



Facultad de Ciencias de la Alimentación

Componente	Referencia	Valor	Footprint
Resistencias de 50k	R10, R6, R2, R9, R5, R1	50k	Resistor_SMD:R_0805_2012Metric
Sensores infrarojos	J6, J5, J2, J4, J1, J3	SENSOR	Mis_componentes:TCRT5000
Resistencia de 120R	R12, R8, R4, R11, R7, R3	120R	Resistor_SMD:R_0805_2012Metric
Puente H	U1, U2	L9110	Package_DIP:DIP-8_W7.62mm
Capacitor de 22uF	C1, C2, C16, C15	22uF	Capacitor_SMD:CP_Elec_6.3x9.9
Conector para motores	J7, J8	Motor	Connector_JST:JST_EH_B2B-EH-A_1x02_P2.50mm_Vertical
Modulo WiFi ESP8266	U3	ESP-12F	RF_Module:ESP-12E
Capacitor de 100nF	C3, C4, C6, C5, C8, C12, C7	100nF	Capacitor_SMD:C_0805_2012Metric
Capacitor de 20pF	C10, C11	20pF	Capacitor_SMD:C_0805_2012Metric
Boton pulsador pequeño	SW1, SW2, SW3	Button	Button_Switch_SMD:SW_SPST_CK_RS282G05A3
Resistencia de 10k	R13, R22, R14, R19, R20	10k	Resistor_SMD:R_0805_2012Metric
PinHeader 01x03	J9	Flash enable	Connector_PinHeader_2.54mm:PinHeader_1x03_P2.54mm_Vertical
Cristal de 8MHz	Y1	8MHz	Crystal:Crystal_SMD_HC49-SD
Resistencia de 100k	R24, R21	100k	Resistor_SMD:R_0805_2012Metric
PinHeader 02x03	J12	BOOT MODE	Connector_PinHeader_2.54mm:PinHeader_2x03_P2.54mm_Vertical
PinHeader 01x04	J11	SWD	Connector_PinHeader_2.54mm:PinHeader_1x04_P2.54mm_Vertical
Resistencia de 20R	R15, R16	20R	Resistor_SMD:R_0805_2012Metric
Conector micro USB hermbra	J10	USB	Connector_USB:USB_Micro-B_Molex_47346-0001
Resistencia de 4,7k	R17	4.7k	Resistor_SMD:R_0805_2012Metric
Resistencia de 20k	R18	20k	Resistor_SMD:R_0805_2012Metric
Capacitor de 4,7uF	C9	4.7uF	Capacitor_SMD:CP_Elec_3x5.4
LED verde	D3	LED	Diode_SMD:D_0805_2012Metric
LED naranja	D2	LED	Diode_SMD:D_0805_2012Metric
Resistencia de 10R	R25, R23	110R	Resistor_SMD:R_0805_2012Metric
Fusible rearmable de 500mA	F1	500mA	Fuse:Fuse_0603_1608Metric
Diodo de baja caida	D1	BAT60A	Diode_SMD:D_SOD-323
STM microcontrolador	U4	STM32F103C8Tx	Package_QFP:LQFP-48_7x7mm_P0.5mm
Conversor DC-DC a 5V	U5	LM2596S-5	Package_TO_SOT_SMD:TO-263-5_TabPin3
Capacitor de 220uF	C14, C13	220uF	Capacitor_SMD:CP_Elec_8x6.9
Inductor de 33uH	L1	33uH	Inductor_SMD:L_TDK_SLF6045
Conversor lineal 5V a 3,3V	U6	AMS1117-3.3	Package_TO_SOT_SMD:SOT-223-3_TabPin2
Diodo Schotky	D4	1N5822	Diode_THT:D_DO-201AD_P15.24mm_Horizontal
Conector de bateria	J13, J14	Batería2	Battery:BatteryHolder_MPD_BH-18650-PC2
Bateria 18650	BAT1, BAT2	Batería2	18650
Motores 6V	MOT1, MOT2	Motor izquierda	6V
Llantas para motor	YANT1, YANT2	Llantas	Para motor
Rueda loca	RL	Rueda loca	3/8 inch
Soporte motor	MT	Soporte	Pololu

