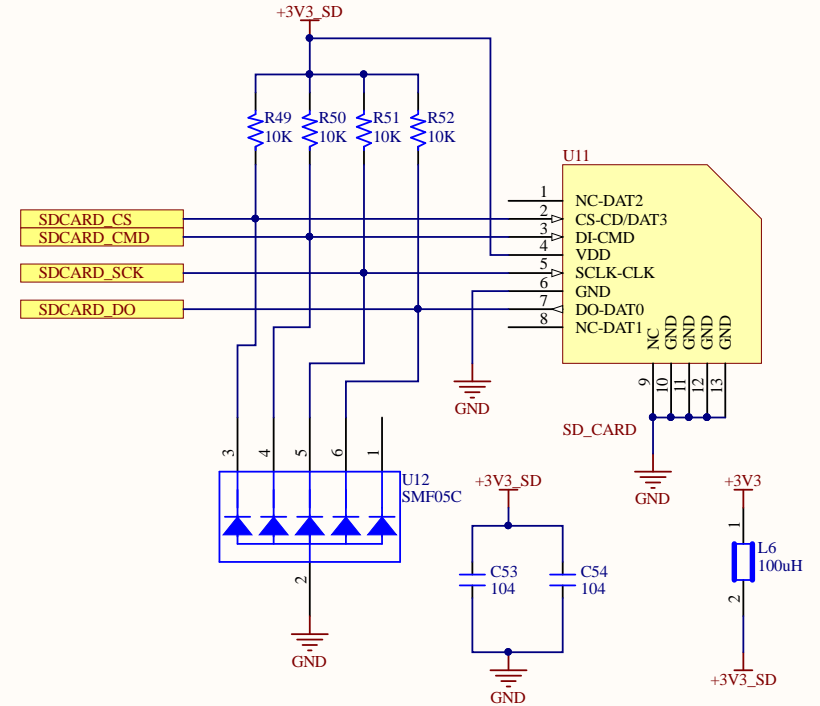
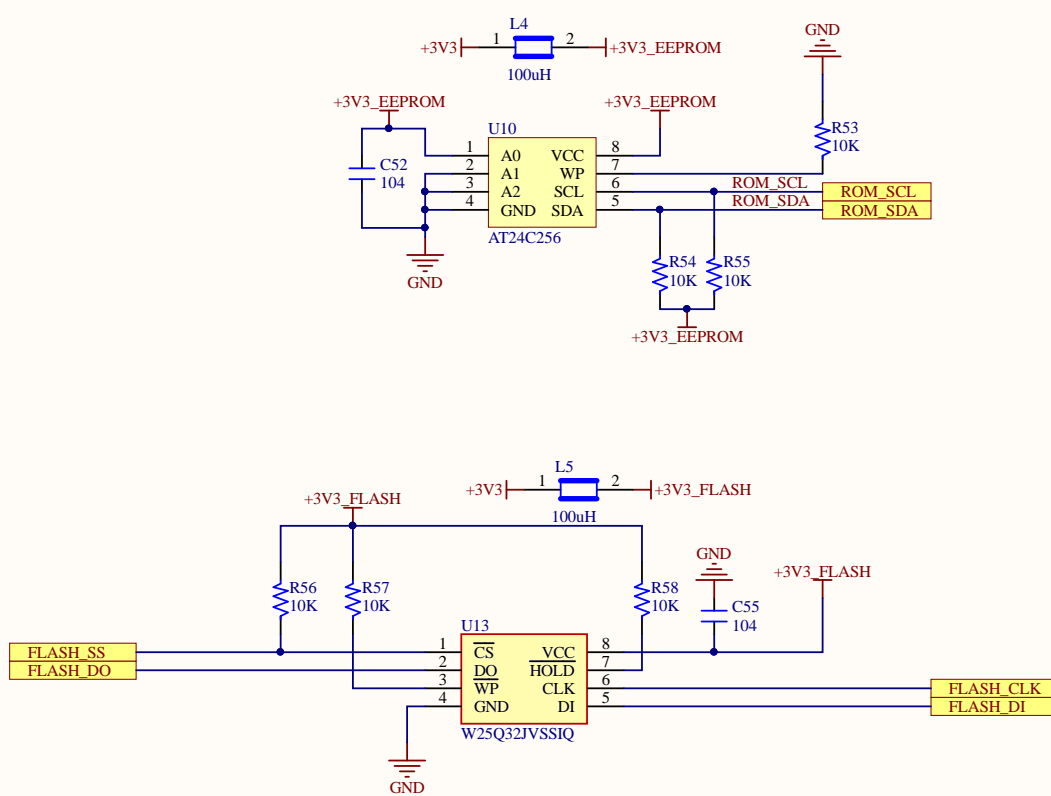


