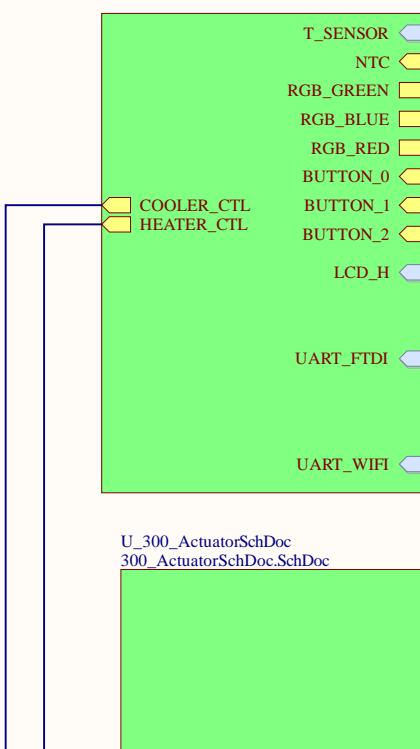


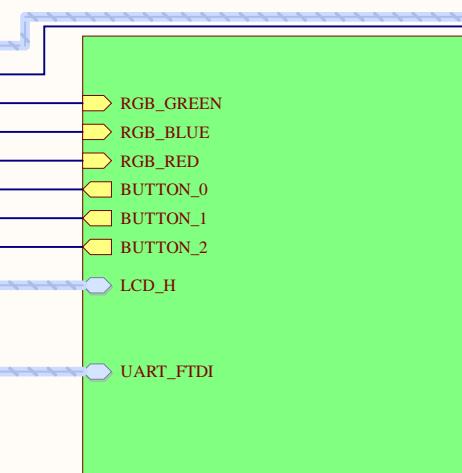
Comment	Description	Designator	Footprint	RefDes	Quantity	
TP_TH_30mil	Test point 30mil hole size	GND1,TP_FTDI_RX FT_FTDI_TV_WIFI FT_FTDI_TV_BT GND1,TP_C3A,TP C37,TP_C3B,TP,C56 D0,TP_D1,TP_D2,TP D1,TP_D4,TP_D5,TP D2,TP_D6,TP_D7,TP EROM_GND_XP U2,SDA_12C_SDLI NTC_R26,TP_RW,RW, S25	TP_TH_30mil	TP_TH_30mil	TP_TH_30mil	9
TP_TH_10mil	Test point 10mil hole size			TP_TH_10mil	23	
0.1uf 10%	CAP CER 0.1uF 50V XTR 0603	C101, C200, C507 C208, C210, C212, C500, C504, C506 C501, C503, C505 C502, C509, C503	0603...	Cap_0.1uf_0603_50V	18	
4.7uf 10%	CAP CER 4.7uF 6.3V XTR 0603	C101, C200, C507 C510	0603...	Cap_4.7uf_0603_6.3V	4	
10μf 20%	CAP CER 10uF 6.3V XTR 0603	C102, C401	0805...	Cap_10uf_0805_6.3V	2	
88pF 1%	CAP CER 88pF 50V NP0 0805	C103	0805...	Cap_88pf_0805_50V	1	
22uF 10%	CAP CER 22uF 16V XTR 0603	C105, C110	0805...	Cap_22uf_0805_16V	1	
495pf 2%	CAP CER 500PF 50V NP0 0805	C106	0805...	Cap_495pf_0805_50V	1	
10uF 10%	CAP CER 10uF 25V KSR 1210	C107, C501	1210...	Cap_10uf_1210_25V	2	
1uf 10%	CAP CER 1uF 25V KSR 1005	C108, C211, C512	0805...	Cap_1uf_0805_25V	3	
10000p 10%	Ceramic Capacitor XTR 0603 (1608 1206)	C109, C211	0603...	Cap_10000p_0603_5 pV	2	
47pF 5%	CAP CER 4.7pF 50V COP/NP0 0603	C203, C204	0603...	Cap_47pf_0603_50V	2	
2.2uf 10%	CAP CER 2.2uF 25V KSR 0603	C207, C209	0603...	Cap_2.2uf_0603_25V	2	
20pF 5%	CAP CER 20pF 50V COP/NP0 0201	C502, C503	0201...	Cap_20pf_0201_50V	2	
B17071VAM007R	DIODE SCHOTTKY 30V TUM/TUM023M	D100	TUM02M...	D.Schotky_30V_TUM023M	1	
ESDA13P70-1H1M	TVS-Diode 120VMM 120V 1A	D101	1610	TVS_120V_1OH_1610	1	
RGB	LED RGB CLEAR 1206 SMD R/G/B	D206	LED_1206_RGB	LED_1206_RGB	1	
PME0302EP.115	DOOR SCHOTTKY 30V TUM/TUM023M	D400, D409	SOD_128...	D.Schotky_30V_A SOD_128	2	
MUFI030FTFO6.30P100	FET IRF840 N-MOSFET 300V 120mΩ 0.1A	F100	0603...	I.RF840_30V_S_E stuffed	1	
VM11608-601-4R	FERRITE BEAD 600uH 400mΩ 1N1111	B100	0603...	FB_400mH_0603_1 nH_A	1	
BLM214AG015ND	FERRITE BEAD 600uH 100mΩ 1N1111	B101, FB102, FB103	0805...	FB_100mH_0805_60 uH_A	3	
2508060700	FERRITE BEAD 600uH 80mΩ 1N1111	B100, FB100, FB100	0805...	FB_80mH_0805_300 uH_A	3	
B4B-PHM-S4-TB	FERRITE BEAD 600uH 50mΩ 1N1111	H300	0603...	H_60mH_1x1.5mD_2 0.1nH_A	1	
7731-462005	CONN HARDFER VIBST 2.54mmH	H500	0603...	H_1.5x1.5mD_2 0.1nH_A	1	
TM-103-1L-SV	CONN HARDFER SMD 5.08mmH	H601, H601	0603...	H_1.5x1.5mD_2.5mm 0.1nH_A	2	
54B-XH-041-L	CONN HARDFER SMD 8.4/402 2.5mmH	H502	0603...	H_1.5x1.5mD_2.5mm 0.1nH_A	1	
TM-102-01-L-SV-P	CONN HARDFER SMD 8.2/402 2.5mmH	H600	0603...	H_1.5x1.5mD_2.5mm 0.1nH_A	1	
PWR JACK 2.1mm	CONN HARDFER SMD 2.54mmH	J100	0603...	J._CON_1H_2.1mm_PWR S_JACK	1	
USB Micro-B	CONN KCF7 USB2.0 Micro-B 5.08m B/A	Z100	Conn_USB_Micro_B	Conn_microUSB_B	1	
