















Comment	Description	Designator	Footprint	LibRef	Quantity
		C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C26, C27, C33, C34, C35, C36, C37, C41, C45, C48, C51, C53, C56, C57, C58, C60,		C_100nF_50V_X7R_06 03_5,	
Ceramic X7R	Capacitor	C61, C62, C65, C66, C68, C70, C72, C74, C75, C76, C77, C77, C78, C79, C80, C81, C82, C83, C84, C88, C89, C90, C91, C94, C96, C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C110, C112, C113, C114	C_0603_1608	C_1uF_25V_X7R_0603 _10, C_33nF_50V_X7R_060 3_10	
Ceramic COG	Capacitor	C24, C25, C86, C87	C_0402_1005	C_22pF_50V_C0G_040	
Ceramic X5R	Capacitor	C28, C38, C42, C92,	C_0603_1608	C_10uF_16V_X5R_060	
Ceramic COG	Capacitor	C109, C111 C29, C30, C31, C32, C39, C40	C_0603_1608	3_20 C_1nF_50V_C0G_0603 _5	
Ceramic X5R	Capacitor	C43, C44, C54, C55, C63, C64, C85, C115, C116, C117	C_1210_3225	C_47uF_16V_X5R_121 0_10	
Tantalum Capacitor	Capacitor	C46, C50, C59, C67, C69, C71, C73, C93, C95	CT_1210_3225	CT_100uF_10V_TA2O 5_1210_20	
Electrolytic Capacitor	Polarized Capacitor	C47	CE_D_10x10MM	CE_100uF_50V_Poly mer_10x10_20	
Ceramic X7R	Capacitor	C49	C_1210_3225	C_2.2uF_100V_X7R_1 210_10	
Ceramic X7R	Capacitor	C52	C_0402_1005	C_22nF_16V_X7R_040 2_10	
4x7 SEG 0.28'		D1	LFD028BUE-103A-01	OL_LFD028BUE-103A- 01	
Green led	LED GREEN	D2, D3, D4, D5, D6, D7, D8, D9	OL_0603_1608	OL_G_0603_OSG8060	
Red led	LED_RED	D10	OL_0603_1608	3C1E OL_R_0603_OSR50603	
OL_G	LED GREEN	D11, D12, D13, D14, D15, D16, D17	OL_0603_1608	C1E OL_G_0603_0C06_AP G1608CGKC/T	
Ferrite bead	Ferrite Bead	FB1, FB2	FB_0603_1608	FB_BLM18EG221TN1D	
ARK2	ARK Screw terminal, 2-Pin	J1, J2, J3	J_ARK2	J_TB-5.0-P-2P	
Inductor	Induction	L1, L2, L3, L4, L5	L_0603_1608	L_2.2uH_130mA_0603	
Jtag	Header, 10-Pin, Dual	P1, P4	P_HEADER_2x5_1.27	P_HEADER_2x5_1.27	
Goldpin	row Header, 4-Pin	P2, P3, P11, P12, P13, P14, P20	P_HEADER_1x4_2.54	P_HEADER_1x4_2.54	
Goldpin	Header, 10-Pin, Dual row	P5, P18	P_HEADER_2x5_2.54	P_HEADER_2x5_2.54	
Goldpin	Header, 5-Pin Header, 3-Pin	P6, P7, P19 P8, P15, P16, P17	P_HEADER_1x5_2.54 P_HEADER_1x3_2.54	P_HEADER_1x5_2.54 P_HEADER_1x3_2.54	
Goldpin Goldpin	Header, 2-Pin	P9, P10, P21, P22	P_HEADER_1x2_2.54	P_HEADER_1x2_2.54	
BCBS7ALTIG Resistor	Transitor PNP	O1, O2, O3, O4 KT, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R12, R13, R14, R15, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R32, R24, R36, R38, R40, R30, R31, R52, R53, R40, R37, R48, R49, R50, R51, R52, R53, R46, R57, R48, R49, R50, R51, R52, R53, R46, R55, R66, R57, R58, R59, R60, R61, R53, R64, R65, R66, R67, R68	SOT23_TO236_SC59	QPN_BC857ALT1G R_200R_0603_1, R_1M_0603_1, R_308R_0603_1, R_10c_0603_1, R_10c_0603_1, R_18_0603_1, R_560k_0603_01, R_560k_0603_01, R_520k_0603_1, R_45k_0603_1, R_47k_0603_1, R_100k_0603_1	
Resistor		R31, R33, R35, R37, R39, R41	R_1206_3216	R_1.8k_1206_1	
Resistor 3x6mm	Tact Switch	R62 S1, S2, S3, S4, S5	R_2512_6432 S_TACTSWITCH3x6	R_1R_2512_1 S_TACTSWITCH	
DIP SWITCH 4 POS	root awred	S6	S_DIP_4_2.54	S_DM-04-V	
DIP SWITCH 4 POS S_SKS04SP		S7 S8	S_DIP_4_1.27 Switch_toggle	S_A6H-4101 S_SKS04SP	
MKV58F1M0VLQ24	240 MHz Cortex-M7 based MCU for Real- time This single-bit noninverting bus	U1	LQFP144_20x20	U_MKV58F1M0VLQ24	
Single-Bit Dual- Supply Bus Transceiver	transceiver uses two separate configurable power- supply rails. VCCA and VCCB accepts any supply voltage from 1.65 V to 5.5 V. DIR low B->A, DIR high A->B		SOT23- 6_SC74A_SOT753	U_SN74LVC1T45DBVT	
		U3. U15	BT_HC-06 SOT23-	U_HC-06 U_SN74LVC1G34_DBV	
U_HC-06		U4, U5, U16. U17. I119			
Single Buffer Gate		U4, U5, U16, U17, U19, U21, U22	5_SC74A_SOT753_M	_DCK_DRL	
Single Buffer Gate 74HC4050D,652	MDMD H354504	U21, U22 U6	5_SC74A_SOT753_M SOP16_SO16_SOIC16 _4X10X18	U_74HC4050D,652	
Single Buffer Gate 74HC4050D,652 WPMDU1251501	WPMDU1251501 Low-Dropout	U21, U22 U6 U7	5_SC74A_SOT753_M SOP16_SO16_SOIC16 _4X10X18 BQFN41_11x9		
Single Buffer Gate 74HC4050D,652 WPMDU1251501 LD1117AS50TR		U21, U22 U6 U7 U8	5_SC74A_SOT753_M SOP16_SO16_SOIC16 _4X10X18 BQFN41_11x9 SOT223_SC73	U_74HC4050D,652 VS_WPMDU1251501 VL_LD1117AS33TR_3V 3_1A2	
Single Buffer Gate 74HC4050D,652 WPMDU1251501	Low-Dropout Positive Voltage	U21, U22 U6 U7	5_SC74A_SOT753_M SOP16_SO16_SOIC16 _4X10X18 BQFN41_11x9	U_74HC4050D,652 VS_WPMDU1251501 VL_LD1117AS33TR_3V	