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Size A4	Number		Revision
Date:	9/14/2023	Sheet	of
File:	E:\DATN\...\03\GSM_GPRS_GPS.SchDocDrawn By:		

EEPROM



Title		
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Date:	9/14/2023	Sheet of
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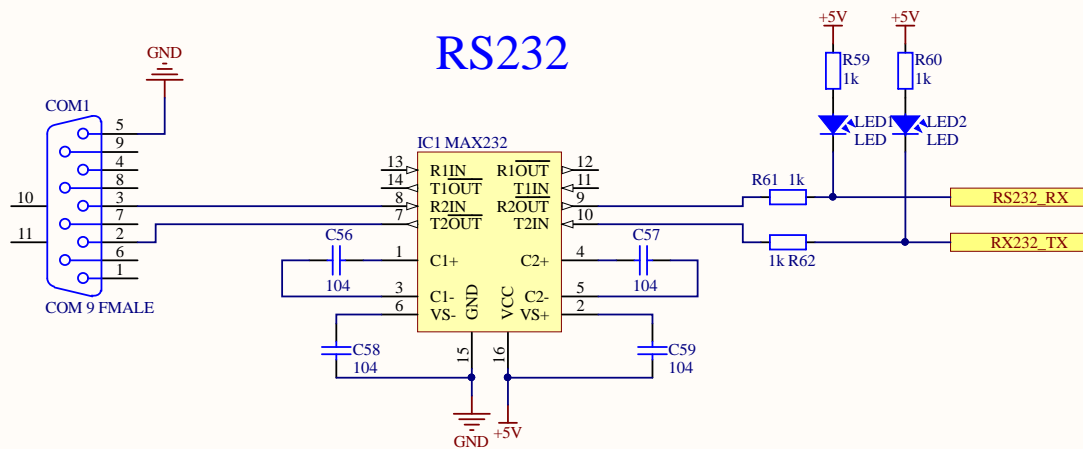
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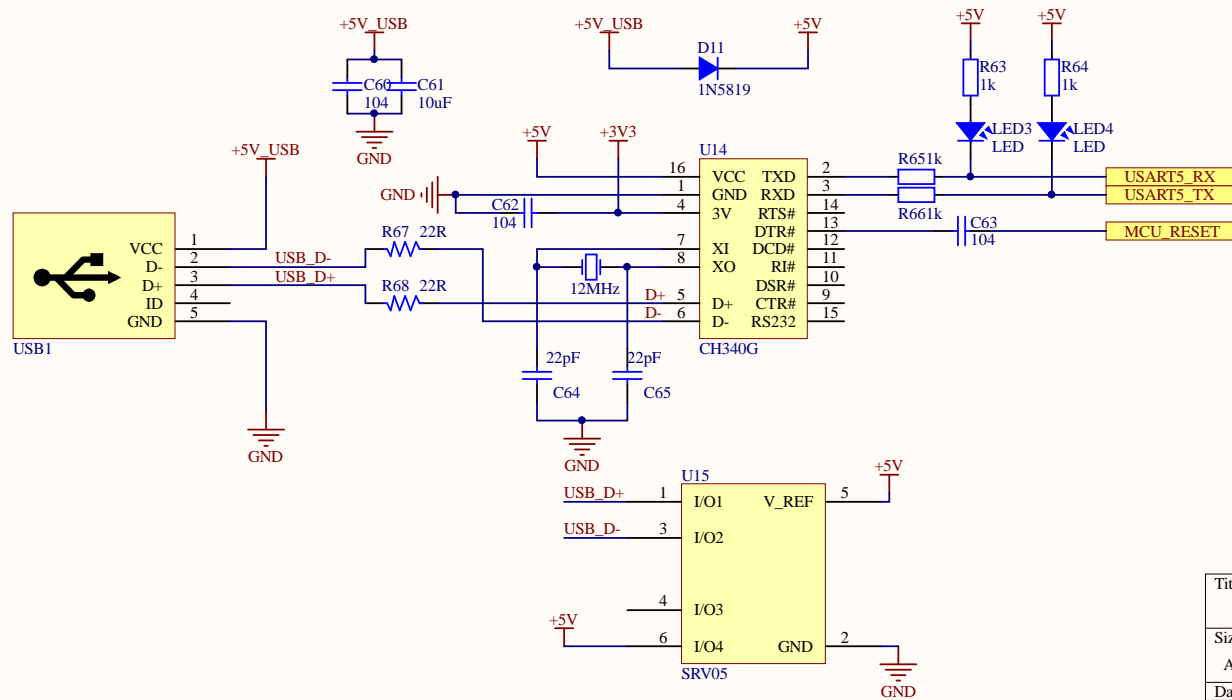
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4