FPC 22 POG	CONN FPC 22 POG 100mΩ 1N1111	Z101	Conn_22x1.5mD_0.1 nH_A	Conn_22x1.5mD_0.1 nH_A	1	
SNM-102-02-5-S	CONN KCF7 2PODS 0.079 GND/0.079 M	Z100, J401	Conn_1x2_2.0mmD_0.1 nH_A	Conn_1x2_2.0mmD_0.1 nH_A	2	
CDR8102BPNP-100NC	FIXED IND 10uH 1.3A 65.5MHz 1.3A	Z100	Z100...	Z100D_1.3A_Ns	1	
W100-2037-4R8H-500	INDUCTOR 2037 4.7uH 50mΩ 1.4A 2PF 49.2MHz 1.4A	L101	Z100...	Z100D_7.0mmx7.0 mm_Ns	1	
W100-1284K-WPPI-000	INDUCTOR 1284K 1.4A 50mΩ 1.4A 2PF 49.2MHz 1.4A	L100	Z100...	Z100D_1.4A_Ns	1	
DR0409	EMI FILTER DC-500uA RTK MODULE	M050	Mod_RTCK_SD405	Mod_RTCK_SD405	1	
2N7002-TP	MOSFET N-CH 60W 115mA SOT23	Q200, Q201, Q202	SOT_23_3...	Q.NFET_60W_0.34A_S SOT_23_3	3	
S23202CS-T1-E3	MOSFET N-CH 20W 100mA SOT23	Q400, Q401	SOT_23_3...	Q.NFET_20W_0.2A_S SOT_23_3	2	
180K Ohm 1/10W	RES 180K OHM 1% 1/10W 0603	R100	0603...	R100m_0603_1/10W	1	
100K Ohm 1/10W	RES 100K OHM 1% 1/10W 0603	R101	0603...	Res_100kOhm_0603_1/ 10W	1	
1M10HM 1/10W	RES 1M10HM OHM 1% 1/10W 0603	R102	0603...	R1M10m_0603_1/ 10W	1	
27.0H 1/10W	RES 27.0H 0.1% 1/10W 0603	R200, R201	0603...	Res_27.0hm_0603_1/ 10W	2	
330 Ohm 1/10W	RES 330 OHM 1% 1/10W 0603	R201, R202, R203	0603...	Res_330Ohm_0603_1/ 10W	6	
10k 1/16W	RES SMD 10 OHM 0.1% 1/16W 0603	R203, R205, R209 R215, R217, R217, R402, R403, R403 R502, R503, R503	0603...	Res_10k_0603_1/16W	16	
900kOhm 0.6mW	PEP1206 10PPM/C 0.02% 0.5% TA	S204	1206...	Res_900kOhm_1206_0. 6mW	1	
95.30H 1/10W	RES 95.30 OHM 1% 1/10W 0603	R206, R208	0603...	Res_95.30Ohm_0603_1/ 10W	2	
4.7k Ohm 1/10W	RES 4.7K OHM 1% 1/10W 0603	R207	0603...	Res_4.7kOhm_0603_1/ 10W	1	
NTC163X102-1	TERMOSTAT NTC 100KHN 1380K 0603	RT300	0603...	RT_NTC_10_0603	1	
101990644	GROVE ANT120 TC MODULE TEMP+P	SE300		Se_Humidity_Temp P	1	
SW410-3017835	SWITCH TACTILE 30 NO/NO 0.05A 12V	Sw100, Sw201, Sw202	Sw100...	Sw_Push_1.7mmx3.5 mm_1.5mmx2.9mm 2.5mmx2.9mm	5	
434153017835	IC BIEG 2.3V 3.9V 300mA SDT2.15	U100	SDT_2.15...	SDC_D_3.9V_300mA U100	1	
TPS26125RSAR	IC BIEG 2.3V 5.1V 1A 100mA	U101	SDA_1.6_3.9V_5.1A_160 mA_U101	SDA_1.6_3.9V_5.1A_160 mA_U101	1	
FT2320X-R	IC USB SERIAL BASIC UART 16CFL	U200	CFN_16_3.9V_5.1mm CFN_16_3.9V_5.1mm	CFN_16_3.9V_5.1mm CFN_16_3.9V_5.1mm	1	
ULSUBLG-2M6	IC DIO54 55W 55M 4.4mA	U201	U201...	U201...	1	
KMC1402164K8	IC KMC1402164K8 74AC02P	U202	U202...	U202...	1	
STM2802R0676TR	IC STM2802R0676TR 74AC02P	U203	U203...	U203...	1	
SPC WRCOM-024	RF TX/RX MOD WIF 5.8GHz	U600	MOD_WIF_LSP_WRF U600...	MOD_WIF_LSP_WRF U600...	1	
ECS-327-12.5-TR	SD CARD 32GB/64GB 12.5PS	V1500	SDA_0.2_3.2mmx1.5mm SDA_0.2_3.2mmx1.5mm	SDA_0.2_3.2mmx1.5mm SDA_0.2_3.2mmx1.5mm	1	
303145102	SD CARD 32GB/64GB 12.5PS	V1500	SDA_0.2_3.2mmx1.5mm SDA_0.2_3.2mmx1.5mm	SDA_0.2_3.2mmx1.5mm SDA_0.2_3.2mmx1.5mm	1	

