













Comment	Description	Designator B1, B2, B3, B4,	Footprint	LibRef	Quantity
FPGA_HRST	Switch	PROGn1, RESET_N1	SWT022	SW-PB	
Buzzer	Magnetic Transducer Burrer	Buzzer1	DB4_2	Buzzer	
0.1uF	Transducer Buzzer Capacitor	C1, C2, C3, C4, C5, C8, C7, C9, C10, C11, C12, C13, C14, C15, C16, C18, C19, C22, C23, C24, C25, C26, C27, C29, C31, C38, C40, C50, C70, C71, C72, C73, C74, C75, C76	C0603	С	
10nF 20pF	Capacitor Capacitor	C17, C33 C20, C21, C36	C0603 C0603	C	
22uF		C28, C30, C37.	1210	c	
22UF	Capacitor	C28, C30, C37, C39, C51	1210	C	
10uF	Polarized Capacitor (Surface Mount)	C32	3528	Cap Pol	
180pF	Capacitor	C34	C0603	С	
15nF 0.1uF	Capacitor	C35 C41, C42, C43, C44, C45, C46, C47, C48, C49, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66,	C0603 0402	c	
		C67, C68, C69			
DCIN		CON*1	KLD3-0202	DCIN	
LED G	Typical RED, GREEN, YELLOW,	D1, D2, D3, D4	LED0805	LED	
_	AMBER GaAs LED				
SS34	Schottky Diode Typical RED,	D5, D6, D8	C8678	D Schottky	
LED_R	GREEN, YELLOW, AMBER GaAs LED USB 1.1, Right	D7, D9	LED0805	LED	
440119-1	Angle, Thru-Hole, B Type, Receptacle, 4 Position, Beige	J1	USB-RIGHT-B	440119-1	
D Connector 9	Receptacle Assembly, 9 Position, Right Angle Receptacle	J2	DSUB1.385-2H9	D Connector 9	
Connector 15	Receptacle Assembly, 15-Pin, Sim Line Connector	J3	VGA_CON	Connector 15	
10uH	Inductor	L1, L2	1206	L	
33uH	Inductor	L3	C10147	L	
1000R/100MHz/10 00mA	Inductor	L4, L5	FB0805	L	1
120R/100MHz/300	Inductor	16	1208		
0mA LED4	m ductor	LED1. LED2	1206 led400	L LED4	
10K	Resistor OSC 4pin	M1, M2, M3, R2, R23, R24, R25, R26, R27, R28, R29, R30, R31, R36, R37, R39, R40, R41, R54, R59, R61, R62, R63, R64, R65, R67, R68	R0803	R	
	Header, 10-Pin,				
Header 10X2	Dual row	P1	HDR2X10_2mm	Header 10X2	
Header 13X2	Header, 13-Pin, Dual row	P2	HDR2X13	Header 13X2	
Header 5X2	Header, 5-Pin, Dual	P4, P5, P6, P7, P8, P9, P12	HDR2X5	Header 5X2	
MMBT3904	NPN MMBT3904	Q1, Q10, Q12	SOT23_N	MMBT3904	
MMBT3906	PNP Switching	Q2, Q3, Q4, Q5,	SOT23 N	MMBT3906	
2K	Transistor Resistor	Q6, Q7, Q8, Q9 R1, R11, R13, R14, R16, R17, R19, R20, R22, R34, R45, R49, R66, R70, R73 R3, R4, R5, R6,	R0803	R	
220R	Resistor	R7, R8, R9, R10, R12, R15, R18, R21, R32 R33, R35, R50,	R0603	R	
0R	Resistor	R51, R52, R53, R55, R56, R57, R58	R0603	R	
1M	Resistor	R38, R47	R0603	R	
150K	Resistor	R43	R0603	R	
10.5K	Resistor	R44	R0603	R	
48.7K	Resistor	R46 R48	R0603 R0603	R R	
75K	Resistor				
	Resistor Resistor		R0603	R	
22R 1K	Resistor Resistor	R60, R69 R71, R74, R76	R0603	R	
22R 1K 500	Resistor Resistor Resistor	R60, R69 R71, R74, R76 R72, R75, R78	R0603 R0603	R R	
22R 1K 500 47R	Resistor Resistor Resistor	R60, R69 R71, R74, R76 R72, R75, R78 R77, R82	R0603	R R R	
22R 1K 500 47R 75	Resistor Resistor Resistor Resistor Resistor Resistor Resistor 3.0V TO 5.5V, Low- Power, up to 1Mbps, True RS- Transceiver Using Four 0.1 sg	R60, R69 R71, R74, R76 R72, R75, R78	R0603 R0603 R0603	R R	
22R 1K 500 47R 75 MAX3232ESE	Resistor Resistor Resistor Resistor Resistor Resistor 3.0V TO 5.5V, Low- Power, up to 1Mbps, True RS- 232 Transceiver	R60, R69 R71, R74, R76 R72, R75, R78 R77, R82 R79, R80, R81 RS1	R0603 R0603 R0603 R0603 R0603 SOIC16	R R R R MAX3232ESE	
22R 1K 500 47R 75 MAX3232ESE	Resistor Uniformation Resistor Resistor Resistor Resistor Resistor Librar Li	R60, R69 R71, R74, R76 R72, R75, R78 R77, R82 R79, R80, R81	R0603 R0603 R0603 R0603 SOIC16	R R R R MAX3232ESE	