RS232



CH340G



Title		
Size	Number	Revision
A4		
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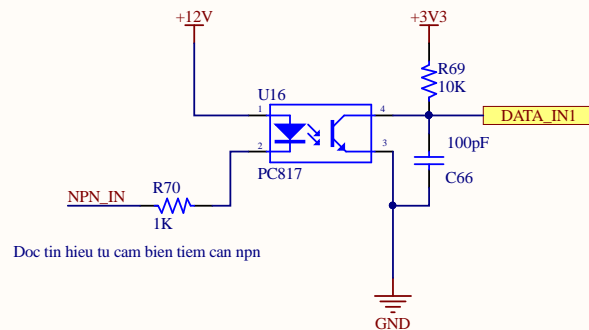
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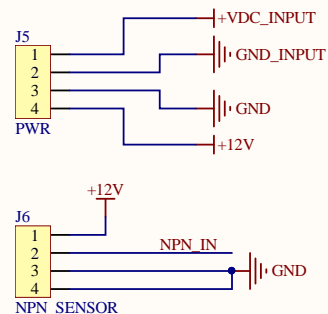
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4

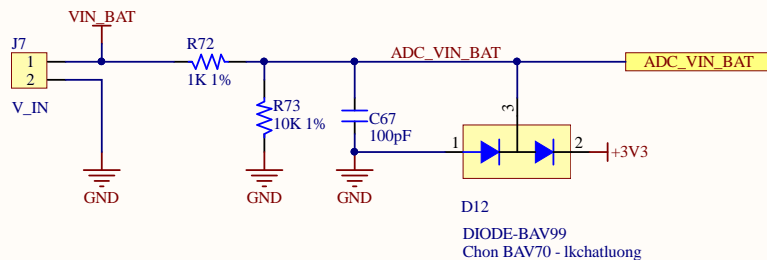
DIGITAL INPUT



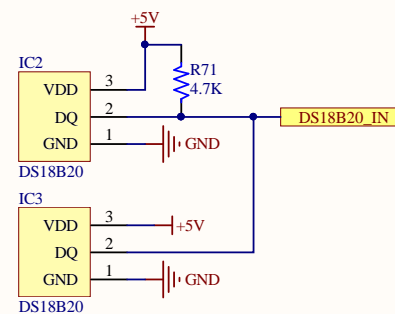
CONNECTOR



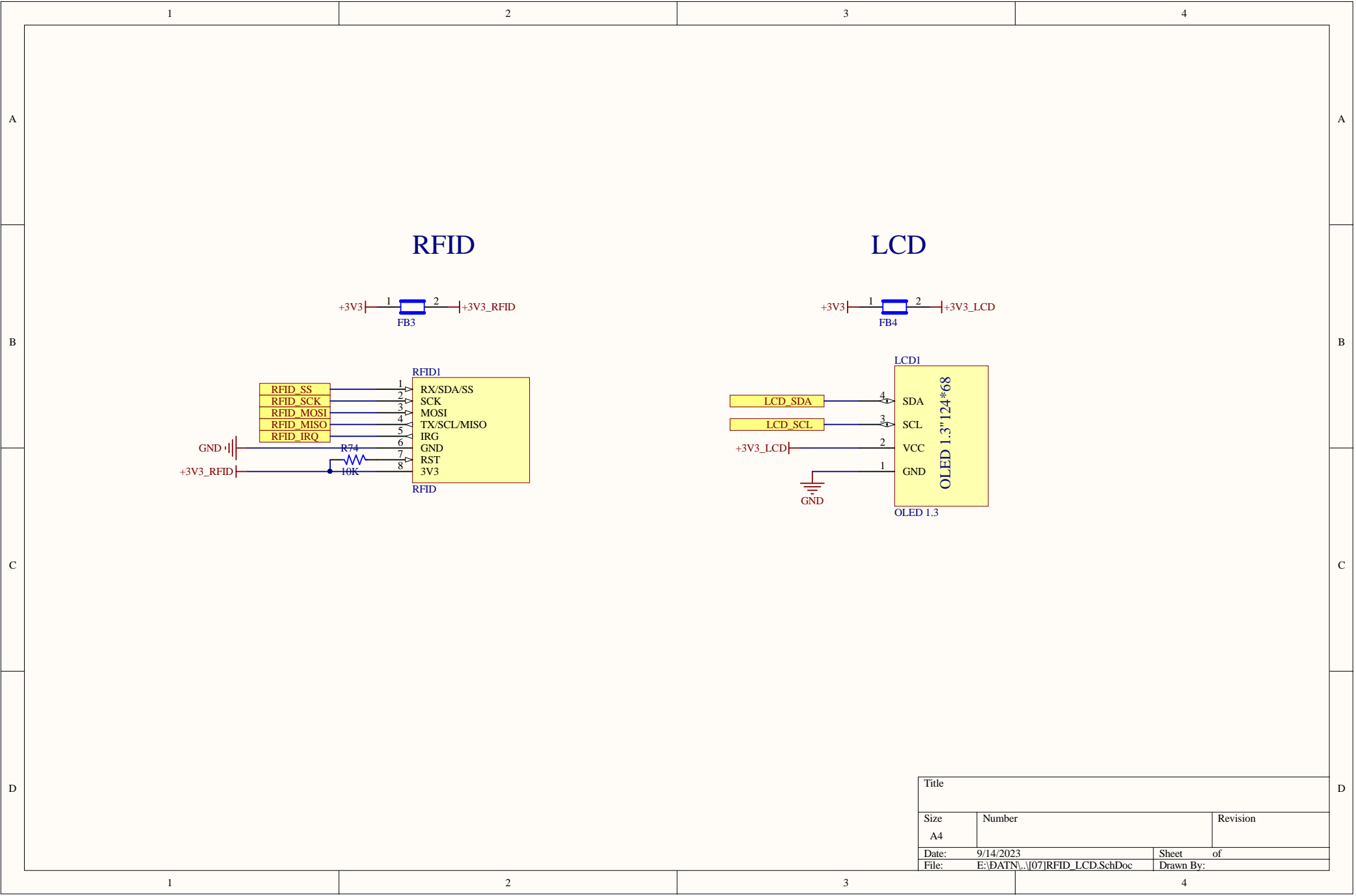
ADC INPUT



SENSOR

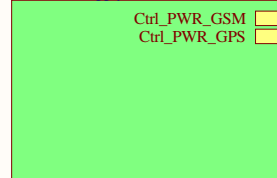


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Size	Number	Revision
A4		
Date:	9/14/2023	Sheet of