1 2 3 4

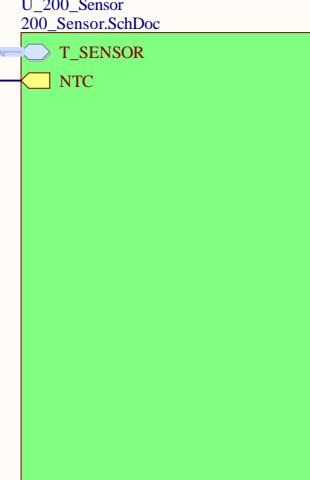
U_400_Logic
400_Logic.SchDoc



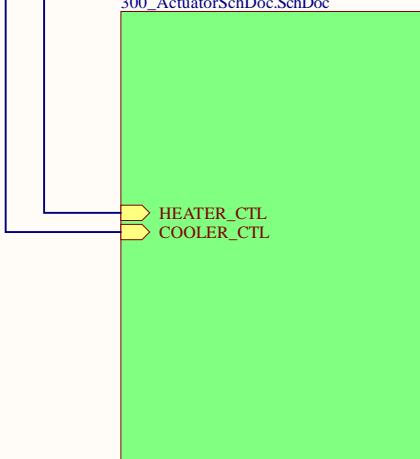
U_100_User interface
100_User interface.SchDoc



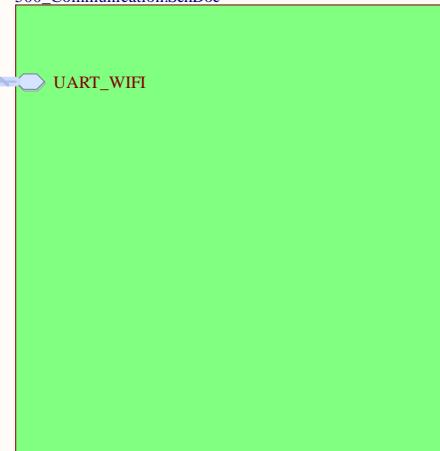
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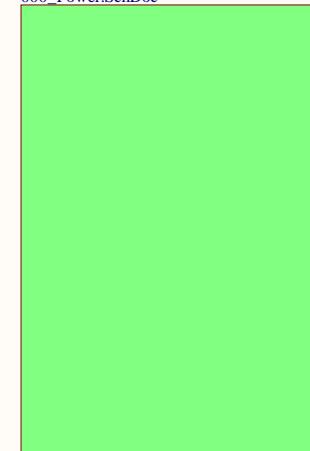
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300_ActuatorSchDoc.SchDoc



U_500_Communication
500_Communication.SchDoc



U_000_Power
000_Power.SchDoc

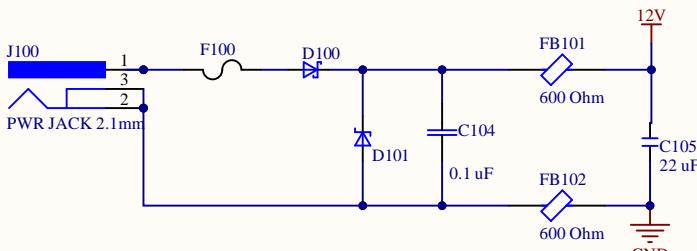


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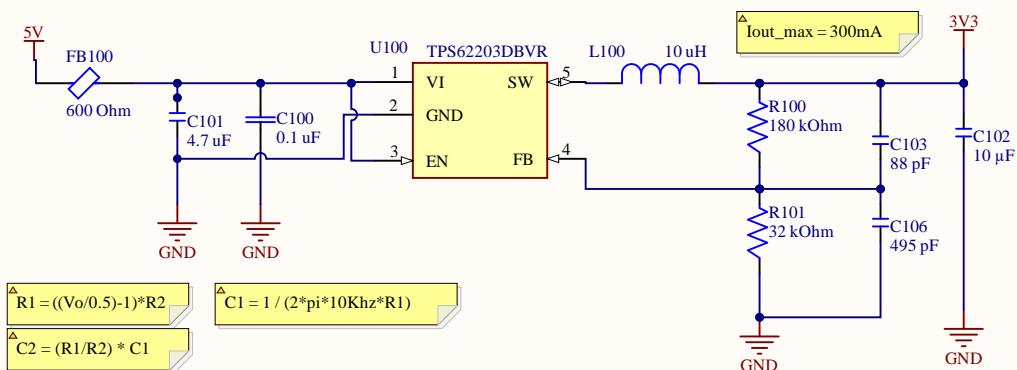
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File:	C:\Users\..\Main.SchDoc	Drawn By: Kamilo Yani Vam Burbano Rincon

