Reference	Value	Digi-Key_PN	Manufacturer Part#	Footprint
Battery-Cell1	CR1220_Cell	BC501SM-TRCT-ND	BC501SM-TR	z51j:Battery_CR1220
BUZZER1	3V 12mm	668-1456-ND	AI-1223-TWT-3V-2-R	Buzzer_Beeper:Buzzer_12x9.5RM7.6
CA1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CA2	4.7uf	399-5505-1-ND	C0805C475K3PACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CADS1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CATOD0	10uf TANT	478-8275-1-ND	F931D106MAA	Capacitor Tantalum SMD:CP EIA-3216-18 Kemet-A Pad1.58x1.35mm Ha
CATOD1	10uf TANT	478-8275-1-ND	F931D106MAA	Capacitor Tantalum SMD:CP EIA-3216-18 Kemet-A Pad1.58x1.35mm Ha
CCLK1	1uf	399-8001-1-ND	C0805C105J4RACTU	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CDC53	4.7uf	399-8001-1-ND	399-8001-1-ND	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CDC54	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CF21	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CF34	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CF48	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CF56	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1.15x1.40mm HandSolder
CFL1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1:15x1:40mm HandSolder
CMCP1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric Pad1:15x1:40mm HandSolder
CMCP47-0	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1:15x1:40mm_HandSolder
CMCP47-1	0.1uf	399-1108-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1:15x1:40ffff_flandSolder
CPREADS1	1uf	399-1108-1-ND	C0805C104K3RACTU	Capacitor SMD:C 0805 2012Metric_rad1:15x1.40mm HandSolder
CQ1	20pf	399-9987-1-ND	C0805C200J4GAC7800	Capacitor SMD:C 0805 2012Metric Pad1:15x1:40mm HandSolder
CQ2	20pf	399-9987-1-ND	C0805C200J4GAC7800	Capacitor SMD:C 0805 2012Metric Pad1:15x1:40mm HandSolder
CRST1	0.1uf	399-3987-1-ND 399-1168-1-ND	C0805C104K3RACTU	
	10uf TANT			Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CSD1		478-8275-1-ND	F931D106MAA	Capacitor_Tantalum_SMD:CP_EIA-3216-18_Kemet-A_Pad1.58x1.35mm_Ha
CSDET1	10uf TANT	478-8275-1-ND	F931D106MAA	Capacitor_Tantalum_SMD:CP_EIA-3216-18_Kemet-A_Pad1.58x1.35mm_Ha
CSDI1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CSDO1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CSDS1	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CSN1	47pf 50V	399-1171-1-ND	C0805C104J5RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CTFF1	12pf 50V	399-9165-1-ND	C0805C120J1GACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CTI1	0.1uf 50V	445-11580-1-ND	C3216CH1H104J160AA	Capacitor_SMD:C_1210_3225Metric_Pad1.42x2.65mm_HandSolder
CTI2	10uf 50V	490-12456-1-ND	GRT31CR61H106KE01L	Capacitor_SMD:C_1210_3225Metric_Pad1.42x2.65mm_HandSolder
CTO1	22uf	490-12450-1-ND	GRT31CR61E226KE01L	Capacitor_SMD:C_1210_3225Metric_Pad1.42x2.65mm_HandSolder
CTO2	22uf	490-12450-1-ND	GRT31CR61E226KE01L	Capacitor_SMD:C_1210_3225Metric_Pad1.42x2.65mm_HandSolder
CTSW1	0.1uf 50V	399-1171-1-ND	C0805C104J5RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CU125	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CUFG1	4.7pf 1K	1608-1394-1-ND	1206J1K04P70CCT	Capacitor_SMD:C_1206_3216Metric_Pad1.42x1.75mm_HandSolder
CV7	10uf	587-2985-1-ND	TMK212BBJ106KG-T	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
CV8	0.1uf	399-1168-1-ND	C0805C104K3RACTU	Capacitor_SMD:C_0805_2012Metric_Pad1.15x1.40mm_HandSolder
D_BAT1	MBR230LSFT1G	MBR230LSFT1GOSCT-ND	MBR230LSFT1G	Diode_SMD:D_SOD-123F
D_JAC1	MBR230LSFT1G	MBR230LSFT1GOSCT-ND	MBR230LSFT1G	Diode_SMD:D_SOD-123F
D_USB1	MBR230LSFT1G	MBR230LSFT1GOSCT-ND	MBR230LSFT1G	Diode_SMD:D_SOD-123F
F_GADS1	120 ohm Ferrite	490-5986-1-ND	BLM21PG121SN1D	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
F_VADS1	120 ohm Ferrite	490-5986-1-ND	BLM21PG121SN1D	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
F_VDD1	120 ohm Ferrite	490-5986-1-ND	BLM21PG121SN1D	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
FUSE1	MF-MSMF050-2	MF-PSMF050X-2CT-ND	MF-MSMF050-2	Fuse:Fuse_1812_4532Metric_Pad1.30x3.40mm_HandSolder
IND1	10uH	587-2189-1-ND	CB2518T100K	z51j:pad1007-2518

