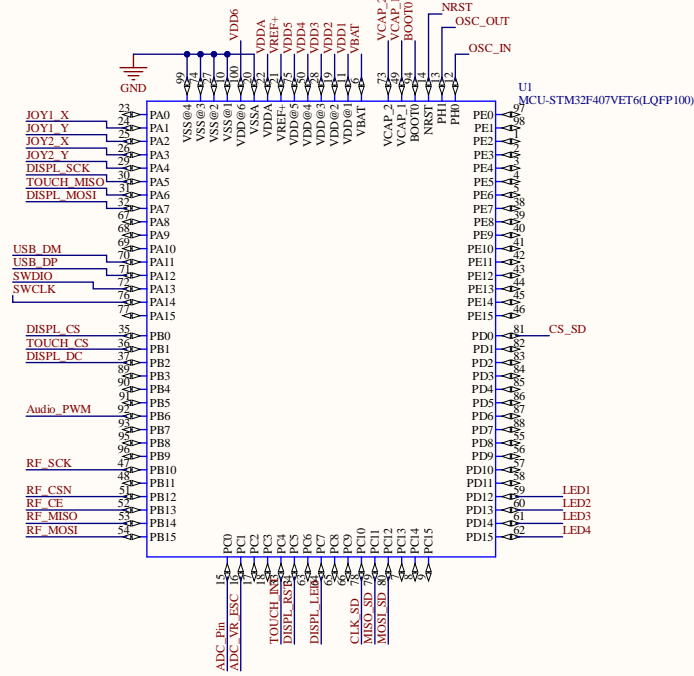
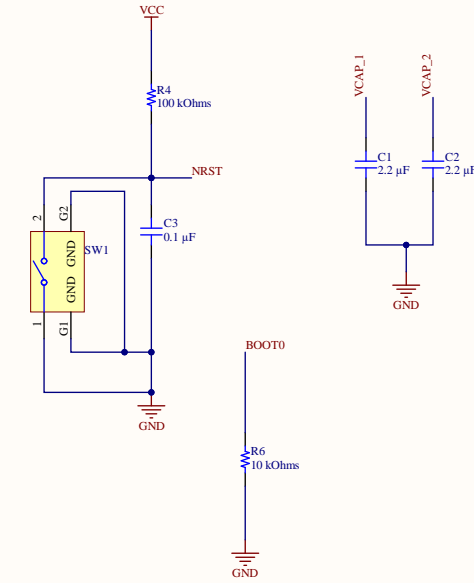