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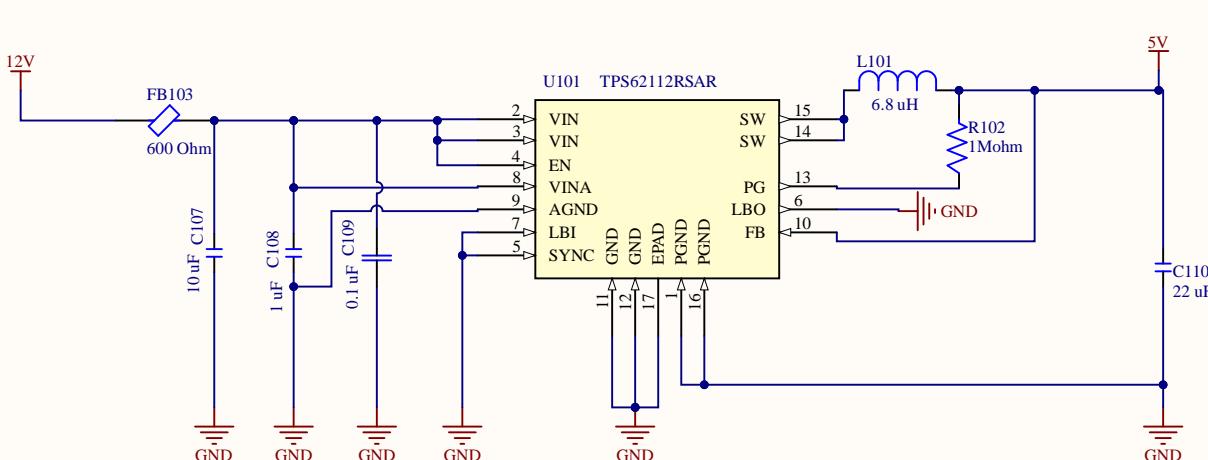
A POWER INPUT AND FILTER