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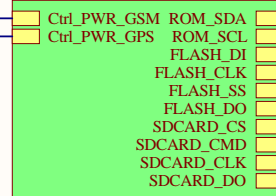


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Size A4	Number	Revision
Date:	9/14/2023	Sheet of
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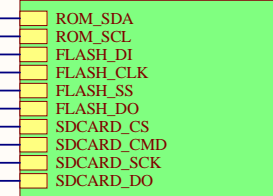
U_[01]PowerSupply
[01]PowerSupply.SchDoc



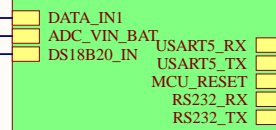
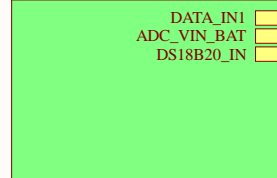
U_[02]MCU
[02]MCU.SchDoc



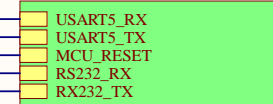
U_[04]EEPROM_FLASH
[04]EEPROM_FLASH.SchDoc



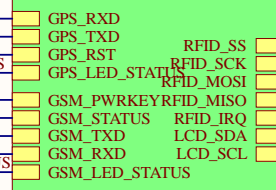
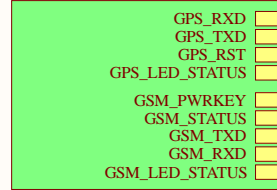
U_[06]IN_OUT
[06]IN_OUT.SchDoc



