

Sch Ref	Name	Value	Pkg	Rating	Part
IC1	voltage regulator	+3.3V	SOT-23-3		MIC5319-3.3YD5 from Micrel, or substitute
LED1	LED	any colour	0603		generic
Q1	ignore, placing this component will make the circuit not work				
SW1, SW2	button				B3U-1100P-B from Omeron, or similar from Omeron
U1	microcontroller		QFP-64		STM32F405RGT from ST
USB	micro USB jack				10118192-0001LF from FCI, or similar
Y1	crystal	8MHz	5x3.2mm SMD	much under 100 PPM stability and tolerance	7A-8.000MAAE-T from TXC
JMP	pins for jumper		2x2, 2mm pitch		5176264-1 from TE Connectivity, or similar
JMP	jumper		2mm pitch		NPN02SXNN-RC from Sullins Connector Solutions, or similar
C1, C9, C10	capacitor, tantalum	4.7uF	1206	10V	generic
C2, C3, C4, C5, C6	capacitor, ceramic	100nF	0603	6V	generic
C7, C8	capacitor, ceramic	2.2uF	0603	6V	generic
C11	capacitor, ceramic	470pF	0603	6V	generic
C12, C13	capacitor, ceramic	22pF	0603	6V	generic
R1, R2	resistor, chip	22Ω	0603	0.1W, 10% tol	generic
R3	ignore, placing this component will make the circuit not work				
R4	resistor, chip	470Ω	0603	0.1W, 10% tol	generic
R5, R6	resistor, chip	10KΩ	0603	0.1W, 10% tol	generic
R7	ignore, placing this component will make the circuit not work				