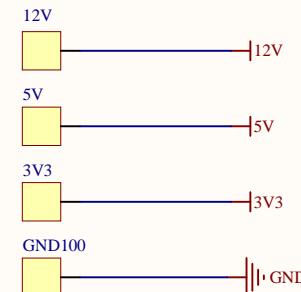
B DC/DC 5V TO 3V3



C DC/DC 12V TO 5V



D TEST POINTS



Title 000_Power

Size A4

Number

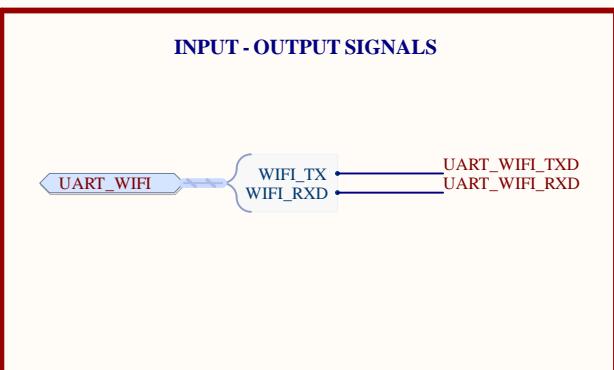
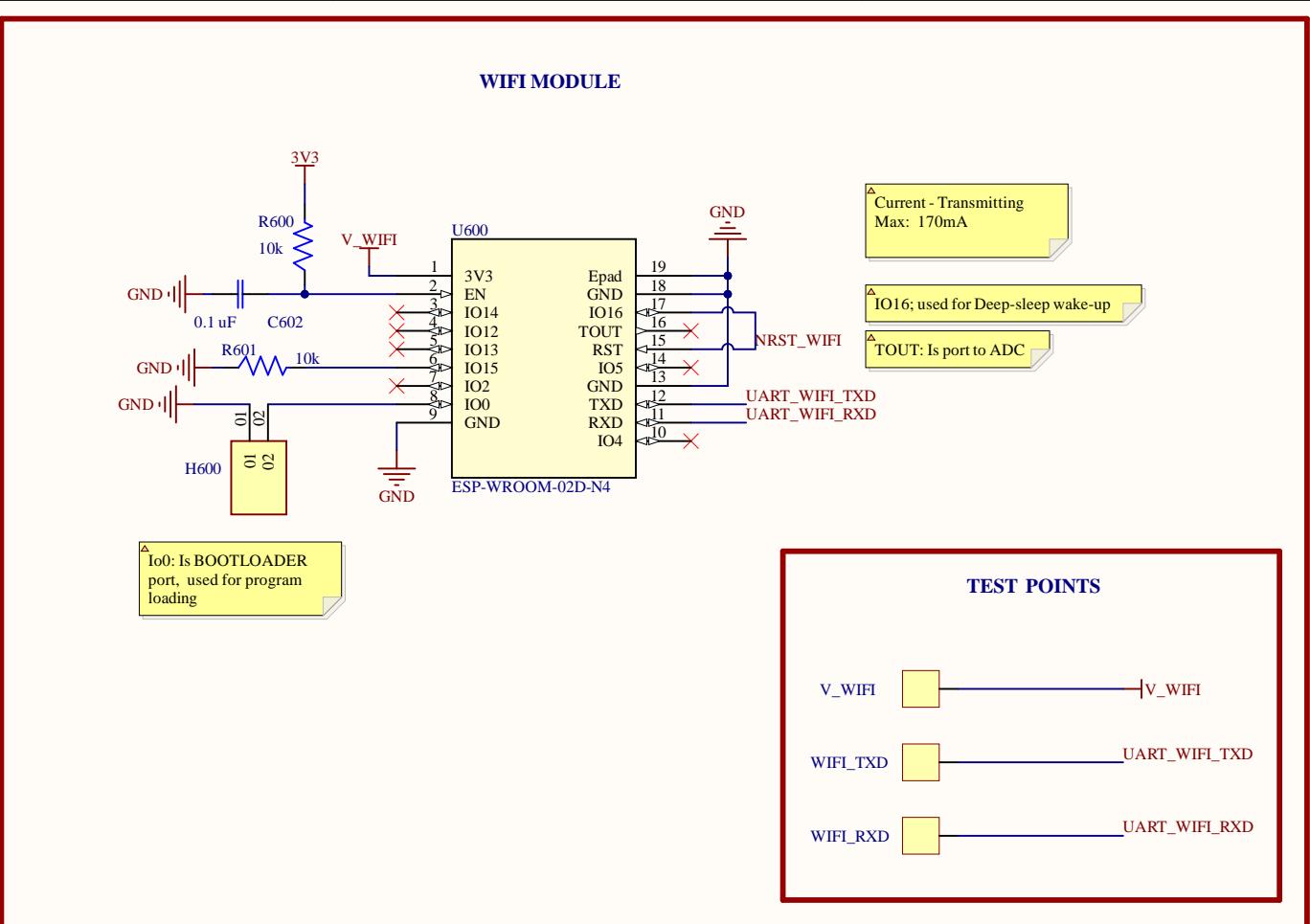
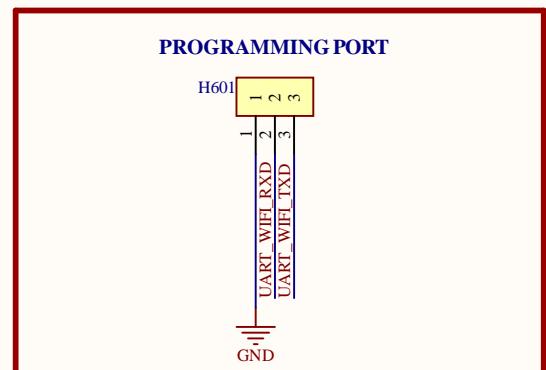
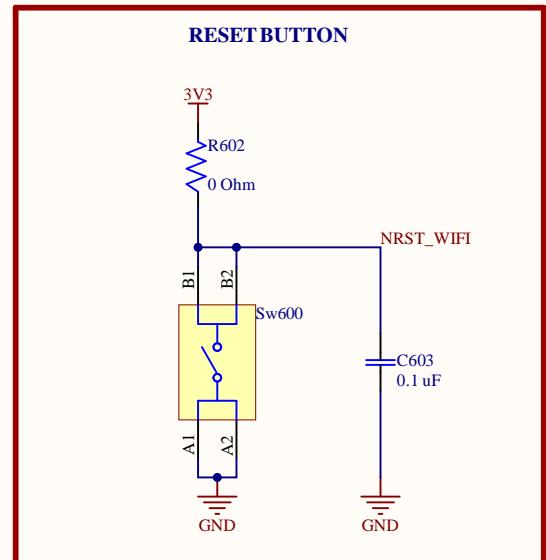
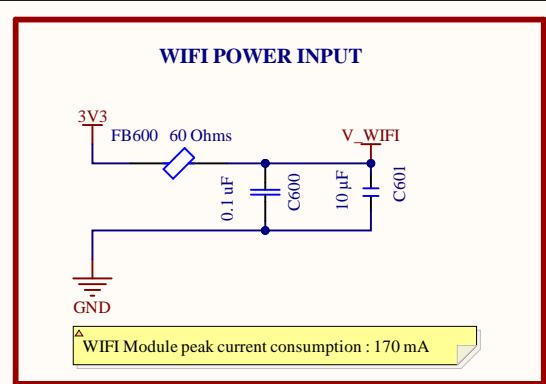
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Date: 2/07/2024

