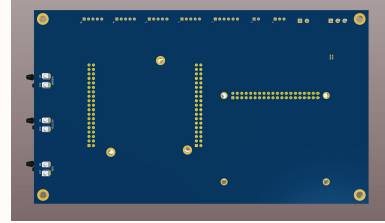
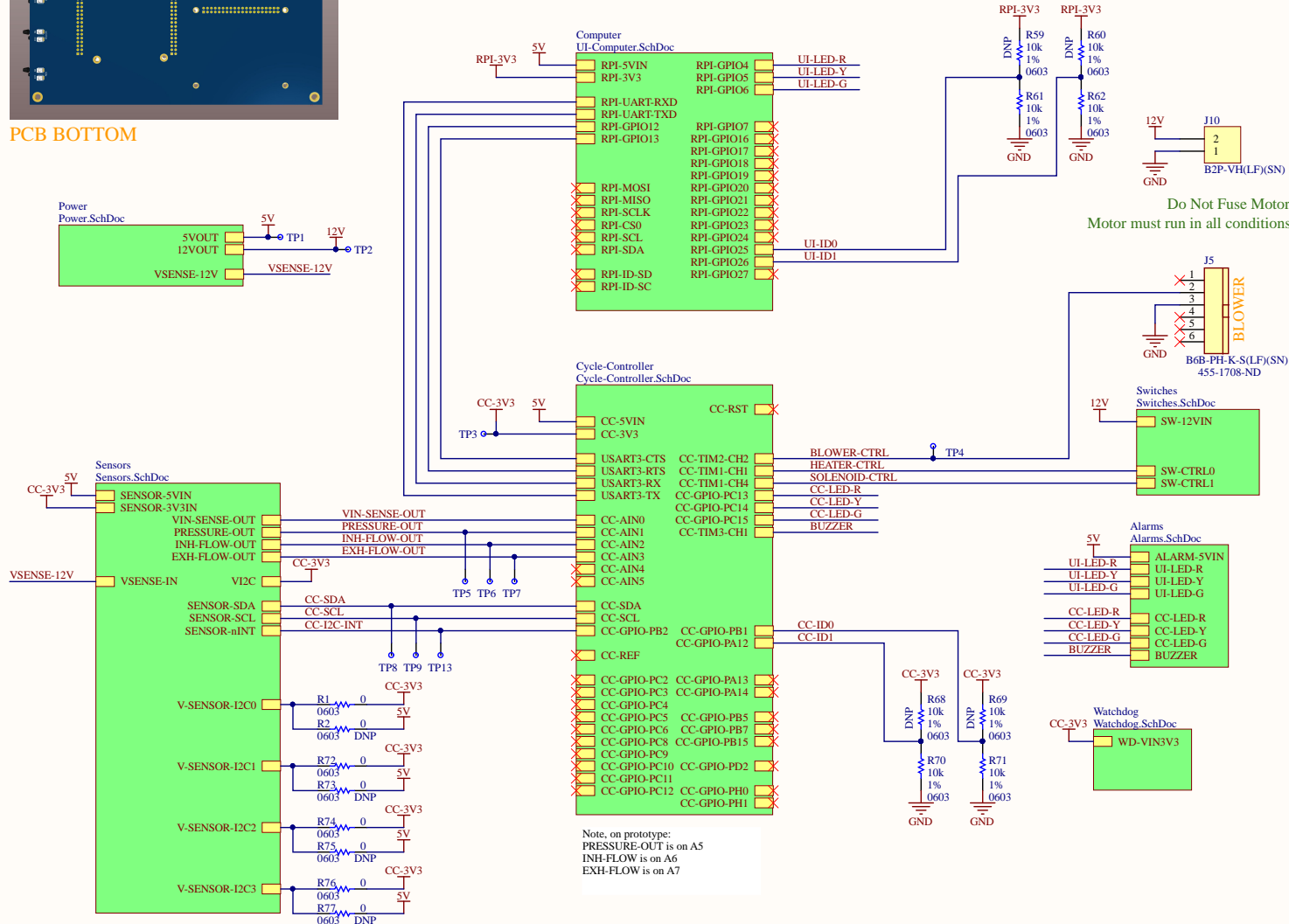