Precio total	\$76,65
	\$10.731,68

Autito Microcontroladores

Gabriel Andrés Aguirre

Link	Precio unidad	Precio unidad	Cantidad	Precio	Fabricante	N.º Fabricante	Mouser N.º
https://ar.n	71,32 ARS	\$0,51	6		\$3,06 KOA Speer	RN73H2ATTD1503B25	660-RN73H2ATD1503B25
https://ar.n	121,54 ARS	\$0,87	6		\$5,21 Vishay Semiconductors	TCRT5000	782-TCRT5000
https://ar.n	70,32 ARS	\$0,50	6		\$3,01 Panasonic	ERA-6VEB1200V	667-ERA-6VEB1200V
https://ar.n	150,68 ARS	\$1,08	2		\$2,15 Adafruit	4489	485-4489
https://ar.n	32,14 ARS	\$0,23	4		\$0,92 Panasonic	EEE-FN1C220R	667-EEE-FN1C220R
https://ar.n	80,36 ARS	\$0,57	2		\$1,15 JST Automotive	S06B-AIT2-1AK	306-S06B-AIT2-1AK
https://ar.n	698,13 ARS	\$4,99	1		\$4,99 Adafruit	2491	485-2491
https://ar.n	52,23 ARS	\$0,37	7		\$2,61 KEMET	C0805X104M5RACTU	80-C0805X104M5RACTU
https://ar.n	49,22 ARS	\$0,35	2		\$0,70 AVX	08055A200F4T2A	581-08055A200F4T2A
https://ar.n	10,05 ARS	\$0,07	3		\$0,22 C&K	PTS636 SL43 LFS	611-PTS636SL43LFS
https://ar.n	10,05 ARS	\$0,07	5		\$0,36 Vishay / Dale	CRCW080510K0FKEAC	71-CRCW080510K0FKEAC
https://ar.n	149,67 ARS	\$1,07	1		\$1,07 Digilent	240-004	424-6-PIN-HEADER
https://ar.n	156,70 ARS	\$1,12	1		\$1,12 ECS	ECS-80-20-5PVX-TR	520-ECS-80-20-5PVX
https://ar.n	10,05 ARS	\$0,07	2		\$0,14 Vishay / Dale	CRCW0805100KJNEAC	71-CRCW0805100KJNEAC
https://ar.n	210,95 ARS	\$1,51	1		\$1,51 Digilent	240-062	424-2X6-PIN-HEADER
https://ar.n	149,67 ARS	\$1,07	1		\$1,07 Digilent	240-004	424-6-PIN-HEADER
https://ar.n	25,11 ARS	\$0,18	2		\$0,36 Vishay / Dale	RCS080520R0FKEA	71-RCS080520R0FKEA
https://ar.n	45,20 ARS	\$0,32	1		\$0,32 CUI Devices	UJ2-MIBH-G-SMT-TR	490-UJ2-MIBH-G-SMTTR
https://ar.n	10,05 ARS	\$0,07	1		\$0,07 Vishay / Dale	CRCW08054K70JNEA	71-CRCW0805J-4.7K-E3
https://ar.n	10,05 ARS	\$0,07	1		\$0,07 Vishay / Dale	CRCW080520K0FKEAC	71-CRCW080520K0FKEAC
https://ar.n	30,14 ARS	\$0,22	1		\$0,22 Wurth Elektronik	865090468011	710-865090468011
https://ar.n	39,18 ARS	\$0,28	1		\$0,28 Dialight	598-8C80-102F	645-598-8C80-102F
https://ar.n	34,15 ARS	\$0,24	1		\$0,24 Dialight	598-8C30-102F	645-598-8C30-102F
https://ar.n	16,07 ARS	\$0,11	2		\$0,23 Vishay / Dale	CRCW0805110RFKEAC	71-CRCW0805110RFKEAC
https://ar.n	92,41 ARS	\$0,66	1		\$0,66 Littelfuse	1812L050/60MR	576-1812L050/60MR
https://ar.n	45,20 ARS	\$0,32	1		\$0,32 Infineon Technologies	BAT 60A E6327	726-BAT60AE6327
https://ar.n	571,56 ARS	\$4,08	1		\$4,08 STMicroelectronics	STM32F103CBT6	511-STM32F103CBT6
https://ar.n	609,73 ARS	\$4,36	1		\$4,36 Texas Instruments	LM2596S-5.0/NOPB	926-LM2596S-5.0/NOPB
https://ar.n	212,95 ARS	\$1,52	2		\$3,04 Nichicon	PCH1C221MCL1GS	647-PCH1C221MCL1GS
https://ar.n	177,80 ARS	\$1,27	1		\$1,27 Taiyo Yuden	NS10145T330MNV8	963-NS10145T330MNV8
https://ar.n	66,00 ARS	\$0,47	1		\$0,47 Texas Instruments	LM1117MPX-3.3/NOPB	926-LM1117MPX3.3NOPB
https://ar.n	115,52 ARS	\$0,83	1		\$0,83 STMicroelectronics	1N5822	511-1N5822
https://ar.n	259,16 ARS	\$1,85	2		\$3,70 Keystone Electronics	1043	534-1043
https://artic	427,00 ARS	\$3,05	2		\$6,10 18650	18650	18650
https://ar.n	750,36 ARS	\$5,36	2		\$10,72 TinyCircuits	ASR00016	406-ASR00016
https://tesl	189,00 ARS	\$1,35	2		\$2,70 Impreso	2343	
https://robo	172,00 ARS	\$1,23	1		\$1,23 POLOLU	P000951	
https://robo	427,00 ARS	\$3,05	2		\$6,10 POLOLU	P000989	