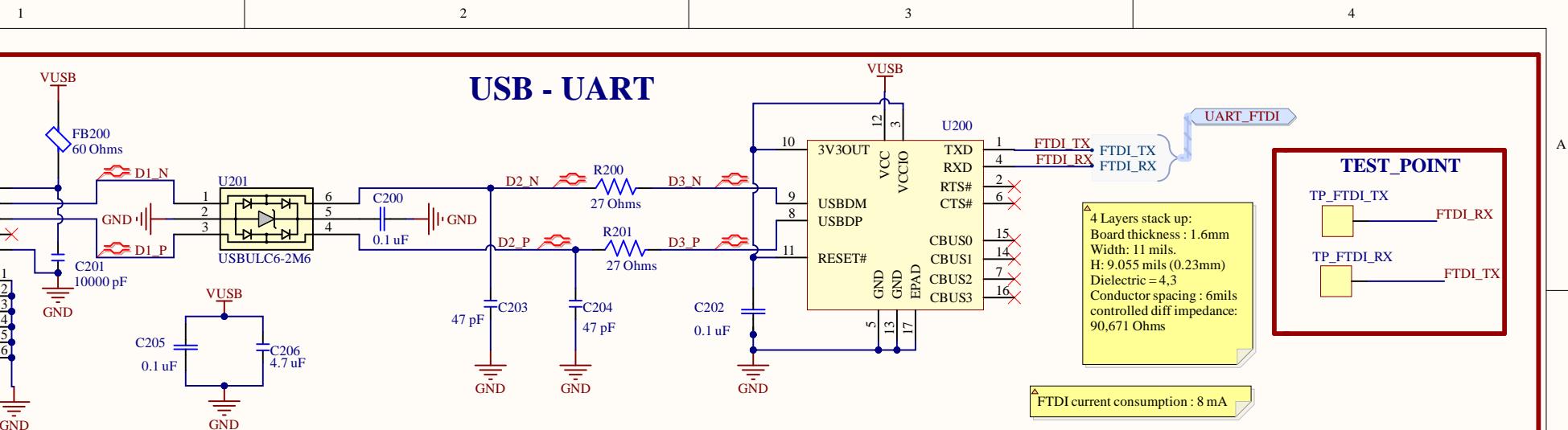
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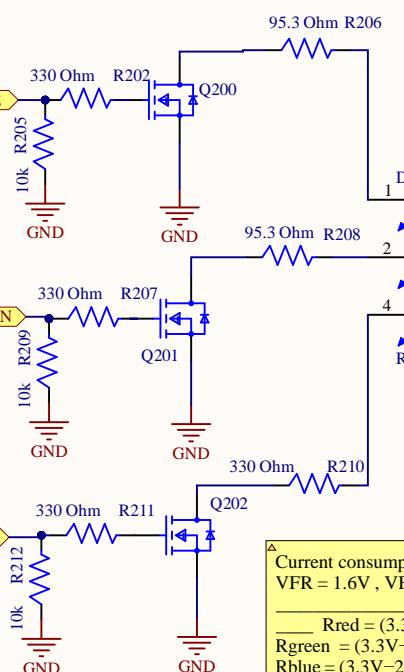
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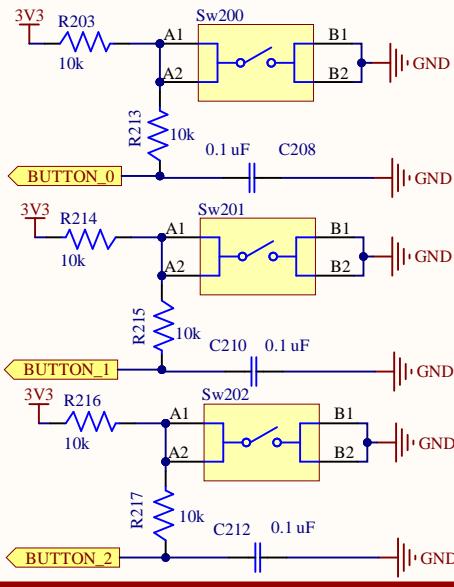
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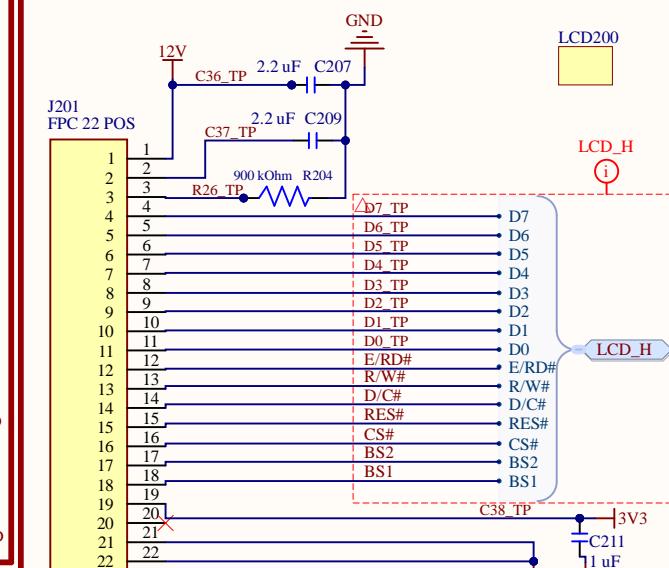
LED_RGB



PUSH_BUTTON



DISPLAY_CONNECTOR



TEST_POINT	
C36_TP	C36_TP
C37_TP	C37_TP
R26_TP	R26_TP
D7_TP	D7_TP
D6_TP	D6_TP
D5_TP	D5_TP
D4_TP	D4_TP
D3_TP	D3_TP
D2_TP	D2_TP
D1_TP	D1_TP
D0_TP	D0_TP
E/RD#	E/RD#
R/W#	R/W#
D/C#	D/C#
RES#	RES#
CS#	CS#
BS2	BS2
BS1	BS1
BS2	BS2
C38_TP	C38_TP
GND_TP	GND_TP

