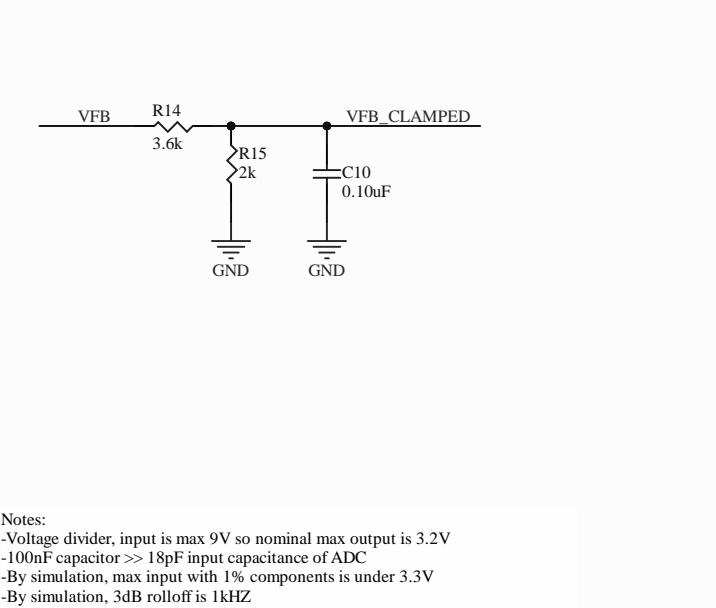
Pressure Sensor



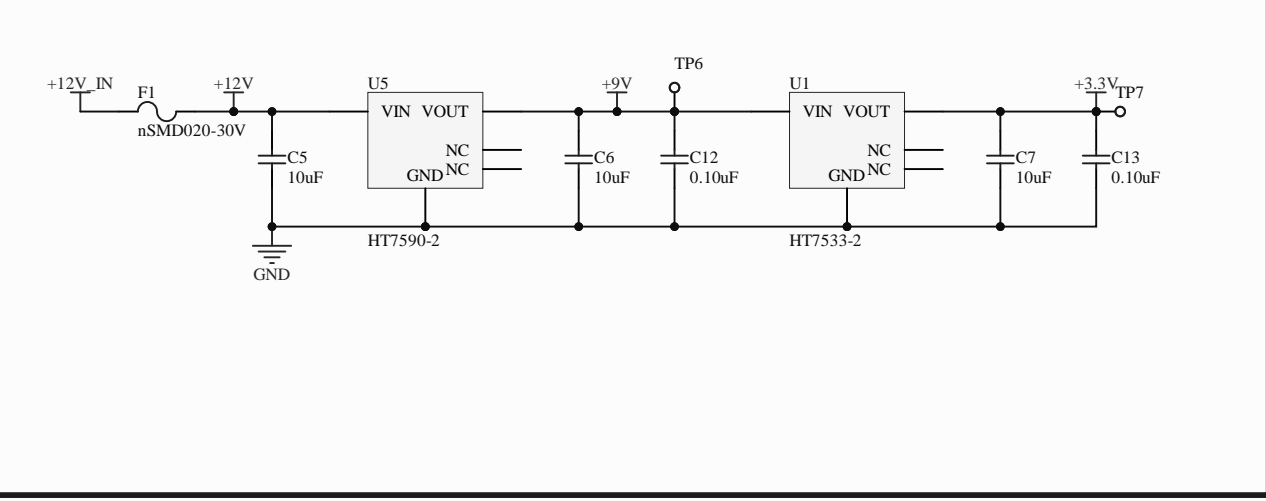
Airflow Sensor

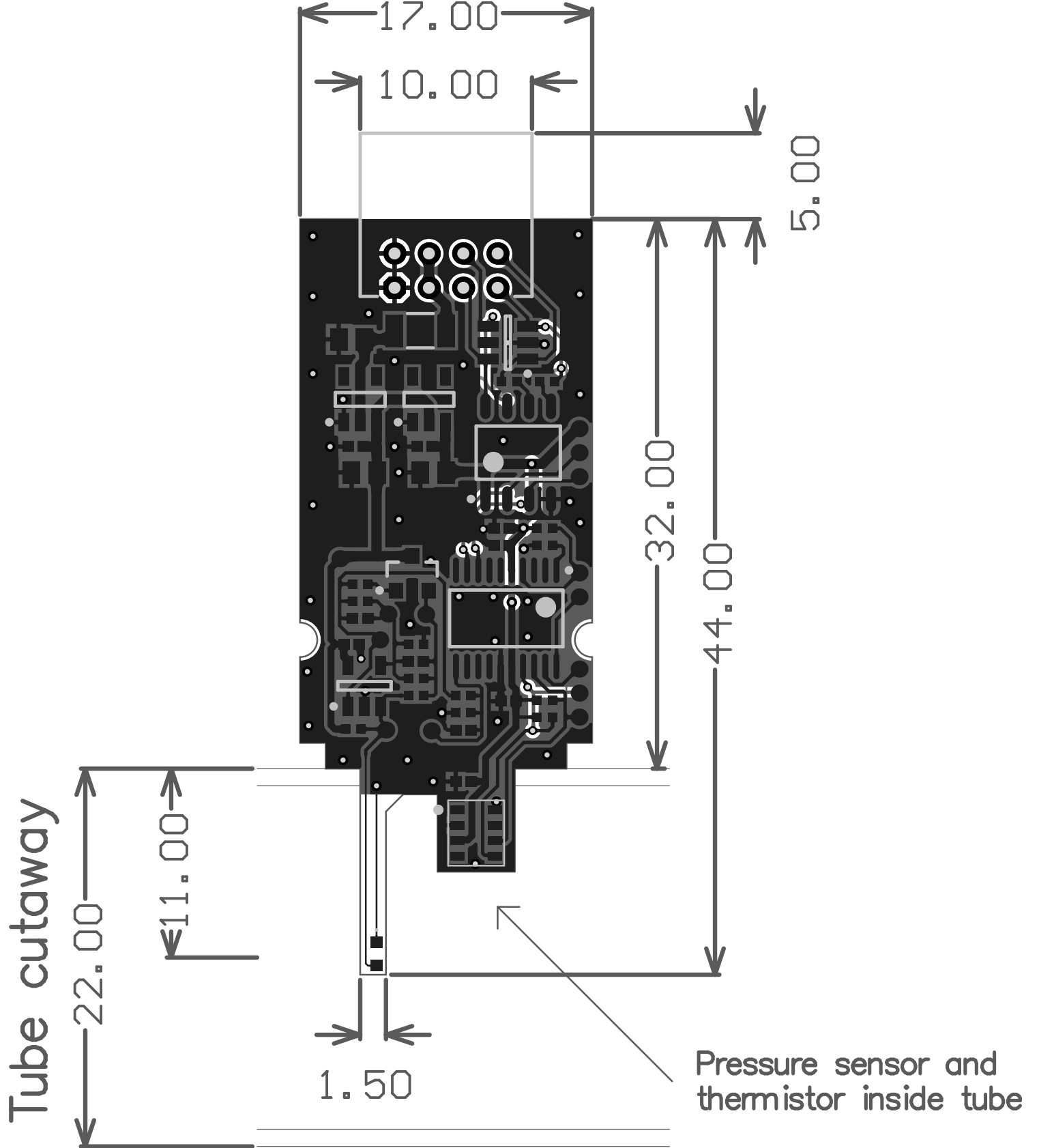


Feedback voltage divider



Power Supply





Layer	Name	Material	Thickness	Constant	Ger ber
	Top Overlay				GTO
	Top Solder	Solder Resist	0.013mm	3.8	GTS
1	Top Layer	Copper	0.036mm		GTL
	Dielectric 1	FR-4	0.502mm	4.8	
2	Bottom Layer	Copper	0.036mm		GBL
	Bottom Solder	Solder Resist	0.013mm	3.8	GBS
	Bottom Overlay				GBO

Total board thickness:

0.599mm

Design Rules Verification Report

Filename : C:\Users\matt\Dropbox\Ventilator Project\PCB\sensor_module\pcb\sensor_mod

Warnings 0
Rule Violations 138

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.2mm) (All),(All)	0
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=0.2mm) (Max=0.6mm) (Preferred=0.4mm) (All)	5
Power Plane Connect Rule(Relief Connect)(Expansion=0.508mm) (Conductor Width=0.254mm)	0
Hole Size Constraint (Min=0.025mm) (Max=2.54mm) (All)	0
Hole To Hole Clearance (Gap=0.254mm) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)	113
Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)	20
Silk to Silk (Clearance=0.254mm) (All),(All)	0
Net Antennae (Tolerance=0mm) (All)	0
Room sensor_module (Bounding Region = (114mm, 104mm, 134mm, 154.5mm)	0
Height Constraint (Min=0mm) (Max=25.4mm) (Preferred=12.7mm) (All)	0
Total	138