IND55	10uH	587-1613-1-ND	CBC2518T100M	z51j:pad1007-2518
J_Micro_SD1	Micro SD Card Det	WM19093CT-ND	5025700893	z51j:MicroSD
J PW1	Barrel Jack sw 4pin	CP-102AH-ND	PJ-102AH	z51j:BarrelJack CUI PJ-102AH Horiz 4pin
J_USB1	USB B Micro	WM1399CT-ND	1050170001	Connector USB:USB Micro-B Molex-105017-0001
JP_SWD1	Conn ARM JTAG SWD 10	1175-1627-ND	3220-10-0100-00	Connector PinHeader 1.27mm:PinHeader 2x05 P1.27mm Vertical
L_DEF1	Blue	160-1645-1-ND	LTST-C171TBKT	LED SMD:LED 0805 2012Metric Pad1.15x1.40mm HandSolder
L NEO1	WS2812B-5050	COM-13667-ND	Sparkfun COM-13667	LED SMD:LED WS2812B PLCC4 5.0x5.0mm P3.2mm
_ L_PWR1	Yellow	160-1428-1-ND	LTST-C171KSKT	LED SMD:LED 0805 2012Metric Pad1.15x1.40mm HandSolder
L RX1	Green	160-1426-1-ND	LTST-C171KGKT	LED SMD:LED 0805 2012Metric Pad1.15x1.40mm HandSolder
L_SD1	Green	160-1426-1-ND	LTST-C171KGKT	LED_SMD:LED_0805_2012Metric_Pad1.15x1.40mm_HandSolder
L_TX1	Red	160-1427-1-ND	LED RED CLEAR SMD	LED SMD:LED 0805 2012Metric Pad1.15x1.40mm HandSolder
LT1	1.8mH	445-8742-1-ND	VLCF5024T-1R8N1R8-2	z51j:COIL VLCF5024
Q32	32.768KHz 12.5pf	535-9808-1-ND	ABS07-32.768KHZ-1-T	Crystal:Crystal SMD MicroCrystal CC7V-T1A-2Pin 3.2x1.5mm
RADALR1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor SMD:R 0805 2012Metric Pad1.15x1.40mm HandSolder
RADDR1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor SMD:R 0805 2012Metric Pad1.15x1.40mm HandSolder
RBUZG1	10k	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RBUZV1	22	541-22.0CCT-ND	CRCW080522R0FKEA	Resistor SMD:R 0805 2012Metric Pad1.15x1.40mm HandSolder
RCLK1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor SMD:R 0805 2012Metric Pad1.15x1.40mm HandSolder
RFLCS1	100K	541-1825-1-ND	RCG0805100KFKEA	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RGP6	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RGP7	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RID1	100K	541-1825-1-ND	RCG0805100KFKEA	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RID2	330	311-330CRCT-ND	RC0805FR-07330RL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RLCS1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RLED1	330	311-330CRCT-ND	RC0805FR-07330RL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RLRES1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RM47-0	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RM47-1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RMCP23A0	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RPH1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RPWR1	330	311-330CRCT-ND	RC0805FR-07330RL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RRST1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RRX1	820	311-820CRCT-ND	RC0805FR-07820RL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSCL1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSDA1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSDCS1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSDD1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSDD2	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSDET1	10K	A129761CT-ND	CRGCQ0805F10K	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSDLED1	1K	311-1.00KCRCT-ND	RC0805FR-071KL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSN1	10	541-1825-1-ND	RCG0805100KFKEA	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSWCLK1	1K	311-1.00KCRCT-ND	RC0805FR-071KL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RSWDRST1	39 1%	A129732CT-ND	CRGCQ0805F39R	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RTBU1	115K 1%	311-115KCRCT-ND	RC0805FR-07115KL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RTBU2	25.5K 1%	311-25.5KCRCT-ND	RC0805FR-0725K5L	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RTR1	820	311-820CRCT-ND	RC0805FR-07820RL	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder
RTREN1	100K 1%	541-1825-1-ND	RCG0805100KFKEA	Resistor_SMD:R_0805_2012Metric_Pad1.15x1.40mm_HandSolder

