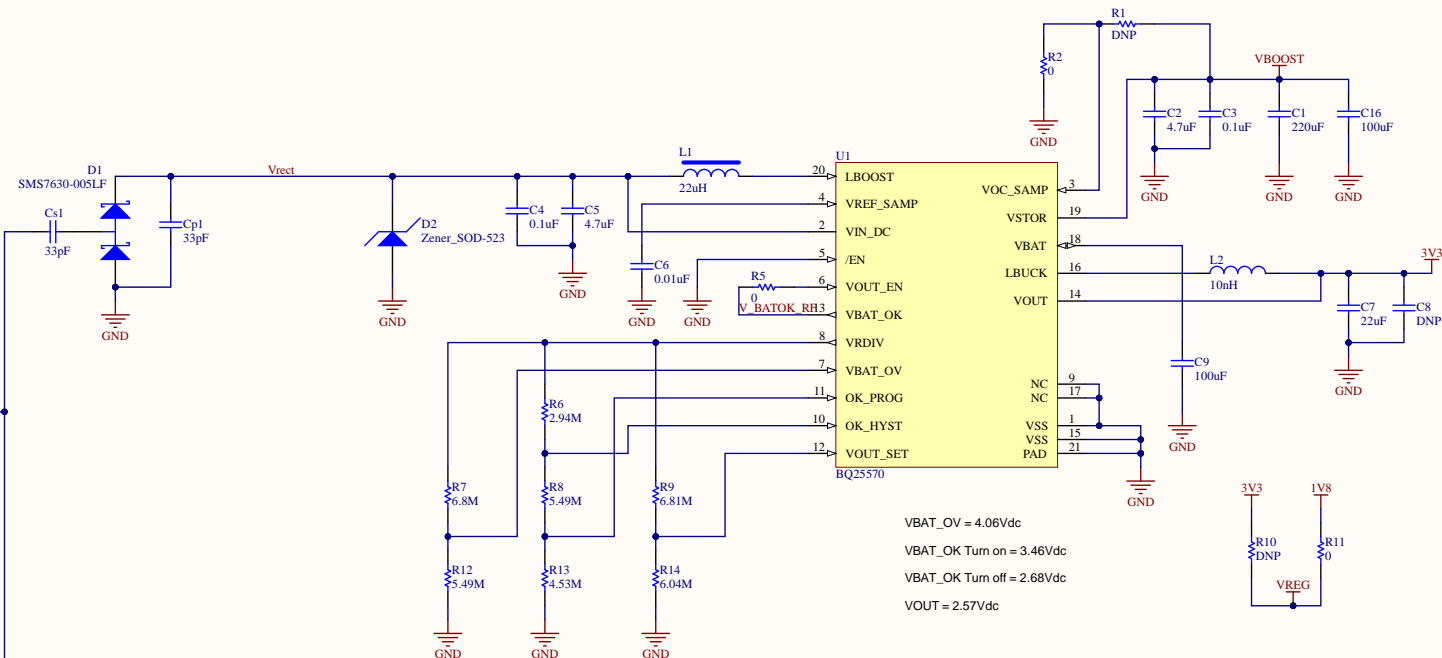
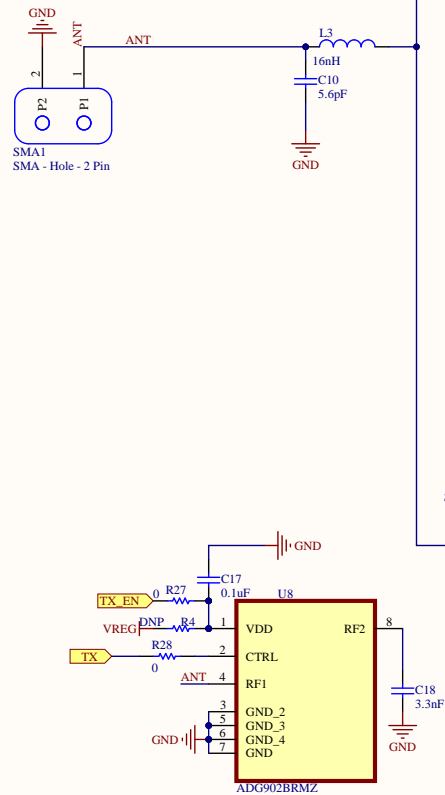


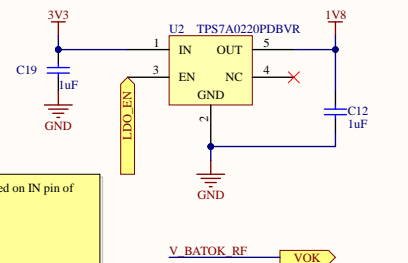
Title MCU		
Size B	Number	Revision
Date: 7/15/2022	Sheet of	
File: Z:\wisp6\wisp-6-mcu.SchDoc	Drawn By:	

