

LibRef	Quantity	Type	Description	Manufacturer	Manufacturer Part Number	Supplier 1	Supplier Part Number 1	Designator
CAP_100nF_10V_040 2	8	Capacitor	CAP CER 0.1UF 10V X5R 0402	Samsung Electro-Mechanics	CL05A104MP5NNNC	Digi-Key	1276-1443-1-ND	C204, C205, C206, C207, C209, C305, C306, C400
CAP_10nF_16V_0402	5	Capacitor	CAP CER 10000PF 16V Y5V 0402	Samsung Electro-Mechanics	CL05F103Z05NNNC	Digi-Key	1276-1738-1-ND	C300, C301, C302, C303, C304
CAP_10uF_6V3_0603	4	Capacitor	CAP CER 10UF 6.3V X5R 0603	Taiyo Yuden	JMK107ABU106MA-T	Digi-Key	587-5869-1-ND	C201, C202, C203, C208
CAP_1nF_50V_0402	1	Capacitor	CAP CER 1000PF 50V COG/NPO 0402	Murata Electronics	GRM1555C1H702J40 1J	Digi-Key	490-6190-1-ND	C200
CAP_2.2uF_6V3_040 2	8	Capacitor	CAP CER 2.2UF 6.3V X6T 0402	Murata Electronics	GRM155D80J225ME P5D	Digi-Key	490-10450-1-ND	C500, C501, C502, C503, C504, C505, C506, C507
CAP_5.6PF_50V_0402	2	Capacitor	CAP CER 5.6PF 50V COG/NPO 0402	Samsung Electro-Mechanics	CL05C5R6D8BNNNC	Digi-Key	1276-1712-1-ND	C307, C308
J_FPC24_DS	2	Connector	CONN FPC BOT 24 PIN 1mm Pitch	MOLEX	522712479	LCSC	C293627	J400, J500
J_MH2x1_2.54	2	Connector	CONN HEADER VERT 2POS 2.54MM	Sullins Connector Solutions	PRPC0025AAN-RC	Digi-Key	51011EC-02-ND	J200, J201
J_PHR-2-R	1	Connector	CONN CONNECTOR PH 2POS 2MM	JST Sales America Inc.	PHR-2-R	LCSC	C398543	J301
J_PHR-2-R_PIN	2	Connector	PIN INSERT	JST Sales America Inc.	SPH-004T-P0.5S	LCSC	C140351	J302, J303
J_S2B-PH-KL	2	Connector	CONN HEADER R/A 2POS 2MM	JST Sales America Inc.	S2B-PH-KL(QFSN)	LCSC	C140237	J205, J300
J_USB-C_2	1	Connector	USB GEN3, TYPE C, TOP MOUNT	Korean Hroparts Elec	TYPE-C-31-M-17	LCSC	C283540	J202
D_LL_200V_200mA	2	Diode	DIODE GP 200V 200MA SOT23-3	onsemi	BA520LT3G	Digi-Key	BA520LT3G0SCT-ND	D300, D301
D_SCH_40V_5A	2	Diode	DIODE SCHOTTKY 40V 5A DO214AB	Comchip Technology	CDBC540-G	Digi-Key	641-1126-1-ND	D400, D401
D_LED_Green_0603	5	Diode, LED	LED GREEN DIFFUSED 0603 SMD	OSRAM Opto Semiconductors Inc.	LT O39G-Q10O-25-1	Digi-Key	475-3442-1-ND	D201, D504, D505, D507, D508
D_LED_White_s	8	Diode, LED	LED WHITE SIDE SMD	Everlight Elec	218UMC/1637CD/TR 8-T	LCSC	C710226	D500, D501, D502, D503, D509, D510, D511, D512
D_LED_W_HP	3	Diode, LED	LED XLAMP WARM WHITE 3250K 4SMD	CreeLED, Inc.	MLEAWT-A1-0000-0003F7	Digi-Key	MLEAWT-A1-0000-0003F7CT-ND	D513, D514, D515