U_[05]RS232_USB
[05]RS232_USB.SchDoc



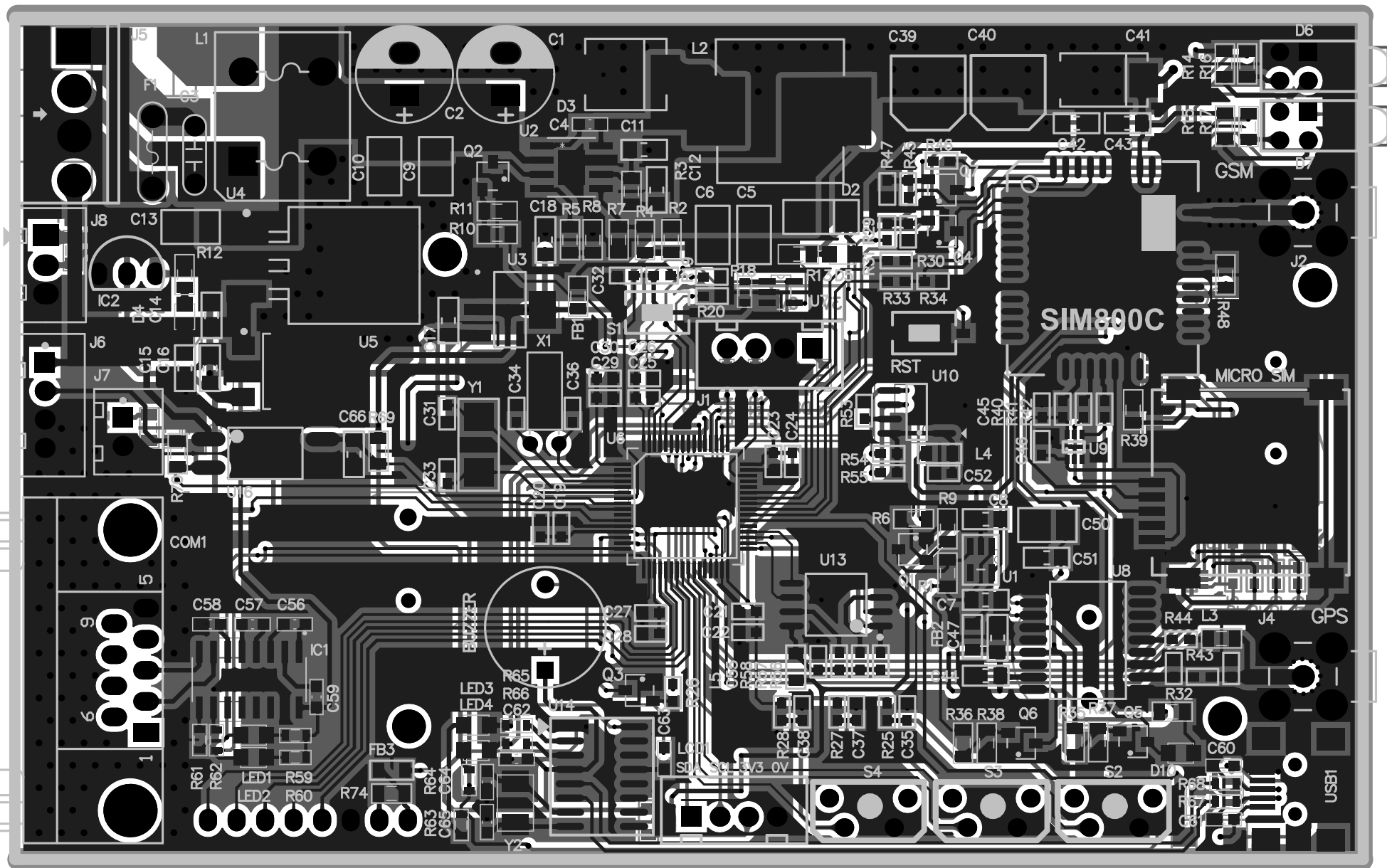
U_[03]GSM_GPRS_GPS
[03]GSM_GPRS_GPS.SchDoc



U_[07]RFID_LCD
[07]RFID_LCD.SchDoc



Title		
Size	Number	Revision
A4		
Date:	9/14/2023	Sheet of
File:	E:\DATN\...\GSHT_V1.4.SchDoc	Drawn By:



Comment	Description	Designator	Footprint	Label	Quantity
PM 2V	Power 2VDC	B11, B12	CR1220 SMD	PM 2V	2
100uF/100V	Cap 100uF/100V - 470uF/16V	C1, C2	CP1 5/3.4	CP1	2
10330K 33V	10330K 33V	C3	CN2	CN	1
104	Cap SMD Capacitor	C4, C5A, C57, C58	CAP 0603	SM 1, CapSMD	8
47uF	Cap SMD	C5, C6	SM-1210	SM 1	2
1uF	Cap SMD	C7, C8	CAP 0805	SM 1	2
2.2uF/100V	Cap C8 2.2uF 100V	C9, C10, C13	SM-1210	SM	3
27pF	Cap SMD	C11	CAP 0805	SM 1	1
6800pF	Cap SMD	C12	CAP 0805	SM 1	1
104	Cap SMD	C14, C42, C44, C51	CAP 0805	SM 1, CM	4
10uF/25V	Cap SMD	C15, C16	CAP 0805	SM 1	2
10uF/16V	Cap SMD	C17, C18	CAP 0805	SM 1	2
1uF	Cap SMD	C19, C20, C32, C35, C37, C38	C0603 SMT	CM	6
104	Cap SMD	C33, C34, C35	C0603 SMT	CM	11
10uF	Cap SMD	C21, C23, C25, C27	C0603 SMT	CM	4
22pF	Cap SMD	C31, C33, C45	C0603 SMT	CM	3
10uF	Cap SMD	C34, C36	C0603 SMT	SM	2
470uF/16V3	Cap Aluminum	C39, C40	C-Alu, 6.3x7.7	C-Alu Tantalum	2
100uF/16V	Cap Tantalum 7343	C41	C-7343_40	C-Alu Tantalum	1
10uF	Cap SMD	C43	CAP 0805	CM	1
10uF	Cap SMD	C47	CAP 0805	CM	1
10M	Cap SMD	C48, C49	C0603 SMT	CM	2
4.7uF	Cap SMD	C50	SM-1210	CM	1
10uF	Capacitor	C61	CAP 0603	CapSMD	1
22pF	Capacitor	C64, C65	CAP 0603	CapSMD	2
100pF	Capacitor, Cap SMD	C66, C67	CAP 0805	CapSMD, CM	2
COM 9 FEMALE	COM 9	CDM1	DSB 9.5	DSB#	1
BR60C-13-F	DIODE SCHOTTKY 60V 5A SMC	D1, D3	DO-214AB SMC	DSA	2
BR40-13-F	DIODE SCHOTTKY 40V 1A SMC	D2	DO-214AB SMA	DTA	1
PWR 12V	LED Single colour Green and Red	D4	LED-0805, Yellow	LED	1
PWR 4V	LED Single colour Green and Red	D5	LED-0805, Green	LED	1
LED3mm	LED 2 holder RGB 3mm	D6, D7	LED 2 holder 3mm	LED2holder 3mm	2
DIODE-BAV99	DIENER, 50V75	D8, D9, D12	SO123	DIODE-BAV99	3