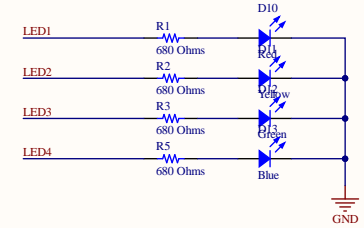
MCU



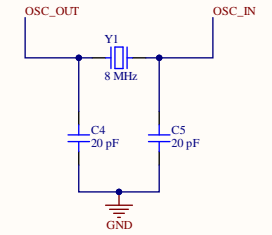
RESET AND BOOT



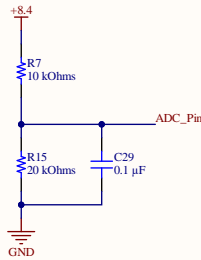
LED TEST



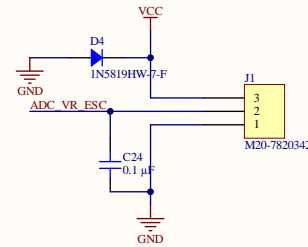
Crystal



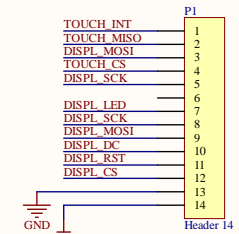
PIN MEASURE



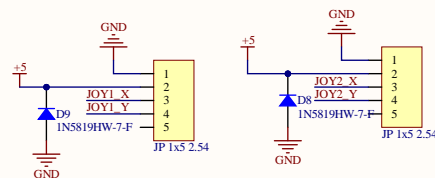
POTENTIONMETER



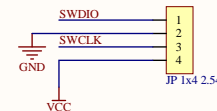
TFT LCD



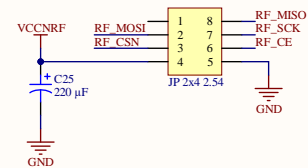
JOYSTICK



DEBUG



NRF



1

2

3

4

A

A

B

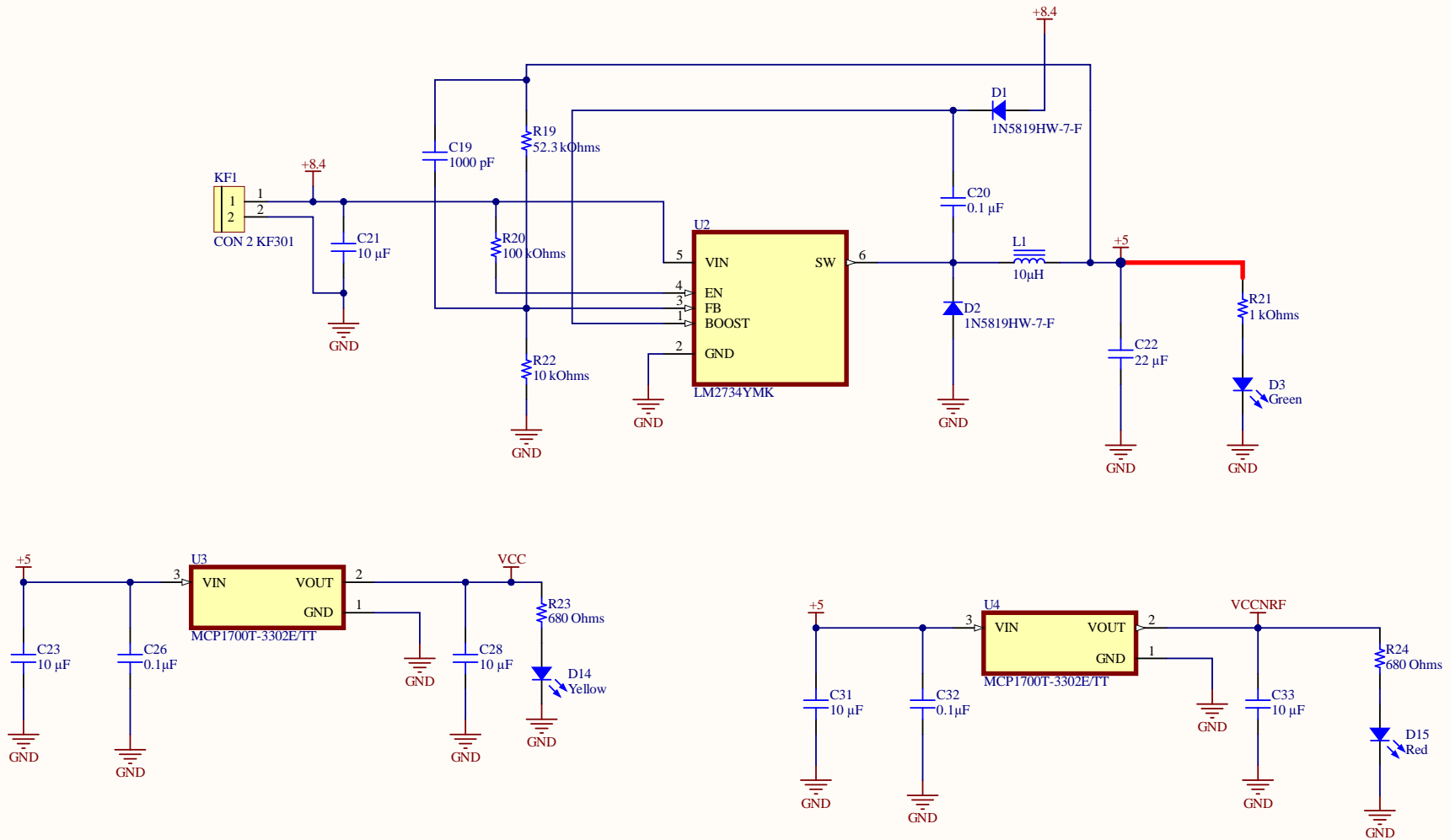
B

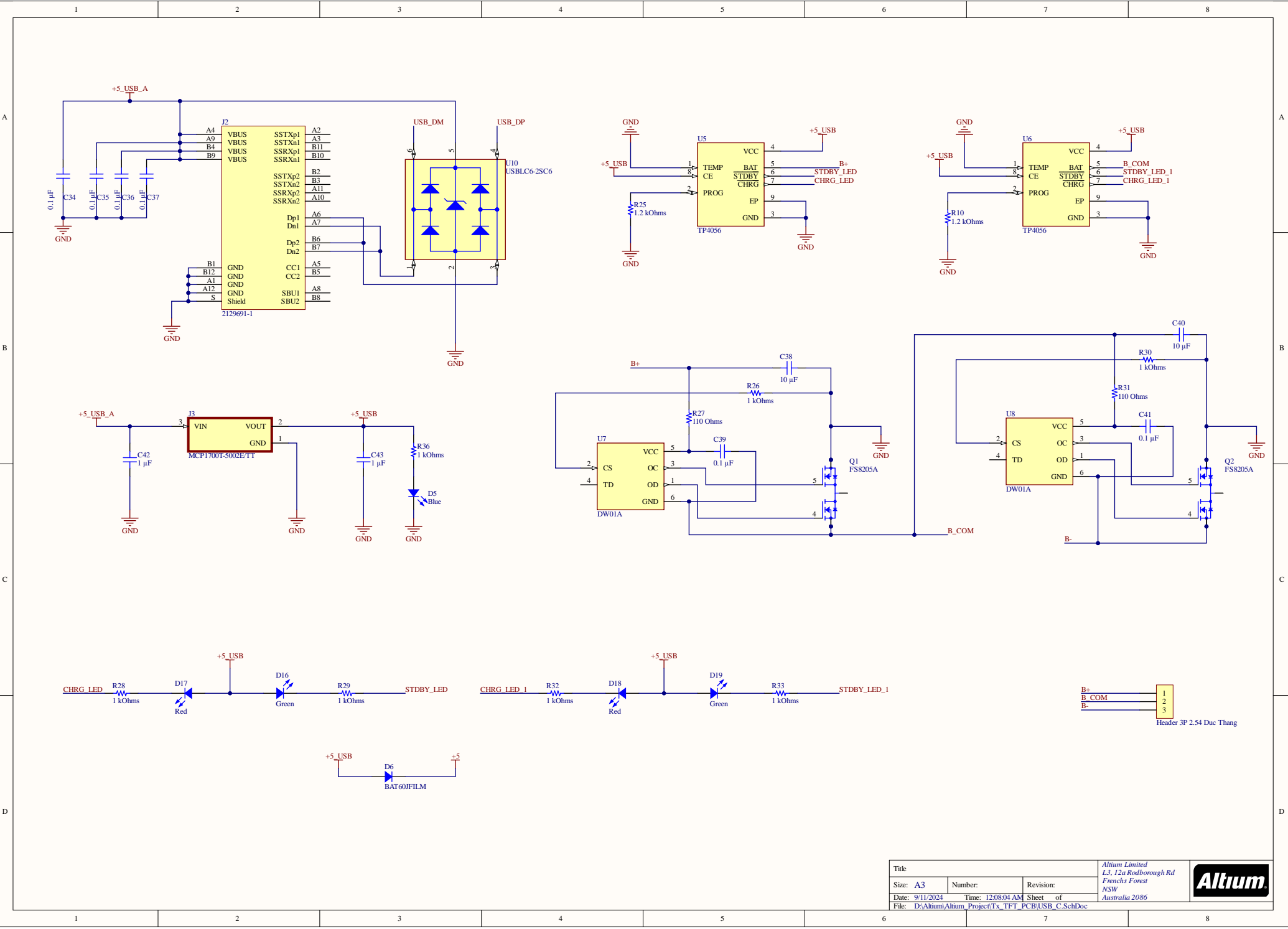
C

C

D

D





Comment	Description	Designator	Footprint	Label	Quantity
2.2 µF	CAP CER 2.2UF 10V X6S 0402	C1, C2	CAP 0402_1005	GRT155C1A225K13 D	2
0.1 µF	CAP CER 0.1UF 10V X6R 0402, CAP CER 0.1UF 10V X7R 0402, CAP CER 0.1UF 10V V5V 0402	C3, C6, C7, C8, C9, C10, C11, C12, C13, C14, C17, C20, C34, C35, C36, C37, C39, C41	CAP 0402_1005	KGMS06S1A104M0, CGA802X6R1A104M0 500A, KGMS06S1A104M0, KGMS06S1A104Z01	18
20 pF	CAP CER 20PF 10V NPO 0402	C4, C5	CAP 0402_1005	C0402C200K9CAC786 1	2
1 µF	CAP CER 1UF 10V X7S 0402, CAP CER 1UF 10V X5R 0402	C15, C18, C42, C43	CAP 0402_1005	GRM155C71A105K111 D, C0402C105K9AC786 7, KGMS06S1A105KH	4
0.22 µF	CAP CER 0.22UF 10V X5R 0402	C16	CAP 0402_1005	0402C224K100CT	1
1000 pF	CAP CER 1000PF 10V X7R 0402	C19	CAP 0402_1005	LMF105B7102MMHF	1
10 µF	CAP CER 10UF 16V X6R 1210	C21, C23, C28, C31, C33	CAP 1210_3225-1MM	CGAP306R1C10M02 50AB	5
