

Bill of Material

VP2_TFT_1\VP2_TFT_1.sch

1/17/2020 9:16:36 PM Eeschema (5.1.5)-3

Component Count:73

Ref	Qty	Value	Part	
BT1	1	CR1220	Battery_Cell	Single-cell
C1, C3	2	10UF	CAPACITOR:10UF-0805-10V-10%	
C2	1	1.0UF	CAPACITOR:1.0UF-0805-25V-10%	
C4, C6, C8	3	0.1UF	CAPACITOR:0.1UF-KIT-EZ-50V-20%	
C5, C7, C9	3	100UF	CAPACITOR100UF-POLAR-RADIAL-2.5MM-25V-20%	
C10	1	0.1UF	CAPACITOR:1.0UF-0805-25V-10%	
D1	1	"CHARGE"	DIODE:LED-BLUE1206	
D2	1	MBRA140	DIODE: SHOTTKY, MBRA140	
D3	1	R (A3)	DIODE:LED-RED 1206	
D4	1	G (D9)	DIODE:LED-GREEN 1206	
D5	1	"ACTY" (D4)	DIODE:LED-BLUE 1206	
D6	1	Y	DIODE:LED,YELLOW 1206	
D7	1	"SD CS"	DIODE:LED,BLUE1206	
F1, F2	2	PPTC0.5A	FUSE, PPTC_HALF,AMP	
H1, H2, H3, H4	4	STAND,OFF	HOLE, #4 Hardware	
J1	1	BATT	Connector, JST-PH, 01x02_Male	https://www.aliexpress.com/item/12080801631.html
J2	1	USB_PWR	Connector, Header, 01x05_Male	
J3	1	USB-B PWR	CONNECTOR, USB_MICRO-B_SMT	
J4	1	U.FL	CONNECTOR, RF, U.FL	
J5	1	SMA	Connector, RF, Coaxial, Thru-Hole	coaxial connector
J6	1	GPS/APRS	GPS Module, Serial, GPS NEO-6M GPS, Connector: Header, 01x04_Male	https://www.aliexpress.com/item/12080801631.html
J7	1	DHT11	Connector: Header, 01x04_Male	https://www.aliexpress.com/item/12080801631.html
J8	1	I2C	Sensor, BMP280, Connector: Header, 01x04_Male	I think it will work https://www.aliexpress.com/item/12080801631.html

JP1	1	NO PWM	JUMPER-SMT_2_NO-SparkFun-Jumpers	ON PCB
JP2	1	NO SO BUFF	:JUMPER-SMT_2_NO-SparkFun-Jumpers	ON PCB
JP3	1	NO SI BUFF	:JUMPER-SMT_2_NO-SparkFun-Jumpers	ON PCB
JP5	1	IRQ	:JUMPER-SMT_2_NO-SparkFun-Jumpers	ON PCB
JP6	1	CARD_DET	:JUMPER-SMT_2_NO-SparkFun-Jumpers	ON PCB
M1A1	1	CR2013-MI2120	DISPLAY, TFT, QVGA, 2.2 INCH, CR2013-MI2120	ILI9341 c
M1B1	1	ILI9341_TOUCH	DISPLAY, TFT, QVGA, 2.8 INCH, ILI9341_TOUCH-TFT	ILI9341 c interface,
M2	1	Moteino_M6	ARDUINO , Moteino_M6-MCU, Module	https://lowp
Q1	1	2N3904	TRANSISTOR, NPN-2N3904, TO92	
R1, R2, R5, R6, R7, R8, R14	7	10K	RESISTOR, _US	Resistor, 1
R3, R9	2	10K	RESISTOR, _US	Resistor, 1
R4	1	1K5	RESISTOR, _US	Resistor, 1
R10, R11	2	100K	RESISTOR, _US	Resistor, 1
R12, R24	2	1K	RESISTOR, _US	Resistor, 1
R13	1	4k7	RESISTOR, _US	Resistor, 1
R15, R20, R22	3	100K	RESISTOR, _US	Resistor, 1
R16	1	AMBIENT	RESISTOR, LDR, PHOTOCCELLPTH	
R17, R18, R23	3	1K	RESISTOR, _US	Resistor, 1
R19	1	1K	RESISTOR, _US	Resistor, 1
R21	1	4K7	RESISTOR, _US	Resistor, 1
S1	1	GO!	SWITCH, MOMENTARY, SPST-PTH-6.0MM	
S2	1	"-"	SWITCH, MOMENTARY, SPST-PTH-6.0MM	
S3	1	"+"	SWITCH, MOMENTARY, SPST-PTH-6.0MM	
S4	1	"RESET"	SWITCH, MOMENTARY, SPST-PTH-6.0MM	

U1, U3	2	74AHC1G125	IC, Single Gate 74xGxx, 74AHC1G125	Single Bu
U2	1	MCP73831	IC, Battery Management, MCP73831-2-OT	Single cel SOT23-5
U4	1	DS3231MZ	IC, Timer RTC, DS3231MZ	±5ppm, I2