

ECE477 Bill of Materials v1.0

Year: 2018

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Project Name: Garbage Collecting Boat

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Project_Component								Qty:
Description	ID	Qty	Value	Package	Manufacturer	Mfg. Part #	Supplier	Supplier Part #
Microcontroller	N/A	1	-	LQFP100	STM32	STM32L476	Digikey	STM32L476
Motor with ESC	N/A	2	-	Bundle	Unbranded	DCC4654754336009FG	ebay	9T 4370KV
GPS module	N/A	1	-	Breakout board	Adafruit	Adafruit 746	Digikey	Adafruit 746
WiFi module	N/A	1	-	Breakout board	ESP	ESP-WROOM-02	Digikey	ESP-WROOM-02
Voltage Regulator	N/A	5	-	8-SOIC	Linear Technology	LT1300CS8	Digikey	LT1300CS8
Light Dependent Resistor	N/A	20	-	thru-hole	Adafruit	Adafruit 485-161	Mouser Electronic	Adafruit 485-161
Compass module	N/A	5	-	16-QFN	Melexis'	MLX90393SLW-ABA-011-RE	Digikey	MLX90393SLW-ABA-011-RECT-ND
PMICs	N/A	4	-	VQFNP 40	TI	TPS-65313-Q1	TI	TPS-65313-Q1
Resistor	N/A	50	1K ohm	1206	Vishay	ALSR101K000FE12	mouser	ALSR101K000FE12
Resistor	N/A	50	2K ohm	1206	Vishay	ALSR0512K00JE12	mouser	ALSR0512K00JE12
Resistor	N/A	50	5K ohm	1206	Vishay	HHV-50FR-52-2M2	mouser	603-HHV-50FR-52-2M2
PNP transistor	N/A	10	-	TO-92-3	ON semiconductor	2N3904BU	mouser	512-2N3904BU
Raspberry Pi 3	N/A	1	-	Standalone	Raspberry Pi	Model B+	Amazon	N/A
Raspberry Pi camera	N/A	1	-	Standalone	Raspberry Pi	Camera Board v2	Adafruit	3099
Capacitor	N/A	50	10uF	1206	Vishay	VJ1206V106ZXQTW1BC	Mouser	77-VJ1206V106ZXQTBC
Capacitor	N/A	50	10nF	1206	Vishay	VJ1206Y104KXXCW1BC	Mouser	77-VJ1206Y104KXXCBC