PCB TOP



PCB BOTTOM

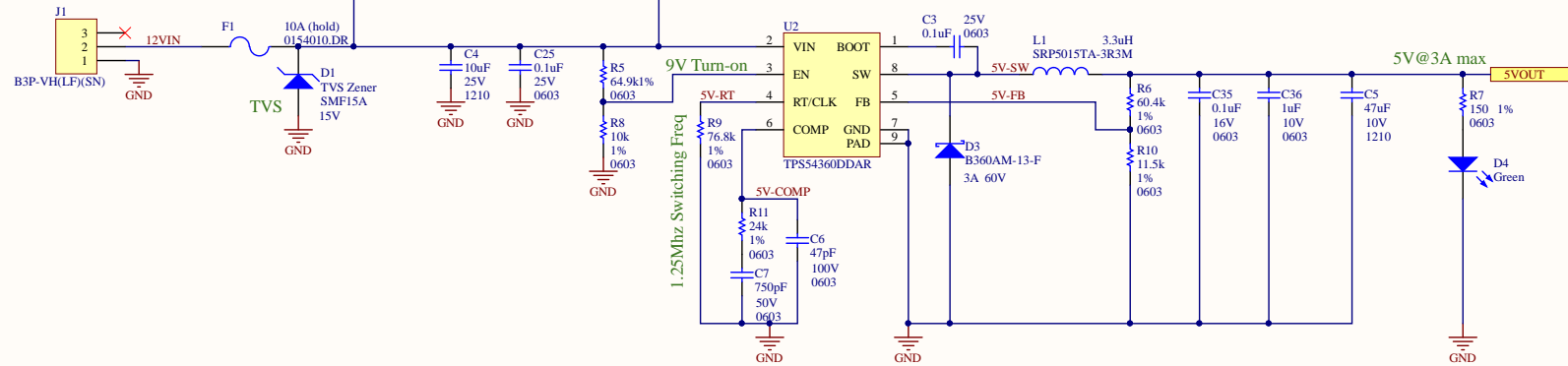
RespiraWorks Ventilator Mainboard Rev 1.0




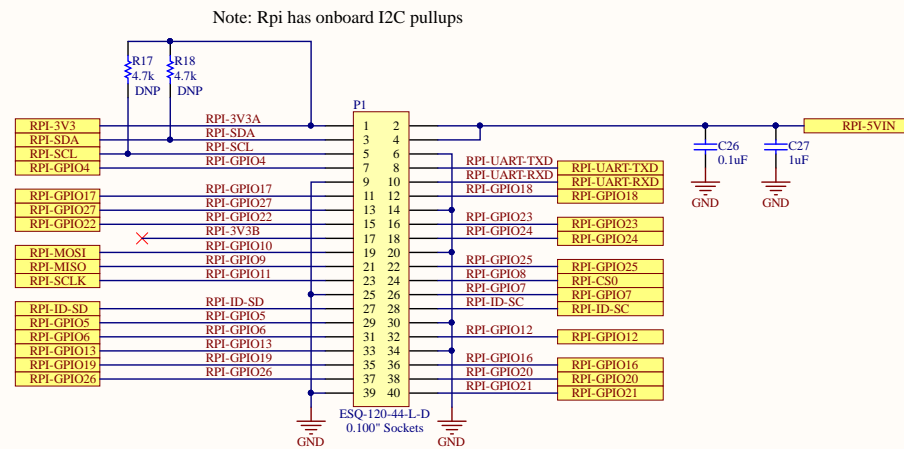
M1	M2	M3	M4
BOM Item 24335 DNP	BOM Item 24335 DNP	BOM Item 24335 DNP	BOM Item 24335 DNP
M2.5 x 20mm + 4mm	M2.5 x 20mm + 4mm	M2.5 x 20mm + 4mm	M2.5 x 20mm + 4mm
M5	M6	M7	M8
BOM Item M2.5 x 4mm DNP	BOM Item M2.5 x 4mm DNP	BOM Item M2.5 x 4mm DNP	BOM Item M2.5 x 4mm DNP
M9	M10	M11	M12
BOM Item M3 x 6mm DNP	BOM Item M3 x 6mm DNP	BOM Item M3 x 6mm DNP	BOM Item M3 x 6mm DNP
M13	M14	M15	M16
BOM Item 971090151 DNP	BOM Item 971090151 DNP	BOM Item 971090151 DNP	BOM Item 971090151 DNP
M2.5 x 20mm + 6mm	M2.5 x 20mm + 6mm	M2.5 x 20mm + 6mm	M2.5 x 20mm + 6mm
M17	M18	M19	M20
BOM Item M2.5 x 4mm DNP	BOM Item M2.5 x 4mm DNP	BOM Item M2.5 x 4mm DNP	BOM Item M2.5 x 4mm DNP
M21	M22	M23	M24
BOM Item M2.5	BOM Item M2.5	BOM Item M2.5	BOM Item M2.5