Width Constraint (Min=0.2mm) (Max=0.6mm) (Preferred=0.4mm) (All)	
Width Constraint: Track (3.825mm,-11.35mm)(3.825mm,0.8mm) on Top Layer Actual Width = 0.102mm, Target Width :	
Width Constraint: Track (3.825mm,-11.35mm)(3.95mm,-11.475mm) on Top Layer Actual Width = 0.102mm, Target Width	
Width Constraint: Track (3.95mm,-11.475mm)(4.45mm,-11.475mm) on Top Layer Actual Width = 0.102mm, Target Width	
Width Constraint: Track (4.45mm,-10.125mm)(4.45mm,-1mm) on Top Layer Actual Width = 0.102mm, Target Width = 0.2mr	
Width Constraint: Track (4.45mm,-10.35mm)(4.45mm,-10.125mm) on Top Layer Actual Width = 0.102mm, Target Width :	

[illegible]

Monday 11 May 2020 5:32:53 PM

Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)

[illegible]

Minimum Solder Mask Sliver (Gap=0.254mm) (All),(All)

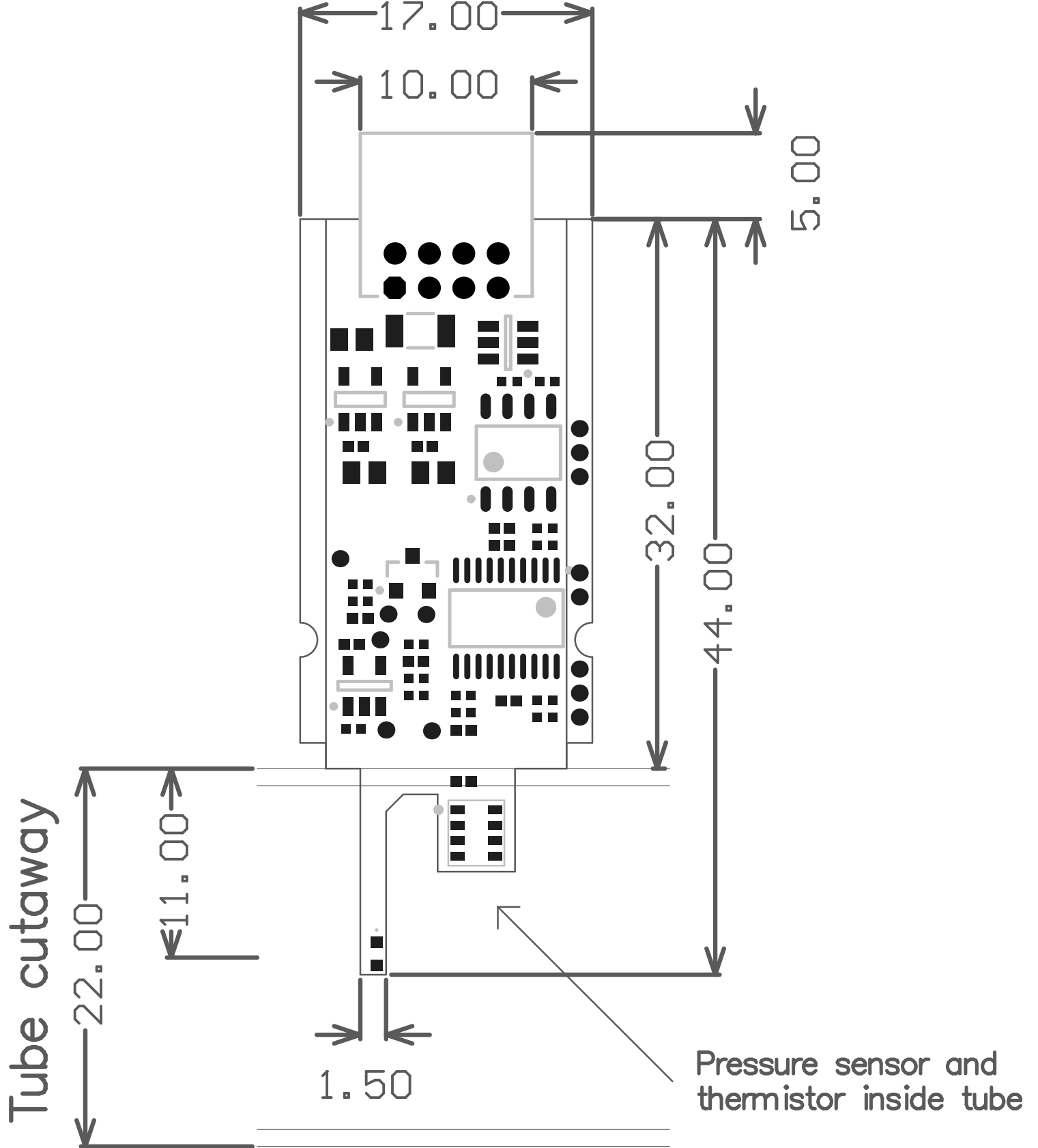
Minimum Solder Mask Sliver Constraint: (0.097mm < 0.254mm) Between Pad U3-8(10.375mm,11.55mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U5-1(2.55mm,20.175mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.147mm < 0.254mm) Between Pad U5-2(3.5mm,20.175mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad U7-1(9.17mm,-2.4mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad U7-2(9.17mm,-3.3mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad U7-3(9.17mm,-4.2mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad U7-5(11.33mm,-5.1mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad U7-6(11.33mm,-4.2mm) on Top Layer And Pa
Minimum Solder Mask Sliver Constraint: (0.197mm < 0.254mm) Between Pad U7-7(11.33mm,-3.3mm) on Top Layer And Pa