Changes:

- 1- C added for ADG902 on VDD pin
- 2- RF1 goes to antenna instead of RF2
- 3- ADG902 can be enabled by MCU

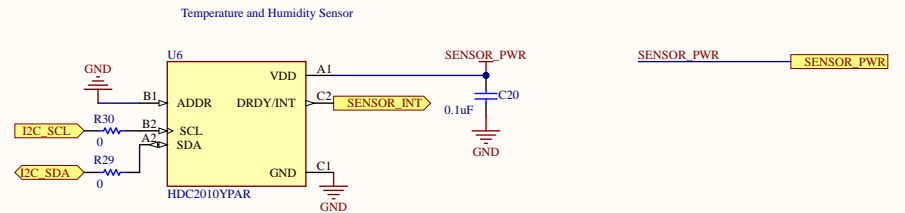
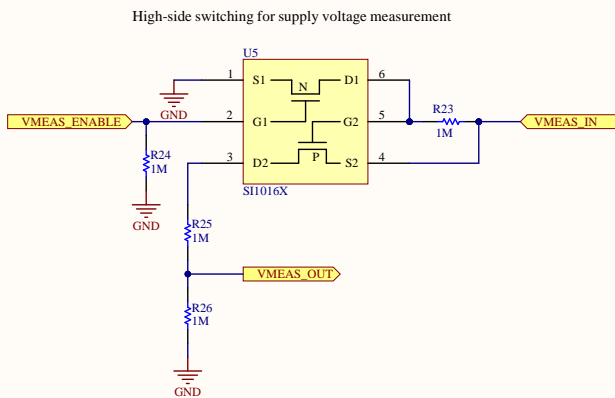


VBAT_OV = 4.06Vdc
 VBAT_OK Turn on = 3.46Vdc
 VBAT_OK Turn off = 2.68Vdc
 VOUT = 2.57Vdc



C added on IN pin of LDO

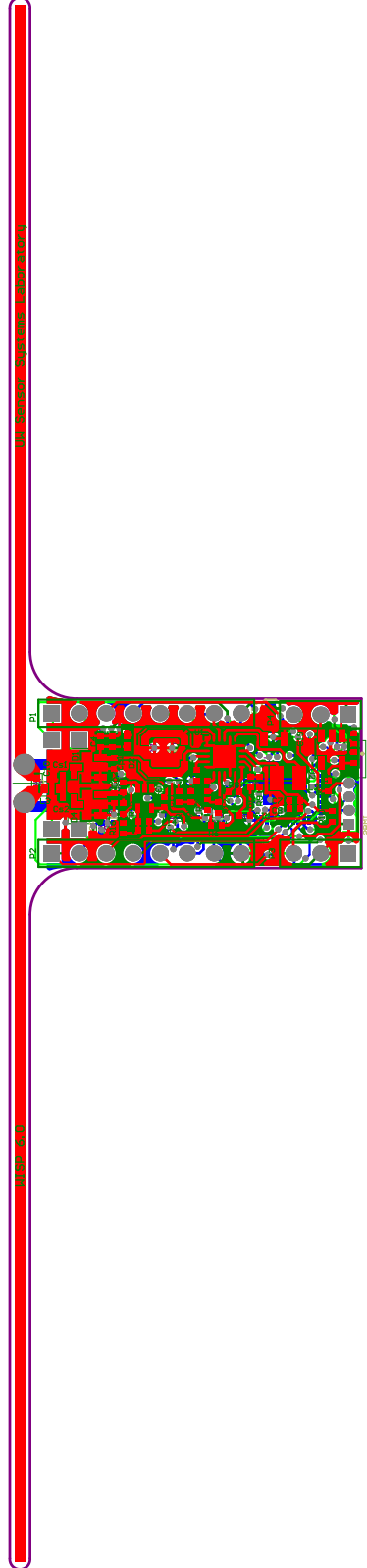
Title AFE		
Size B	Number	Revision
Date: 7/15/2022	Sheet of	
File: Z:\wisp6\wisp-6-afe.SchDoc	Drawn By:	



Changes:

- 1- C on VDD pin
- 2- ADDR to GND (unconnected is fine too)
- 3- VDD goes to MCU
- 4- SENSOR INT goes to MCU

Title Peripherals		
Size B	Number	Revision
Date: 7/15/2022	Sheet of	
File: Z:\wisp6\...\wisp-6-peripherals.SchDoc	Drawn By:	