These are placeholders - final mech parts TBD

Project:	RespiraWorks Ventilator			
Title:	RespiraWorks			
Sheet: 1 of 8	Size: A4	Revision: A1	Date: 4/24/2020	
File: TOP.SchDoc		Drawn By: E. Chiu	Altium	



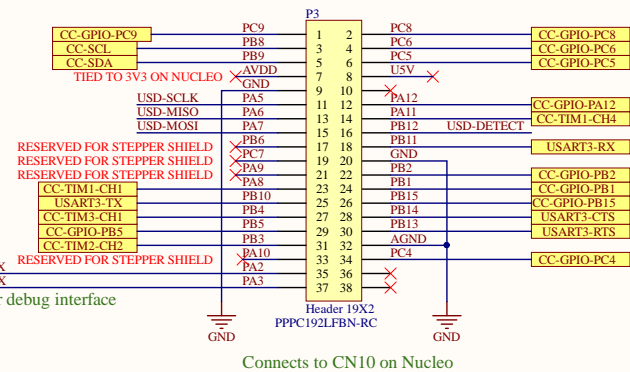
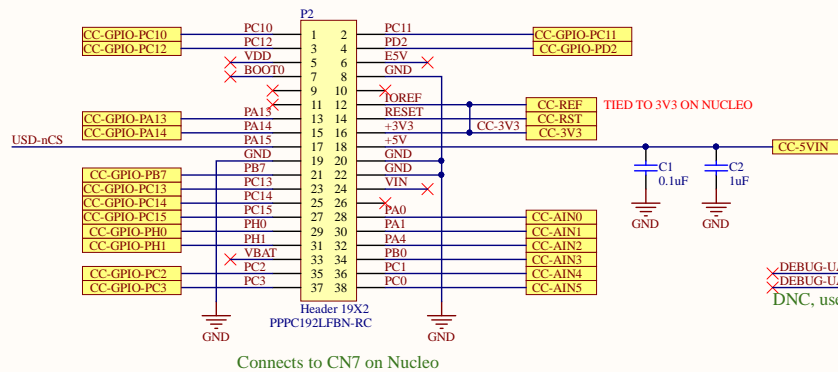
Project: <i>RespiraWorks Ventilator</i>		 RespiraWorks	
Title: <i>RespiraWorks</i>			
Sheet: <u>2</u> of <u>8</u>	Size: <u>A4</u>	Revision: <u>A1</u>	Date: <u>4/24/2020</u>
File: <u>Power.SchDoc</u>		Drawn By: <u>E. Chiu</u>	



U8

Raspberry Pi B+ Mechanical Footprint
Upside down direct socket
Separately placed ESQ-120-44-L-D
connector required!

RpiB+Footprint-UpsideDown-Direct DNP



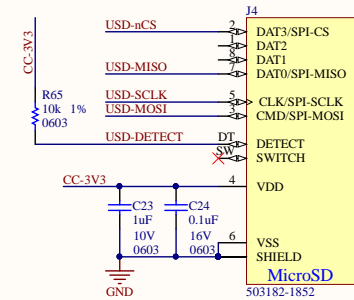
NUCLEO-64 Mechanical Footprint Only

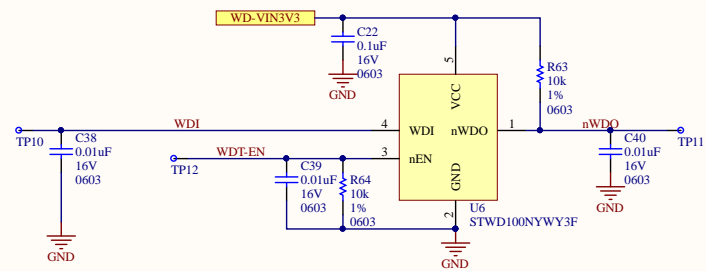
Separately placed PPPC192LFBN-RC connectors required!