Title 100_User interface

Size	Number	Revision
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A

A

B

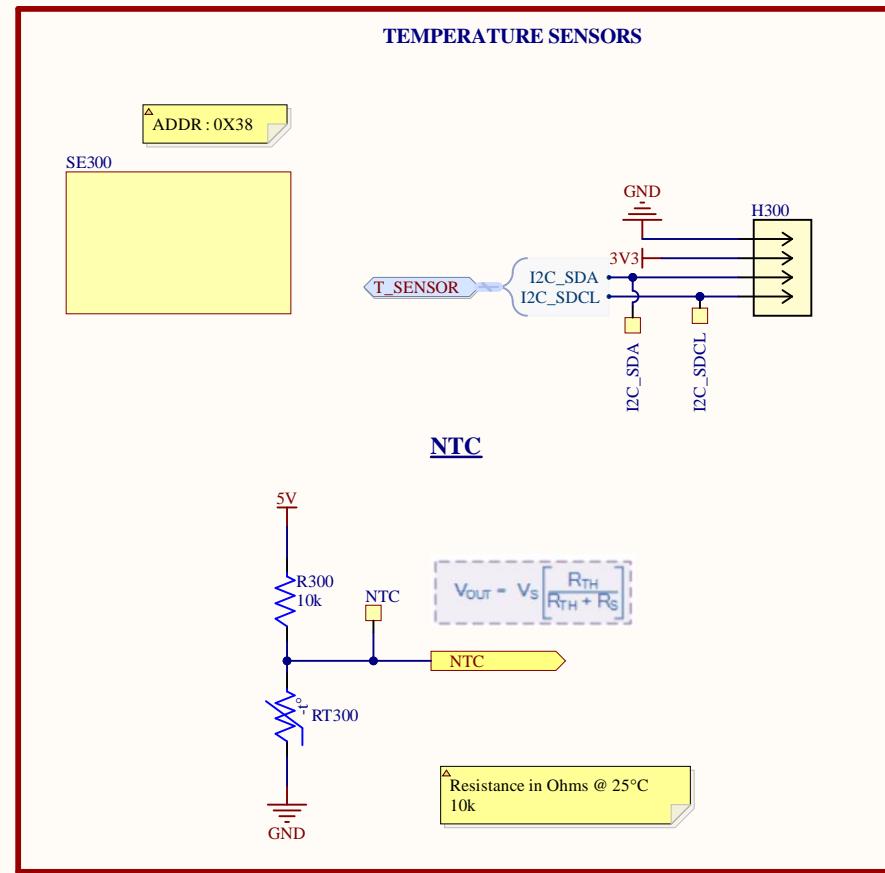
B

C

C

D

D



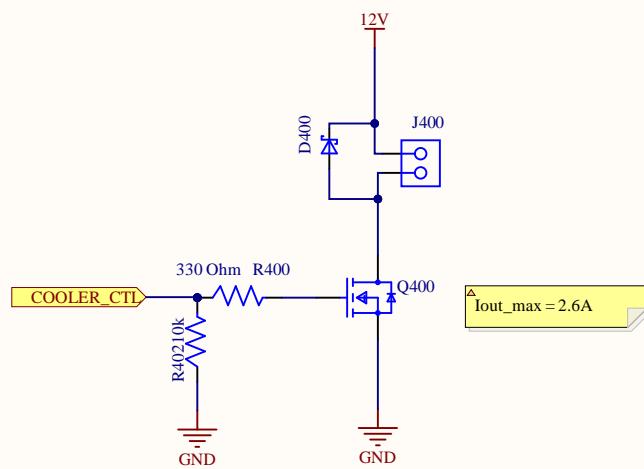
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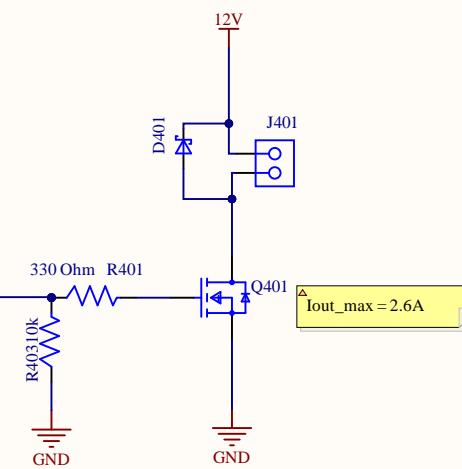
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CONTROL_STAGE_COOLER