22 µF	CAP CER 22UF 16V X7R 1210	C22	CAP 1210_3225-1MM	C1210C22M6RAC786 0	1
0.1 µF	CAP CER 0.1UF 10V X7R 0603	C24, C29	CAP 0603_1608	V0603Y104K0C0W18	2
220 µF	CAP ALUM 220UF 20V 10V SMD	C25	CAP AL SMD 6.6MM H6.1MM	WCM1A221M02 1G5	1
0.1µF	CAP CER 0.1UF 10V X7R 0402	C26, C32	CAP 0402_1005	0402C2104KAT2A	2
1µF	CAP TANT 1UF 10% 16V 1206	C27, C30	CAP POL 1206_3216	TAJUA105K016RU1	2
10 µF	CAP CER 10UF 10V X5R 0402	C38, C40	CAP 0402_1005	CUS610A0P0A0UB0	2
1N5819HW 7-F	DIODE SCHOTTKY 40V 1A SOD123	D1, D2, D4, D8, D9	SOD-123	1N5819HW 7-F	5
Green	LED GREEN CLEAR 0402 SMD	D3, D12, D16, D19	LED 0402_1005 GREEN	GRPS95-AG15-2897, 4P0C105C02C-S0AW, 150040537340	4
Blue	LED BLUE CLEAR 0603 SMD	D5	LED 0603_1608 BLUE	1500608575000	1
BAT60FILM	DIODE SCHOTTKY 10V 1A SOD323	D6	SOD323	BAT60FILM	1
Red	LED RED CLEAR 0402 SMD	D10, D15, D17, D18	LED 0402_1005 RED	9M4040RC-ORLPP95-05, 1500405373200	4
Yellow	LED YELLOW CLEAR 0402 SMD	D11, D14	LED 0402_1005 IN-S42ATY, IN-S42BTY	150040537340	2
Blue	LED BLUE CLEAR 0402 SMD	D13	LED 0402_1005 BLUE	C2899HW95MAV-3	1
Header 3P 2.54 Dsc Thang	Cam	H1	X02 54M-3	Header 3P 2.54 Dsc Thang	1
MOD-7820342	CONN RCPT 3POS 0.1 TYPE: 24POS SMD	J1	HARWIN MOD-7820345	MOD-7820342	1
2129691-1	CONN RCPT USB3.1 TYPE: 24POS SMD	J2	TE USB-C 2129691-1	2129691-1	1
MCPI120T-500G6/TT		J3	SOT99P237X12-38	MCPI120T-500G6/TT	1
JP 1x4 2.54	Cam	JP1	JP 1x4 02	JP 1x4 2.54 Cam Cong	1
JP 2x4 2.54	Cam	JP2	JP 2x4 CT	JP 2x4 2.54 Cam Thang	1