Designator	Value	Comment	Description	Footprint	LibRef	Quantity	Manufacturer
C1	220uF	Cap	Ceramic Capacitor (Surface Mount)	1206	Cap	1	Generic Ceramic Chip Cap (TBD)
C2, C5, C15	4.7uF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	3	Generic Ceramic Chip Cap (TBD)
C3, C4, C11, C17, C20	0.1uF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	5	Generic Ceramic Chip Cap (TBD)
C6	0.01uF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	1	Generic Ceramic Chip Cap (TBD)
C7	22uF	Cout1	Ceramic Capacitor (Surface Mount)	0402	Cap	1	Generic Ceramic Chip Cap (TBD)
C8, R1, R4, R10, R20	DNP	Cout2, R_80%, Rok3, Res	Ceramic Capacitor (Surface Mount), Chip Resistor (Surface Mount)	0402	Cap, Res	5	Generic Ceramic Chip Cap (TBD), Generic Chip Res (TBD)
C9, C16	100uF	Cap	Ceramic Capacitor (Surface Mount)	0805	Cap	2	Generic Ceramic Chip Cap (TBD)
C10	5.6pF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	1	Generic Ceramic Chip Cap (TBD)
C12, C19	1uF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	2	Generic Ceramic Chip Cap (TBD)
C13, Cp1, Cs1	33pF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	3	Generic Ceramic Chip Cap (TBD)
C14	1nF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	1	Generic Ceramic Chip Cap (TBD)
C18	3.3nF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	1	Generic Ceramic Chip Cap (TBD)
C21, C22, Cp2	10pF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	3	Generic Ceramic Chip Cap (TBD)
Cs2	1pF	Cap	Ceramic Capacitor (Surface Mount)	0402	Cap	1	Generic Ceramic Chip Cap (TBD)
D1, D4		SMS7630-005LF	Schottky Diodes & Rectifiers Ls=1.5nH SOT-23 Series Pair	SOT23 - N	SMS7630-005LF	2	
D2		Zener_SOD-523	Diode - Zener	Zener_SOD-523	Zener_SOD-523	1	
L1	22uH	Ind_LPS4018	Inductor (Surface Mount)	LPS4018	Ind_LPS4018	1	Coil Craft
L2	10nH	Ind	Inductor (Surface Mount)	IND1008	Ind	1	
L3	16nH	Ind	Inductor (Surface Mount)	0603	Ind	1	
LED2		LED	Typical RED, GREEN, YELLOW, AMBER GaAs LED	Diode - 0603	Diode - LED	1	
P1, P2		Header 8	Header, 8-Pin	HDR1X8	Header 8	2	
P3, P4		Header 3	Header, 3-Pin	HDR1X3	Header 3	2	
R2, R3, R5, R11, R27, R28, R29, R30	0	R_50%, Res, R_VBAT_OK, Rok3	Chip Resistor (Surface Mount)	0402	Res	8	Generic Chip Res (TBD)
R6	2.94M	Rok3	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R7	6.8M	Rov2	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R8, R12	5.49M	Rok2, Rov1	Chip Resistor (Surface Mount)	0402	Res	2	Generic Chip Res (TBD)
R9	6.81M	Rout2	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R13	4.53M	Rok1	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R14	6.04M	Rout1	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R15	560k	Res	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R16	22k	Res	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R17	220k	Res	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R18, R19, R22	47k	Res	Chip Resistor (Surface Mount)	0402	Res	3	Generic Chip Res (TBD)
R21	33	Res	Chip Resistor (Surface Mount)	0402	Res	1	Generic Chip Res (TBD)
R23, R24, R25, R26	1M	Res	Chip Resistor (Surface Mount)	0402	Res	4	Generic Chip Res (TBD)
SBW1		MHDR1X4	Header, 4-Pin	MHDR1X4	MHDR1X4	1	
SMA1		SMA - Hole - 2 Pin	Two pin SMA connector wisp	SMA - Hole - 2 Pin	SMA - Hole - 2 Pin	1	
U1		BQ25570	Boost Charger	BQ25570	BQ25570	1	Texas Instruments
U2		TPS7A0220PDBVR	IC REG LINEAR 1.8V 200MA SOT23-5	SOT23-5	TPS7A0218PDBVR	1	
U3		TLV7041	Comparator General Purpose Open Drain SC-70-5	SC70-5	NCS2200	1	ON Semiconductor
U4		MSP430 Wolverine 48 Pin	16-bit FRAM MCU	MSP_QFN48_RGZ_PAD0	MSP430FR596X_586X	1	
U5		SI1016X	NMOS and PMOS array	SC-89-6 Vishay	SI1016X	1	
U6		HDC2010YPAR	Humidity Temperature Sensor 0 - 100% RH IA°C ±2% @s Surface Mount	BGA6C100X50P2X3_HDC2010YPAR	HDC2010YPAR	1	
U8		ADG902BRMZ	RF Switch IC General Purpose SPST 2.5GHz 500hm 8-MSOP	SOP65P490X110-8N	ADG902BRMZ	1	
Y1	32.768kHz	XTAL	Crystal Oscillator - [3.20mm x 1.50mm]	XTAL [3.20mm x 1.50mm]	XTAL 2-pins	1	Epson Toyocom Corporation