D_LED_Yellow_0603	3	Diode, LED	LED YELLOW DIFFUSED	Stanley Electric Co	FKY1111C-TR	Digi-Key	404-1273-1-ND	D202, D302, D506
D_TVS_U4_12V5	1	Diode, TVS	TVS DIODE 5VWM 12.5VC SOT23-6	Comchip Technology	CPD16-5V0UPC-HF	Digi-Key	641-1829-1-ND	D200
IC_BAT_CHGR_TP405 6	1	IC	IC BATT CHG LH-ON 1CELL ESOP-8-EP	TOPPOWER(Nanjing Extension Microelectronics)	TP4056-42-ESOP8	LCSC	C16581	IC201
IC_BAT_PROT_DW01 A	1	IC	IC BATT MANAGEMENT SOT-23-6	PUOLOP	DW01A	LCSC	C351410	IC200
IC_16ch_Port_Extend er_2	1	IC, Driver	IC GRO EXPANDER I2C 16CH 28-QFN	Semtech Corporation	SK1503IO91TR1	Digi-Key	SK1503IO91CT-ND	IC400
IC_LCD_cntrr_BL5507 2A-R	1	IC, Driver	IC LCD DRIVER 36SEG TSSOP-48	BL(Shanghai Belling)	BL55072A-R	LCSC	C524044	IC501
IC_LED_cntrr_MIC284 1	2	IC, Driver	IC LED DRIVER 4 CH	Microchip Technology	MIC2841AYMT-TR	Mouser	998-MIC2841AYMT-TR	IC500, IC502
IC_LED_cntrr_OCT140	3	IC, Driver	IC LED DRIVER 1 CH 2A ESOP8	OCX	OCT140	LCSC	C842736	IC503, IC504, IC505
IC_EEPROM_4Kb	1	IC, EEPROM	IC EEPROM 4KBIT I2C 1MHZ 8TSSOP	Microchip Technology	AT34C04-XSM-T	Digi-Key	AT34C04-XSM-TCT-ND	IC301
IC_MCU_STM32G031 F8P6	1	IC, MCU	IC MCU 32BIT 32KB FLASH 20TSSOP	STMicroelectronics	STM32G031F8P6	LCSC	C529334	IC302
IC_OpAmp_MCPS600 7-E/SN	1	IC, OpAmp	DUAL 1MHz OP AMP, E TEMP	Microchip Technology	MCPS6007-E/SN	Digi-Key	155-MCPS6007-E/SN-ND	IC202
IC_Ref_LM4040DIM3 X-3.0	1	IC, Reference	IC VREF SHUNT 1% SOT23-3	Texas Instruments	LM4040DIM3X-3.0/NOPB	Digi-Key	296-41429-1-ND	IC204
IC_Reg_TCR2LF30	1	IC, Regulator	IC REG LINEAR 3V 200MA SMV	Toshiba Semiconductor and Storage	TCR2LF30.LM(CT	Digi-Key	TCR2LF30LM(TCT-ND	IC203
IC_RTC_RTC1CALENDAR I2C 10250N	1	IC, RTC	IC RTC CLK/CALENDAR I2C 10250N	Micro Crystal AG	RV-3028-CTTAOC	Mouser	428-203591-MG01	IC300
L_100R_4A	1	Inductor, Ferrite	FIXED IND 100 4000MA 1206	Eaton - Electronics Division	MF8M1V3216-101-R	Digi-Key	283-MF8M1V3216-101-RCT-ND	L200
CABLE_FPC24_80	1	other	FPC Cable 1mm Pitch 24Pin 80mm Opposite Sides	LX	C50299	LCSC	C50299	CABLE500
DFP_Player_mini	1	other	Mini-Y5200 Audio MP3 Modul	DF Robot	DFR0299	AliExpress	33036928283	DS300
J_BAT_CLIP_18650_A J_BAT_CLIP_18650_B	2	other	SMT Battery Connectors 18650	MYOUNG	MY-18650-02	LCSC	C2979182	J203, J204
SW_TactileSW_V_2	5	other	SWITCH TACTILE SW SMD	BRIGHT	TSAD63G50-250	LCSC	C294565	SW500, SW501, SW502, SW503, SW504