JP 1x5 2.54	Cam	JP3, JP4	JP 1x5 DT	JP 1x5 2.54 Dsc Thang	2
JP 1x2 2.54	Cam	JP5	JP 1x2 CT	JP 1x2 2.54 Cam Thang	1
CON 2 HF 301	Cam	H1	CON 2 HF 301 S-08	CON 2 HF 301	1
10µF	FIXED IND 10UH 1.4A 63.6mOhm	L1	TDK SLF7032	SLF7032T-100M1R4-20F	1
Header 14	Header, 14 Pin	P1	HE81814	Header 14	1
ST-TT-003A	Micro SD Card Socket	P2	SUNTECH_ST-TT-003A	ST-TT-003A	1
58205A	N/A	Q1, Q2	SC945PM40X120-8N	58205A	2
480 Ohms	RES 480 OHM 1% 1/16W 0402	R1, R2, R3, R5, R23, R24	RES 0402_1005	RC0402GR-07480RL	4
100 kOhms	RES SMD 100K OHM 0.1% 1/16W 0402, RES 100K OHM 0.1% 1/10W 0402	R4, R20	RES 0402_1005	MCS04020D1003BE10 0, RPT39F1E100K8TD1	2
10 kOhms	RES 10K OHM 0.1% 1/10W 0402, RES SMD 10K OHM 1% 1/10W 0402	R6, R7, R9, R22	RES 0402_1005	RP139F1E10K8TD1, MCS0402MC100FE0 00	4
4.7 kOhms	RES 4.7K OHM 1% 1/10W 0402	R8, R11, R12, R13, R17, R18	RES 0402_1005	RK79H1ERTTP4701F	6
1.2 kOhms	RES SMD 1.2K OHM 1% 1/10W 0402	R10, R25	RES 0402_1005	MCS04020C1201FE00 0, ERJ-2802 1201X	2
47 Ohms	RES SMD 47 OHM 1% 1/10W 0603	R14	RES 0603_1608	CR70603-FY-470EL1F	1
20 kOhms	RES SMD 20K OHM 0.1% 1/10W 0402	R15	RES 0603_1608	RC1608P-203-B-T5	1
0 Ohms	RES 0 OHM JUMPER 1/10W 0603	R16	RES 0603_1608	CR0603AU-000ELF	1
52.3 kOhms	RES SMD 52.3K OHM 1% 1/10W 0402	R19	RES 0402_1005	ERJ-2802523X	1
