

Board : RollerShutterNode

Prototype : 1

Parts	Value	Package	Description	SUPPLIER	Qty	Prix U HT	Total HT	Total TTC	ID_MOUSER	Autre fournisseur
PCB			Par lot de 10; 10\$ + 5\$ fdp		1	1,5	1,5	1,5		Seedstudio
IC1	ATMega-328	TQFP32-08	Atmel 32-pin 8-bit micro, 16k flash.		1	1,4	1,4	1,4		Aliexpress
IC2	AT25DF512C-SSHN-B	SO-08	Serial EEPROM 4K/ 8K , SPI bus		1	0,431	0,431	0,5172	988-AT25DF512CSSHN-B	
IC3	MCP1703CB	SOT23	250 mA, 16V, Low Quiescent Current LDO Regulator		1	0,568	0,568	0,6816	579-MCP1703T-3302ECB	
IC4	ACS712_5A	SOIC127P600X175-8N	Linear Current Sensor		1		0	0		Aliexpress
IC5	ATSHA204A	SOT23	Puce signature (Note : version 3 broches STUCZ)		1	0,869	0,869	1,0428	566-ATSHA204ASTUCZ-T	
IC6	LM321	SOT95P285X120-5N	Low Power Single Op Amp		1	0,634	0,634	0,7608	926-LM321MF/NOPB	
IC7	MDC3105DMT1				1	0,43	0,43	0,516	863-MDC3105DMT1G	
X1	8 MHz	RESONATOR-SMD	Resonator		1	0,431	0,431	0,5172	81-CSTCE8M00G55-R0	
D1	LED0805	0805	LED0805		1	0,091	0,091	0,1092	720-LOR976-PS-1	
D2	schottky	SOD-323	Diode		1	0,091	0,091	0,1092		
C1, C4, C5, C6, C7, C11, C12, C14, C16	0.1uf	0805	Capacitor		9	0,091	0,819	0,9828	77-VJ0805Y104MXAMR	
C2	0.01uf	0805	Capacitor		1	0,091	0,091	0,1092	77-VJ0805Y103JXAPBC	
C8	1u	0805	Capacitor		1	0,101	0,101	0,1212	581-08055C105K4T2A	
C9	10u	0805	Capacitor		1	0,35	0,35	0,42	81-GRM21BR61E106KA3L	
C3, C10, C13	4u7	0805	Capacitor		3	0,352	1,056	1,2672	581-08053D475K	
C15		0806	Capacitor		1	0,1	0,1	0,12		
R1, R2, R7, R8, R9	10k	0805	Resistor		5	0,108	0,54	0,648	660-SG73S2ATTD103J	
R3	56k	0805	Resistor		1	0,108	0,108	0,1296	667-ERJ-6ENF5602V	
R4, R5, R11, R13		0805	Resistor		4	0,108	0,432	0,5184	660-SG73S2ATTD472J	
R6	100k	0805	Resistor		1	0,108	0,108	0,1296	660-SG73P2ATTD104J	
R10	47k	0805	Resistor		1	0,108	0,108	0,1296		
R12	1k5	0805	Resistor		1	0,108	0,108	0,1296		
CTN	10k	0805					0	0		
VAR1	B72207S0251K101		Varistance 250V 1200A		1	0,379	0,379	0,4548	871-B72207S251K101	
F1	RST5A		Micro fusible 250VAC 5A		1	0,343	0,343	0,4116	530-RST5	
RL1	G5Q-1A-5VDC		OMRON Slim, Miniature, SPST		1		0	0		tme
RL2	G5Q-1-EU-5VDC		OMRON Slim, Miniature, SPDT		1		0	0		tme
ALIM	HILINK_HLK-PM01	HILINK_HLK-PM01	220VAC-5VDC Step Down		1		0	0		Aliexpress
Radio			NRF24L01+ smd or RFM69(H)W		1		0	0		Aliexpress
AC, MOTOR		SCREWTERMINAL-5MM-3	Bornier à vis 3 pôles pas de 5mm		2		0	0		
JP1		2X02	Header 2x7		1		0	0		
AVRSPi		1X04	Header 4		1		0	0		
FTDI	FTDI	1X06	Header 6		1		0	0		

RFM69 Notes
Be careful as RFM69CW footprint is different of RFM69HW. So CW version not compatible with this board
EU : 868 MHz
US : 915 MHz

Antenna Notes

Freq	1/4 Monopole wire antenna length	1/2 Monopole wire antenna length
433 MHz	173 mm	346 mm
868 MHz	86 mm	173 mm
915 MHz	82 mm	164 mm

1/2 Monopole has better range. But 1/4 can work well most of the time
From Moteino doc :