Text frames below can be Copy/Paste Special... into net names

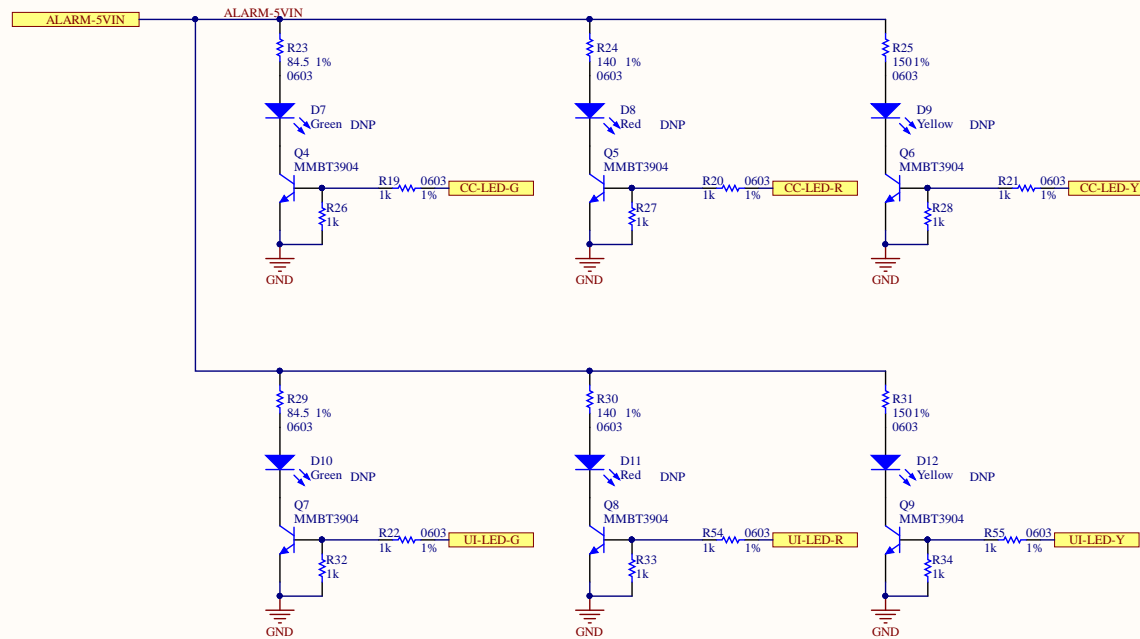
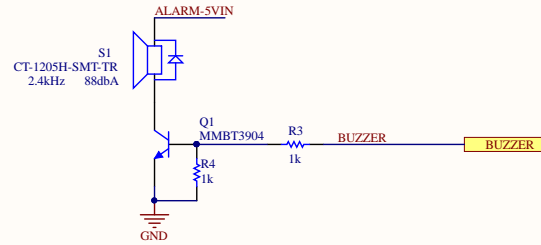
CN7	CN7	CN10	CN10
ODD:	EVEN:	ODD:	EVEN:
PC10	PC11	PC9	PC8
PC12	PD2	PB8	PC6
VDD	ESV	AVDD	PC5
BOOT0	GND	GND	U5V
NC	NC	PA5	NC
NC	IOREF	PA6	PA12
PA13	RESET	PA7	PA11
PA14	+3V3	PB6	NC
PA15	+5V	PC7	GND
GND	GND	PA9	PB2
PB7	GND	PA8	PB1
PC13	VIN	PB10	PB15
PC14	NC	PB4	PB14
PC15	PA0	PB5	PB13
PH0	PA1	PB3	AGND
PH1	PA4	PA10	PC4
VBAT	PB0	PA2	NC
PC2	PC1	PA3	NC
PC3	PC0	PB9	PB12

NUCLEO-L452RE
DNP






Project: <i>RespiraWorks Ventilator</i>		 Respira Works	
Title: <i>RespiraWorks</i>			
Sheet: <u>5</u> of <u>8</u>	Size: <u>A4</u>	Revision: <u>A1</u>	Date: <u>4/24/2020</u>
File: <u>Watchdog SchDoc</u>		Drawn By: <u>E. Chiu</u> <i>Altium</i>	



backside LED are DNP'd to expedite assembly - hand solder upon receipt

Project: RespiraWorks Ventilator			
Title: RespiraWorks			
Sheet: 6 of 8	Size: A4	Revision: A1	Date: 4/24/2020
File: Alarms.SchDoc		Drawn By: E. Chiu	