GPS	LED Single colour Green and Red	D10	LED-0805, Red	LED	1
1N5819	Diode 1A	D11	DO-214AB SMA	DTA 1	1
RTCF204H-ND	PTC RESET FUSE 60V 5A RADIAL	F1	FUSE2	Fuse	1
BLM21PG600S1ND	Ferrite Bead	F81	RES-SMD-0805	Ferrite Bead	1
BLM21PG600S1ND	Ferrite Bead	F82, F83, F84	R0805	Ferrite Bead	3
MAX322	Dual EIA-232 Driver/Receiver	F51	MAX322DR	MAX322	1
DS18B20	High Precision, 1-Wire Digital Thermometer	F52, IC3	TO92	DS18B20	2
ST_LNK	Header IDC, 4 x 1 Pin Vertical 2.54mm Pitch (Non-RoHS, Male)	J1	CON_4P	Header 4	1
GPS ANTENNA		J2, J4	Antenna-AACX-05-15	ANTEN	2
SM MICRO PUSH		J3	MICRO5MM PUSH	SM MICRO PUSH	1
PWR	Header 4 (5000)	J5	Head4V 3.96	Head4	1
MPN SENSOR	Connector 4	J6	CON_2.54mm 4	Con4	1
V-IN	Connector 2	J7	CON_2.54mm 2	Con2	1
L	Inductor	J1	L3-UPX8	JU220	1
6.8uH	6.8TA 22.4 MOHM	J2	L01 SMD 12*12*6	L1	1
47uH	Inductor	J3	RES-SMD-0805	L1	1
100uH	100uH 0805	J4, L5, L6	R0805	Ferrite Bead	2
OKLED 1.3	LED Single colour Green and Red	JCD1	CON_4P	OKLED 1.3	1
LED	LED Single colour Green and Red	JED4	LED-0805, Green	LED	4
DIODE	Diode	J31	DIODE	Diode	1
SHM800C	Subintegrator	M1	SHM800C	SHM800C	1
C1815	NPN 400mW ECB	Q1, Q2, Q3, Q4, Q5	SO123B	C1815	7
10K	Resistor SMD	R1, R3, R7, R69, R74	RES-SMD-0805	RM	5
22K	Resistor SMD	R2, R4	RES-SMD-0805	RM	2
100K	Resistor SMD	R5, R8, R9, R37, R38	RES-SMD-0805	RM	5
1K	Resistor SMD	R6, R13, R14, R15, R16, R17, R32, R35, R36, R39, R70	RES-SMD-0805	RM	11
4.7K	Resistor SMD	R10, R71	RES-SMD-0805	RM	2
47K	Resistor SMD	R11	RES-SMD-0805	RM	1
8.2	Resistor SMD	R22	RES-SMD-0805	RM	1
1K	Resistor SMD	R18, R59, R60, R61, R62, R63, R64, R65, R66	RES-SMD-0603	RM, Resistor - SMD	9