Q_32k768_12p5	1	Other, Crystal	CRYSTAL 32.7680KHZ 12 SRF SMD	NDK America, Inc.	NK3215SA-32.768K-EX500A-MU00003	Digi-Key	644-1313-1-ND	Q300
DISPL_7SEG_4x1	1	other, Display	LCD MOD 4 DIG 4 X 1 REFLECTIVE	Varitronix	VL-402-DP-RC-S	Digi-Key	153-1135-ND	DS500
ENC_12_THT	2	other, Encoder	ROTARY ENCODER MECHANICAL 12PPR	Bourns Inc.	PEC11R-4220F-S0012	Digi-Key	PEC11R-4220F-S0012-ND	SW300, SW301
R_OR0_0402	3	Resistor	RES 0 OHM JUMPER 1/16W 0402	Stackpole Electronics Inc	RMCF0402ZT0R00CT	Digi-Key	RMCF0402ZT0R00CT-ND	R505, R507, R508
R_OR27_1206	3	Resistor	RES 0.27 OHM 1% 1/3W 1206	RALEC	RTT04R270FTP	LCSC	C104939	R506, R509, R510
R_100R_0402	5	Resistor	RES 100 OHM 1% 1/16W 0402	Stackpole Electronics Inc	RMCF0402F1100RCT	Digi-Key	RMCF0402F1100RCT-ND	R202, R315, R316, R317, R318
								R203, R205, R208, R209, R210, R214, R215, R300, R301, R302, R303, R304, R305, R306, R307, R312, R400, R500, R501, R503, R504
R_10k_0402	21	Resistor	RES 10K OHM 1% 1/16W 0402	VAGEO	RC0402FR-0710KL	Digi-Key	311-10.0RLRCT-ND	
R_16k_0402	1	Resistor	RES 16K OHM 1% 1/16W 0402	Stackpole Electronics Inc	RMCF0402F116K0	Digi-Key	RMCF0402F116K0CT-ND	R502
R_220R_0603	1	Resistor	RES 220 OHM 1% 1/10W 0603	Stackpole Electronics Inc	RMCF0603F220R0	Digi-Key	RMCF0603F220R0CT-ND	R213
R_270k_0402	4	Resistor	RES 270K OHM 1% 1/16W 0402	VAGEO	RC0402FR-07270KL	Digi-Key	311-270KLRCT-ND	R200, R201, R216, R310
R_2k_0402	8	Resistor	RES 2K OHM 1% 1/16W 0402	Stackpole Electronics Inc	RMCF0402F22K00	Digi-Key	RMCF0402F22K00CT-ND	R204, R206, R207, R308, R309, R311, R313, R314
R_5k1_0420	2	Resistor	RES 5.1K OHM 1% 1/16W 0402	Stackpole Electronics Inc	RMCF0402F5K10CT	Digi-Key	RMCF0402F5K10CT-ND	R211, R212
R_84k5_0402	1	Resistor	RES SMD 84.5K OHM 1% 1/16W 0402	Vishay Dale	CRCW040284K5FKE D	Digi-Key	641-84.5KLCT-ND	R217
SW_TactileSW_V	1	Resistor	SWITCH TACTILE SPST-NO 0.05A 16V	C&K	PTS810 SJM 250 SMT8 LFS	Digi-Key	CKN10502CT-ND	SW302
P_2NCH_20V_1W	1	Transistor	MOSFET 2N_CH 20V 6A TSSOP-9	Fortune Semicon	FS8205A	LCSC	C16052	P200
P_NCH_50V_150mW	3	Transistor	MOSFET N-CH 50V 200MA UMT3F	Rohm Semiconductor	RU1J002YNTCL	Digi-Key	RU1J002YNTCLCT-ND	P201, P202, P301
P_PCH_30V_1W	1	Transistor	MOSFET P-CH 30V 6A	Toshiba Semiconduc	SSM3J32RLF	Digi-Key	SSM3J32RLFCT-ND	P300