

Designator	Comment	Description	Footprint	Qty	Value	Part Number	Distributor	Comment
C1	Cap Var	Adjustable Capacitor	CAP_TRIMM_CTZ	1	5 - 20pF	490-1992-1-ND	DigiKey	
C2	Cap	Capacitor	1608[0603]	1	15nF, 5%	445-2511-1-ND	DigiKey	
C4, C24, C25, C29, C33, C37, C38, C39	Cap 10uF	Capacitor	C1206	10	10uF, 6V3, 10%	445-1388-1-ND	DigiKey	
C5, C7, C10, C11, C19, C20, C26, C27, C28, C30, C31, C32, C35, C42, C43, C48, C49, C51, C52	Cap 100nF	Capacitor	1608[0603]	19	100nF	PCC2277CT-ND	DigiKey	
C8, C34, C40	Cap 1nF	Capacitor	1608[0603]	3	1nF, X7R	399-1083-1-ND	DigiKey	X7R, 50V, 5%
C9	Cap 22pF	Capacitor	1608[0603]	1	22pF	PCC220ACVCT-ND	DigiKey	NP0, 100V, 10%
C17, C18, C6	Cap 10pF	Capacitor	1608[0603]	3	10pF, 5%, NP0	PCC100CVCT-ND	DigiKey	NP0, 50V, 5%
C21, C22	Cap 15pF	Capacitor	1608[0603]	1	15pF	PCC150ACVCT-ND	DigiKey	NP0, 50V, 5%
C23	Cap 33pF	Capacitor	1608[0603]	1	33pF	PCC330ACVCT-ND	DigiKey	NP0, 50V, 5%
C41	Cap 10nF	Capacitor	1608[0603]	1	10nF, X7R	445-1304-1-ND	DigiKey	X7R, 10%
C45	Cap 56pF	Capacitor	1608[0603]	1	56pF, 5%, NP0	445-1278-1-ND	DigiKey	
D1	BAS216	High-speed diode, 75V, 250mA	SOD110	1	75V, 250mA	1081183	farnell	
D5	Schottky	Transient Voltage Supressor	SOT23-3 (D)	1	30V, 500mA	ZHCS500CT-ND	DigiKey	
D6	LED	LED GREEN	LED_0805		20mA	511-1287-1-ND	DigiKey	
D7	LED	LED RED	LED_0805	2	20mA	511-1286-1-ND	DigiKey	
D8	Z-Diode	Zener-Diode 1SMB5919BT3G	SMB	1	5V6	1SMB5919BT3GOSCT-ND	DigiKey	
J2	USB-B-MINI	USB 1.1/USB 2.0, Right Angle, SMT, B Type MINI, Receptacle, 5 Position	USB-B-MINI	1			reichelt	
L1	Coil	Inductor	Coil TDK NLC4532	1	10uH, 550mA	445-1956-1-ND		
L3, L6	Ferrite Bead	Inductor	2012[0805]	2	100MHz, 1A, 39Ohm	P10191CT-ND		
L4	Coil	Inductor	2012[0805]	1	10uH, 100mA	490-4029-1-ND		
P1	Header 2X2	Header, 4-Pin, Dual row	HDR2X2	1				
P2	SAM-BA	Header, 2-Pin	HDR1X2	1				
P3	BOOTLOADER	Push Button / Reset-Taster	Taster9312_LSG	1			reichelt	
P4	RS232_CMOS	TTL-232R-3V3 6 way header Pin Out	HDR1X6	1				
P5	JTAG 10X2	Header, 10-Pin, Dual row	HDR2x10G_SMD2.54	1				
P6, P7	U.FL	U.FL-R Connector	U.FL-R-SMT	2		H9161-ND	DigiKey	P6 not connected
Q1, Q2	BSS123	BSS123 N-Channel MOSFET	SOT23-3 (M)	2	100V, 170mA	BSS123NCT-ND	DigiKey	
Q3, Q4	BC847	NPN General-purpose Transistor	SOT23-3 (T)	2	45V, 100mA	BC847B-TPCT-ND	DigiKey	
R1, R2	Res 2R2	Resistor	1608[0603]	2	2R2	311-2.2GRCT-ND	DigiKey	5%, 1/10W
R3, R25, R27, R28, R33	Res 4K7	Resistor	1608[0603]	5	4K7	RHM4.7KGCT-ND	DigiKey	5%, 1/10W

