

## ECE477 Bill of Materials v1.0

Year: 2019

Semester: Spring

Project Name: Guard DAWG System

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Door Control Unit								Qty:		1
Description	ID	Qty	Value	Package	Manufacturer	Manufacturer Part #	Supplier	Supplier Part #		
Microcontroller MSP432 Dev Board		1	\$20.76	N/A	Texas Instruments	MSP-EXP432P401R	Digi-Key	296-39653-ND		
Microcontroller MSP432		2	\$7.95	100-LQFP	Texas Instruments	MSP432P401RIPZR	Digi-Key	296-44715-1-ND		
Microcontroller MSP430		2	\$7.45	80-LQFP	Texas Instruments	MSP430F5529IPNR	Digi-Key	296-27306-1-ND		
Bluetooth Module		2	\$6.95	-	LearningTech	CSR BC417	Amazon	N/A		
Raspberry Pi 3 b+		1	\$31.00	Standalone	Raspberry Pi Foundation	Model B+	Amazon			
Keypad Button Matrix		1	\$3.95	Standalone	Adafruit	1824	Adafruit	1824		
Pi Camera		2	\$23.90	Standalone	Adafruit	3099	Adafruit	3099		
Decoupling Capacitors (0805) x 100			\$2.30	0805	Murata	80-C0805C104Z3V	KEMET			
Wood (2x4)		4	\$30.00	2"x4"	Weathershield		Home Depot	020208MCAXE1		
Plywood Sheet		1	\$20.00	50"x100"	PureBond		Home Depot	263012		
Hinge		2	\$8.00		Everbilt		Home Depot	13591		
Handle		1			Liberty Hardware		Home Depot	P18949C-SN-C		
Screws		50	\$5.00		Everbilt		Home Depot	802002		
Button		2	\$4.50		E-Switch	RP3502ARED	Digi-Key/Mouser	EG1930-ND		
Switch		2	\$2.99		C&K	JS202011JCQN		CKN10723TR-ND		
Hall Effect Sensor		6	\$0.50							
Hall Effect Magnets		6	\$2.00		DIYMAG	HLMAG03	Amazon	N/A		
Door Motor		1			Micro DC Motor	FBA_TRS-775W	Amazon	N/A		
Power MOSFETs		6	\$10.75	D2PAK	Texas Instruments	CSD18510KTT	Texas Instruments	CSD18510KTT		
Linear Voltage Regulator		2		SOIC   8 SON   8	Texas Instruments	LP2951	Texas Instruments	LP2951		
Wall Converter		1			CanaKit	FBA_DCAR-RSP-1A	Amazon	N/A		
10k Resistors (0805)		100	\$1.80	0805	Murata	<a href="#">RN731JTTD1022A10</a>	Digi-Key/Mouser	660-RN731JTTD1022A10		