1 kOhms	RES SMD 1K OHM 1% 1/10W 0402, RES 1K OHM 1% 1/10W 0402, RES 1K OHM 0.5% 1/10W 0402, RES SMD 1K OHM 1% 1/16W 0402, RES 1K OHM 0.1% 1/16W 0402, RES 1K OHM 1% 1/10W 0402	R21, R26, R28, R29, R30, R32, R33, R36	RES 0402_1005	MCS0402MC1001FE0 00, RK79H1ERTTP1001F, RK79C1ETTP1001D, CR04020402K000F00, TNPW04021K00BYEP, RMF0402T1K00	8
110 Ohms	RES 110 OHM 1% 1/10W 0402, RES 110 OHM 1% 1/10W 0402 SMD	R27, R31	RES 0402_1005	RK79H1ETTP1100F, ERJ-U02F1100X	2
431256083716	WS-TATU THT Tact Switch bottom Right Angled Type with ground terminal, SPST, NO, 12VDC, 50mA, 160g	SW1		431256083716	1
PAM8403DR	Amplifier IC 2-Channel _Stereo_ Class D 16-SDP	U	SON127P605X150-16N	PAM8403DR	1
MCU STM32F407VET6[QFP100]	ARMv7-M Cortex-A* MM STM32F4 Microcontroller IC 32-Bit Single-Core 168MHz 512KB (512K x 8) FLASH 100-LQFP (14x14)	U1	LQFP100 0.5-13.8K13.8MM	MCU STM32F407VET6[QFP100]	1
LM2734YMK	Buck Switching Regulator IC Positive Adjustable 0.8V 1-Output 1A SOT-23-6 Thm TSOT-23-6	U2	SO19SP285X100-4N	LM2734YMK	1
MCPI170T-3302E/TT	Linear Voltage Regulator IC 1-Output 250mA SOT-23-3	U3, U4	SO19SP237X12-3N	MCPI170T-3302E/TT	2
TP4055	Complete single cell Li-ion battery with a constant current / constant voltage linear charger	U5, U6	SCP127P600X175-9N	TP4055	2
DW01A	One Cell Lithium-Ion/Polymer Battery Protection IC	U7, U8	SO19SP280X145-4N	DW01A	2
USBLCa-25C6	17V Clamp 5A (B/20A) Ipp Typ Diode Surface Mount SOT-23-6	U10	SO19SP280X145-4N	USBLCa-25C6	1
VR 10kOhm		VR1	VR 10kOhm	VR 10kOhm	1
8 MHz	CRYSTAL 8.0000MHz 8PFT SMD	Y1	NDK N55032GA	N55032GA 8.000MHz-C01-1	1