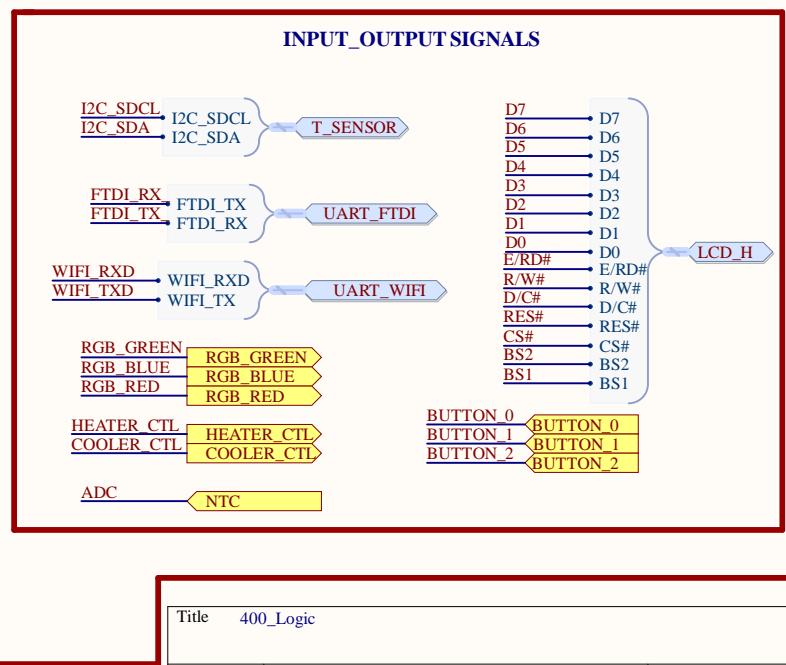
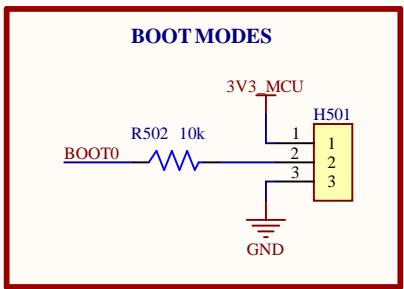
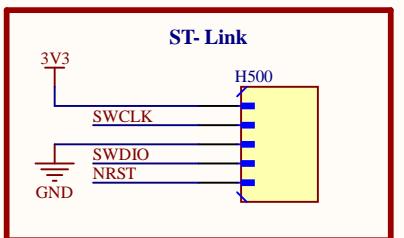
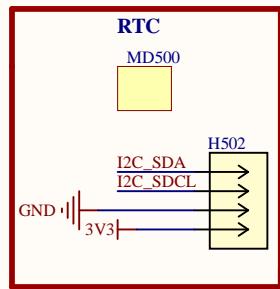
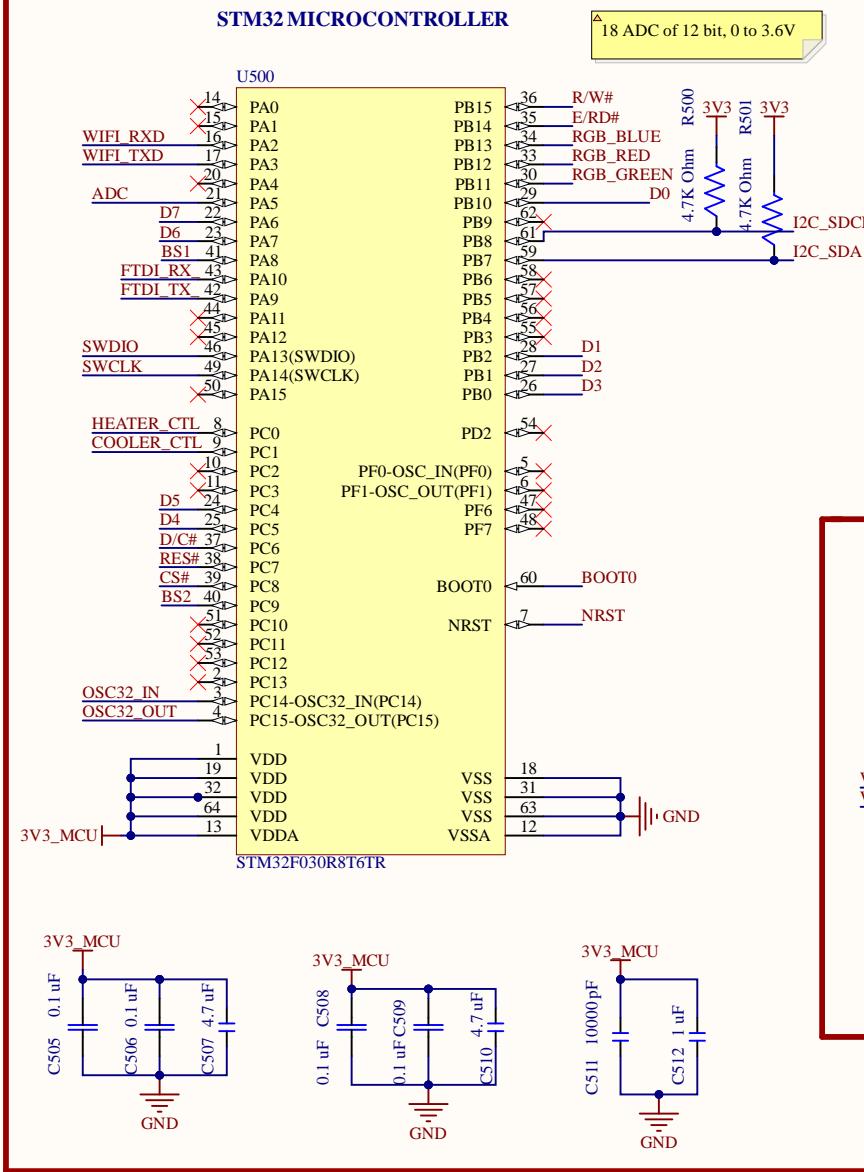
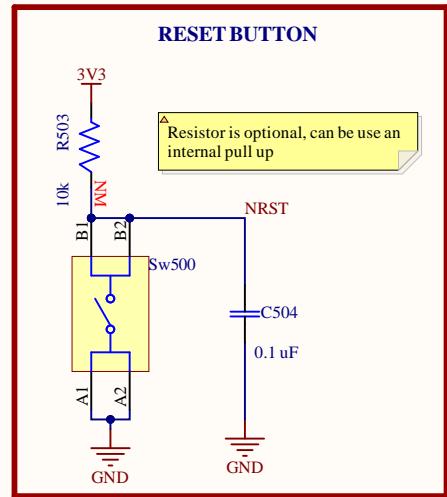
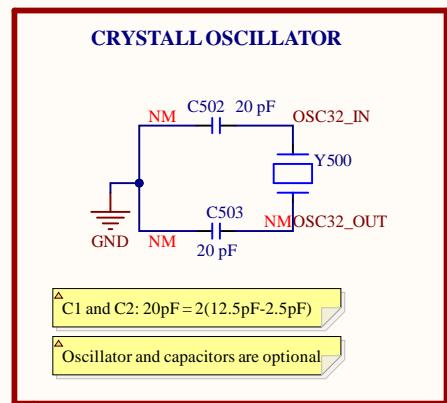
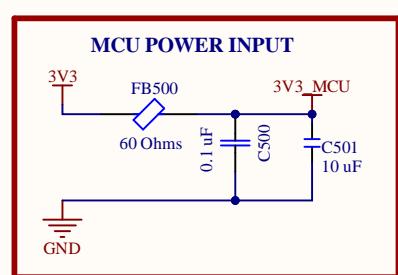


CONTROL_STAGE_HEATER



Title 300_ActuatorSchDoc

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Title	400_Logic		
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