R4	Res 560R	Resistor	1608[0603]	1	560R	RHM560GCT-ND	DigiKey	5%, 1/10W
R5	Res 1K2	Resistor	1608[0603]	1	1K2	RHM1.2KGCT-ND	DigiKey	5%, 1/10W
R6	Res 9K5	Resistor	1608[0603]	1	9K5	311-9.53KHRCT-ND	farnell	farnell 1170887
R7	Res 500R	Resistor	1608[0603]	1	500R	RHM499HCT-ND	DigiKey	499R, 1%, 1/10W
R10	Res 9K1	Resistor	1608[0603]	1	9K1, 1%	311-9.10KHRCT-ND	DigiKey	
R11	Res 15K0	Resistor	1608[0603]	1	15K0, 1%			1%, 1/10W
R13	Res 100K	Resistor	1608[0603]	1	100K, 1%	311-100KHRCT-ND	DigiKey	1%, 1/10W
R14, R15, R16, R17	Res 10K	Resistor	1608[0603]	4	10K, 1%	311-10.0KHRCT-ND	DigiKey	1%, 1/10W
R18	Res 330R	Resistor	1608[0603]	1	330R	RHM330HCT-ND	DigiKey	1%, 1/10W
R21	Res 0R	Resistor	1608[0603]	1	0R	RHM0.0GCT-ND	DigiKey	5%, 1/10W
R23, R24	Res 150	Resistor	1608[0603]	2	150R	RHM150HCT-ND	DigiKey	1%, 1/10W
R26	Res Array	Isolated Resistor Network, 4 resistors	Res 1206	1	4K7	TC164J-4.7KCT-ND	DigiKey	
R29	Res 47K	Resistor	1608[0603]	1	47K	RHM47.0KHCT-ND	DigiKey	1%, 1/10W
R30, R37	Res 1K5	Resistor	1608[0603]	2	1K5	RHM1.50KHCT-ND	DigiKey	1%, 1/10W
R31, R32	Res 27R	Resistor	1608[0603]	2	27R	RHM27.0HCT-ND	DigiKey	1%, 1/10W
R34	Res	Resistor	1608[0603]	1	N.C.			
R42	Res 1K0	Resistor	1608[0603]	1	1K0, 1%			1%, 1/10W
T1, T2, T3, T4, T5, T6, T7	Testpad	Testpad	TESTPAD	7			-	
U1	SN74LVC2G74	SN74LVC1G79, Single Positive-Edge-Triggered D-Type Flip-Flop with Clear and Preset	VSSOP-8	1		296-12755-1-ND	DigiKey	
U2	OPA4820IPWT	Quad Operational Amplifier	TSSOP14	1		296-16811-1-ND	DigiKey	Alternative OPA4354
U3	ZXCL5213V25	Low Dropout Regulator (fix voltage)	SC70-5	1	2V5, 150mA	ZXCL5213V25H5CT-ND	DigiKey	
U5	AD5300	8Bit D/A-Converter, rail-to-rail, power-down-func	SOT23-6	1		AD5300BRTZREEL7CT-ND	DigiKey	
U6	TS5A4595	TS5A4595 Single-Channel Analog Switch	SC70-5	1		296-17708-1-ND	DigiKey	
U7	LM211D	Differential Comparator with Strokes	D008	1		296-6616-5-ND	DigiKey	
U8	AT91SAM7S256	AT91 ARM 32-bit Microcontroller	LQFP64	1		AT91SAM7S256AU001-ND	DigiKey	
U9	ZXCL330	Low Dropout Regulator (3V3)	SOT23-5	1	3V3	ZXCL330E5CT-ND	DigiKey	farnell 1132756
U13	SN74LVC2G08	SN74LVC2G08, Dual 2-Input Positive-AND Gate	VSSOP-8	1		296-13264-1-ND	DigiKey	
U14	CD74HCT7046A	CD74HCT7046A, PLL with VCO and Lock-Detector	SOIC150-16	1	fc_typ=18MHz at VCC=5V	296-9296-5-ND	DigiKey	
U15	SN74LVC1G17	SN74LVC1G17, Single Schmitt-Trigger Buffer	SC70-5	1	VCC: 1V65 - 5V5	296-11934-1-ND	DigiKey	
X1	HCM49 SMD	Crystal Oscillator	49USMXL	1	18.432 MHz, 18pF	300-8561-1-ND	DigiKey	