10K	Resistor SMD	R19, R20, R22, R26, R27, R28, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58	R0603 SMT	RM	16
10R	Resistor SMD	R21, R23, R24	RES-SMD-0603	RM	3
1K	Resistor SMD	R43, R44, R45, R46	R0603 SMT	RM	4
47K	Resistor SMD	R50, R47	R0603 SMT	RM	2
4.7K	Resistor SMD	R24	R0603 SMT	RM	1
31R	Resistor SMD	R40, R41, R42	R0603 SMT	RM	3
8R	Resistor SMD	R43, R44	R0603 SMT	RM	2
8R	Resistor SMD	R45	RES-SMD-0805	RM	1
22R	Resistor SMD	R47, R48	RES-SMD-0603	RM	2
1K 1%	Resistor SMD	R72	RES-SMD-0805	RM	1
10K 1%	Resistor SMD	R73	RES-SMD-0805	RM	1
0F02	0F02	W021	WFO IC522	WFO IC522	1
SW-SMD	Switch	W51, S1	SW-SMD	SW-SMD	2
SW-SMD	Switch	S2, S3, S4	BUTTON NGHENG	SW-SMD	3
TLV70233DRV1	REG BUCK 5V1T 5A0, ESOPWSP4Q2	U1	TLV70233, 3.3V	TLV70233, 3.3V	1
TPS4360DDA	REG BUCK 5V1T 5A0, ESOPWSP4Q2	U2	QDA8, 3P1X2P4-M	TPS4360DDA	1
ULV1117-33C0Y8	3uF	U3	SO1223-4N	ULV1117	1
LM7812SX/NOPB	LM7812SX/NOPB	U4	TO-263.4	LM78xx, 1	1
18M05	On up +, from +5 to +24VDC	U5	TO252-3L	LM78xx	1
STM32F103NC16	FLASH 64KWP	U6	LQFP-64	STM32F103NC16	1
TPS3828	TPS3828	U7	TPS3828	TPS3828	1
GPS L70	GPS L70	U8	GPS L70	GPS L70	1
SMR05C	ESD Protection	U9, U12	SO1 263.6	SMR05C	2
AT24C256	AT24C256	U10	SO-8	AT24Cxx	1
SD_CARD	SD/MMC 70000	U11	MICROSD2	MicroSD	1
W55032/V5503	133MHz ESOP	U13	SO-8 208	W75032/V5503	1
CH340G	High and Low Side Driver	U14	SO16	CH340G	1
SRV05	TVS DIODE 5V	U15	SO123.6	SRV05	1
PCB17	Single Opto	U16	PCB17X150MD	PCB17	1
U98	Crystal 32.768kHz for timer real	U20R1	USB-B-Mini	USB-M	1
32.768 KHz	CRYSTAL 16MHz	X1	XT32m	XT32m	1
8MHz	UBT SMD	X1	ABMT v1.1, BGT	ABMT-16.000MHz, 32v1.1	1
12MHz	Crystal Oscillator	X2	XTAL-5032	XTAL	1