RTX1	820	311-820CRCT-ND	RC0805FR-07820RL	Resistor SMD:R 0805 2012Metric Pad1.15x1.40mm HandSolder
RUFG1	1Meg	P1.00MCCT-ND	ERJ-6ENF1004V	Resistor SMD:R 0805 2012Metric Pad1.15x1.40mm HandSolder
RVBUZ2	200 ohm TRIMMER	3386W-201LF-ND	3386W-1-201LF	Potentiometer_THT:Potentiometer_Bourns_3386C_Horizontal
SW PWR1	SW SPDT	CKC5121-ND	TS01AQE	z51j:SPDT-612-500ASSP1M2QE
SW RESET1	SW B3F-3100	SW1049-ND	B3F-3100	z51j:Switch Tactile B3F
U ADS1115	ADS1115IDGS	296-24934-1-ND	ADS1115IDGST	Package SO:TSSOP-10 3x3mm P0.5mm
U DS3231	DS3231M	DS3231SN#T&RCT-ND	DS3231SN#T&R	Package SO:SOIC-16W 7.5x10.3mm P1.27mm
U FLASH1	GD25Q16C	1970-1024-1-ND	GD25Q16CSIGR	Package SO:SO-8 5.3x6.2mm P1.27mm
U G125-LMISO1	SN74LVC1G125DBVR	296-11603-1-ND	SN74LVC1G125DBVR	Package TO SOT SMD:SOT-23-5 HandSoldering
U G125-LMOSI1	SN74LVC1G125DBVR	296-11603-1-ND	SN74LVC1G125DBVR	Package TO SOT SMD:SOT-23-5 HandSoldering
_ U_G125-LSCK1	SN74LVC1G125DBVR	296-11603-1-ND	SN74LVC1G125DBVR	Package_TO_SOT_SMD:SOT-23-5_HandSoldering
_ U_G125-TFT1	SN74LVC1G125DBVR	296-11603-1-ND	SN74LVC1G125DBVR	Package TO SOT SMD:SOT-23-5 HandSoldering
_ U_M47-0	MCP4725A0T-E CH	MCP4725A0T-E/CHCT-ND	MCP4725A0T-E/CH	Package TO SOT SMD:SOT-23-6 Handsoldering
_ U_M47-1	MCP4725A0T-E CH	MCP4725A0T-E/CHCT-ND	MCP4725A0T-E/CH	Package_TO_SOT_SMD:SOT-23-6_Handsoldering
U_MCP23	MCP23008	MCP23008T-E/SSCT-ND	MCP23008T-E/SS	z51j:SSOP-20_5.3x7.2mm_P0.65mm_fix
U_NMOS-BUZ1	2N7002PW.115	1727-4793-1-ND	2N7002PW,115	Package_TO_SOT_SMD:SOT-323_SC-70_Handsoldering
U_NMOS-LED1	2N7002PW.115	1727-4793-1-ND	2N7002PW,115	Package_TO_SOT_SMD:SOT-323_SC-70_Handsoldering
U_PRTR5	PRTR5V0U2X	1727-3884-1-ND	PRTR5V0U2X,215	Package_TO_SOT_SMD:SOT-143
U_RT6222	RT6222C	1028-1392-1-ND	RT6222CHGJ6F	Package_TO_SOT_SMD:SOT-23-6_Handsoldering
U_SAMD51J19	ATSAMD51J19A-A	ATSAMD51J19A-AUTCT-ND	ATSAMD51J19A-AUT	Package_QFP:TQFP-64_10x10mm_P0.5mm
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RA8875 DRIVER	4	D'.: // 4530 4064 ND	A d = f = 1111 4500	
BOARD FOR 40P TFT	1	Digi# 1528-1861-ND	Adafruit# 1590	
TFT DISPLAY -				
800X480 WITH				
TOUCH	1	Digi# 1528-1870-ND	Adafruit# 2354	
12 volt 2A power				
supply for				
MiniNetPad	1	Plug type: 5.5mm OD / 2.1mm ID		
SOLDER PASTE LOW				
JOLDEN PASTE LOW				

MP# SMDLTLFP10

MP# 423

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