22R 1K 500 47R 75  MAX3232ESE SW-DIP4 SWITCH K4S511632B-UC75	Resistor Sover	R60, R69 R71, R74, R76 R72, R75, R78 R72, R75, R78 R77, R82 R79, R80, R81	R0603 R0603 R0603 R0603 SOIC16 DIP-8 SWITCH_DIP6 54 TSOP2 400AF	R R R R MAX3232ESE SW-DIP4 SWITCH_6	
22R  1K  1K  1S  1S  1S  1S  1S  1S  1S  1S	Resistor Resistor Resistor Resistor Resistor Resistor Resistor 3.00 TO 5.5V, Low- Power, up to 1Mbps, True RS- 222 Transace viet ill Edemail Capacitor DIP Switch 512Mb Synchronous High Data Rate DRAM, 8Mb x 168R x 4 Bankx, 54-Pin TSOP Po-free AT744C256 EEPROM EEPROM EEPROM EIST FOLD  Battley Fourser  Battley Twoered	R60, R69 R71, R74, R76 R72, R75, R78 R77, R82 R79, R80, R81 RS1	R0803 R0803 R0803 R0803 SOIC16 DIP-8 SWITCH_DIP6 54_TSOP2_400AF_N	R R R R R R R R R R R R R R R R R R R	
228 W W 0500 W TR TR TR TR TR MAN3232ESE SW-0IP4 SWITCH AT24084 AT24084 COY7088013A-06PPACC	Resistor Res	R60, R69 R71, R74, R79 R72, R75, R78 R79, R80, R81 R79, R80, R81 S1 S1 U2	R0003   R000	R R R R R R MAX3232ESE SW-DIP4 SWITCH_6 AT24C256 AT24C256 CYT088013A-66FPXC	
228 W W 0500 W TR TR TR TR TR MAN3232ESE SW-0IP4 SWITCH AT24084 AT24084 COY7088013A-06PPACC	Resistor Res	R80, R69 R71, R74, R76 R72, R75, R78 R77, R82 R79, R80, R81 S1 S2	ROBEGO RO	R R R R R R R R AMACI322ESE SW-DIP4 SWITCH_6 K45511632B-UC75 AT24C256 CY7C88013A-56PPAC TPS54332DDA	
22R  W  5000  FTR  575  MACCISTER  MACCISTER	Resistor Land Resistor Resisto	R60, R69 R71, R74, R79 R72, R75, R78 R79, R80, R81 R79, R80, R81 S1 S1 U2	R0003   R000	R R R R R R MAX3232ESE SW-DIP4 SWITCH_6 AT24C256 AT24C256 CYT088013A-66FPXC	
22R VK 550 S50 S50 S50 S50 MACG222ESE SW-DIPA SWHTCH AT24084 AT24084 C77088013A-08PP/AC TPS843320DA AL3L8BG256 M24C22MW0	Resistor Res	R80, R89 R87, R77, R78, R79 R77, R78, R79 R77, R78, R79 R77, R82 R79 R80, R81 R85	R0603 R0603 R0603 R0603 R0603 SOIC16 DIP-8 SWITCH DIP6 94 TSCP2 400AF N SOP9_N SOIG8PPAD FRGAZ96 SOP9_N	R R R R R R MANG232ESE SW-DIP4 SWITCH_6 M455116328-UC75 AT24C256 CY7C88013A-56PVAC TFS84332DDA A_3L69C256 MACCOSMN0	
22R  IK  300  307  75  MAX3232ESE  SW-DIP4  SWITCH  AT24084  AT24084  TPS64333DDA  TPS64333DDA  MA2672686  MA2672880	Resistor Res	R60, R69 R71, R72, R78, R79 R71, R72, R79 R77, R72 R77, R82 R79, R80, R81 R81 U11 U11 U11 U11 U11 U11 U11 U11 U11 U	R0003	R R R R R MAX323265E SW.OBPA SWITCH_6 K485116328-UC75 AT24C296 CY7088013A-96P/NC TP584332DDA AJ3.68G259 AJ3.68G259 GFCS1658N	
75  MAX3222ESE  SW-0IP4  SWITCH  SWITCH  AT24084  AT24084	Resistor Res	R80, R89 R87, R77, R78, R79 R77, R78, R79 R77, R78, R79 R77, R82 R79, R80, R81 S2 UU1 UU1 UU1 UU1 UU1 UU1 UU1 UU1 UU1 UU	ROSCO   ROSC	R R R R R MANAG2025SE SW/DIP4 SW/TCH_6 K485116328-UC75 A724C296 CY7038013A-56PVXC TP564332DDA A-31.68G2056 EPCS1658BN LM1117MP-3.3	
22R VK D500 MAX3232ESE SW-DIP4 SWTD14 SWTD14 SWTD14 SWTD14 SWTD14 SWTD14 SWTD14 SWTD15 MAX3232ESE SW-DIP4 MAX3232ESE SW-DIP4 SWTD15 MAX3232ESE SW-DIP4 MAX3232ESE SW-DIP4 SWTD17 MAX3232ESE SW-DIP4 MAX3232ESE SW-DIP4 SWTD17 MAX3232ESE SW-DIP4 MAX3232ESE SW-DIP4 SWTD17 MAX3232ESE MAX322ESE MAX32ESE MAX32ESE MAX	Resistor Res	R00, R80 P. R80	ROSCO   ROSC	R R R R R R R R R R R R R R R R R R R	
22R VK 150 150 150 150 150 157 157 158 158 158 158 158 158 158 158 158 158	Resistor Res	R80, R89 R87, R77, R78, R79 R77, R78, R79 R77, R78, R79 R77, R82 R79, R80, R81 S2 UU1 UU1 UU1 UU1 UU1 UU1 UU1 UU1 UU1 UU	ROSCO   ROSC	R R R R R MANAG2025SE SW/DIP4 SW/TCH_6 K485116328-UC75 A724C296 CY7038013A-56PVXC TP564332DDA A-31.68G2056 EPCS1658BN LM1117MP-3.3	