Silk To Solder Mask (Clearance=0.254mm) (IsPad),(All)

Silk To Solder Mask Clearance Constraint: (0.153mm < 0.254mm) Between Arc (13.25mm,23mm) on Top Overlay And Pa
Silk To Solder Mask Clearance Constraint: (0.197mm < 0.254mm) Between Arc (13.25mm,23mm) on Top Overlay And Pa
Silk To Solder Mask Clearance Constraint: (0.025mm < 0.254mm) Between Arc (15.65mm,11.55mm) on Top Overlay And Pa
Silk To Solder Mask Clearance Constraint: (0.162mm < 0.254mm) Between Arc (4.625mm,10.375mm) on Top Overlay And Pa
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad F1-1(8.5mm,25.5mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad F1-1(8.5mm,25.5mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad F1-2(5.5mm,25.5mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.155mm < 0.254mm) Between Pad F1-2(5.5mm,25.5mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U7-1(9.17mm,-2.4mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-1(9.17mm,-2.4mm) on Top Layer And Trac
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-2(9.17mm,-3.3mm) on Top Layer And Trac
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-3(9.17mm,-4.2mm) on Top Layer And Trac
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U7-4(9.17mm,-5.1mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-4(9.17mm,-5.1mm) on Top Layer And Trac
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-5(11.33mm,-5.1mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U7-5(11.33mm,-5.1mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-6(11.33mm,-4.2mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-7(11.33mm,-3.3mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.1mm < 0.254mm) Between Pad U7-8(11.33mm,-2.4mm) on Top Layer And Pa
Silk To Solder Mask Clearance Constraint: (0.25mm < 0.254mm) Between Pad U7-8(11.33mm,-2.4mm) on Top Layer And Pa

Electrical Rules Check Report

Class	Document	Message
Warning	sensor_module.SchDoc	Net BOOT0 has no driving source (Pin R10-1, Pin U3-1)
Warning	sensor_module.SchDoc	Net SENSE+ has no driving source (Pin R1-2, Pin R3-1, Pin R7-2, Pin TP3-1, Pin U2-3)
Warning	sensor_module.SchDoc	Net SENSE- has no driving source (Pin C2-2, Pin C3-2, Pin R2-2, Pin R4-1, Pin R5-2, Pin TP4-1, Pin U2-4)
Warning	sensor_module.SchDoc	Net SENSOR_RX+ has no driving source (Pin D2-6, Pin J1-5, Pin U4-8)
Warning	sensor_module.SchDoc	Net SENSOR_RX- has no driving source (Pin D2-4, Pin J1-6, Pin U4-7)



Layer	Name	Material	Thickness	Constant	Ger ber
	Top Overlay				GTO
	Top Solder	Solder Resist	0.013mm	3.8	GTS
1	Top Layer	Copper	0.036mm		GTL
	Dielectric 1	FR-4	0.502mm	4.8	
2	Bottom Layer	Copper	0.036mm		GBL
	Bottom Solder	Solder Resist	0.013mm	3.8	GBS
	Bottom Overlay				GB0

Total board thickness:

0.599mm

