

ECE477 Bill of Materials v1.0**Year:**

2017

Semester:**Authors:**

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Created:

1/29/2017

Last Modified:

4/3/2017

Project_Component			
Description	ID	Qty	Value
Capactor (10uF, Tantalum)	C1, C2, C11	3	10uF
Multilayer Ceramic Capacitors MLCC - SMD/SMT 9pF	C12, C13	2	9pF
Capacitor (100uF)	C3	1	100uF
Capactor (0.1uF, Ceramic)	C4, C5, C6, C7, C8	7	0.1uF
LED - Blue, Clear, 1206 SMD	D1	1	BLUE
DIODE GEN PURP 100V 1A SMA	D140	1	
LED - Blue, Clear, 1206 SMD	D2 - D139	140	BLUE
Guitar Neck Replacement	H1	1	-
Plasti Dip	H13	1	14.5 fl.oz RED
Big Bends String Sleeves	H14	1	7 Pack
1pc Neck Plate with Crews Chrome for Fender Repla	H2	1	-
M2.5-0.4 x 3 mm. Phillips-Square Flat-Head Machine	H3, H4, H5, H6, H	4	
1x3 pin header	ICSP	2	
RES SMD 68 OHM 5% 1/8W 0805	R1	1	68 Ohm
RES SMD 330K OHM 5% 1/8W 0805	R2, R3, R4, R5, R6	22	330 kOhm
Resistor (1000 Ohm)	R24	1	1 kOhm
Resistor (10000 Ohm)	R25	1	10 kOhm
Resistor (1000000 Ohm)	R26	1	1 MOhm
Resistor (100 Ohm)	R27	1	100 Ohm
Resistor Network	RN1, RN2, RN3, R	46	68 Ohm
Pushbutton Switches 50mA 12VDC F065 4.3mm Gull	S1	1	
32-bit Microcontroller, 50 Hz, 100 Pin	U1	5	-
IC REG LDO 3.3V 0.8A SOT223	U2	1	3.3V
IC Shift Register 8Bit 16 TSSOP	U3, U4, U5, U6, U	23	8 BIT
LM324 Quadruple Operational Amplifier	U26	1	
Crystals 16.00MHz 30ppm 12pF -40 to 85C	Y1	1	16MHz
Lithium Ion Battery Pack - 3.7V 6600mAh	BT1	1	3.7V 6600mAh
PowerBoost 1000 Charger - Rechargeable 5V Lipo US	A2	1	5V 1A
BLUETOOTH 4.2 DUAL MODE (ROM) DA	A1	1	

Resistor Network (100 Ohm)

8 100 Ohm

Spring
za

Project Name: Guitutar

				Qty:
Package	Manufacturer	Mfg. Part #	Supplier	Supplier Part #
0805 SMD	AVX	TACR106K016RTA	Mouser	581-TACR106K01
0805 SMD	Kemet	CBR08C909D5GAC	Mouser	80-CBR08C909D5
0805 SMD	Murata	GRM31CD80J107ME39L	Digikey	490-10525-1-ND
0805 SMD	Kemet	C0805C104M5RACTU	Mouser	80-C0805C104M5
1206 SMD	Kingbright USA	APT3216LVBC/D	Digikey	754-1943-2-ND
DO-214AC	Fairchild/ON Sem	S1B	Digikey	S1BFSCT-ND
1206 SMD	Kingbright USA	APT3216LVBC/D	Digikey	754-1943-2-ND
-	lotmusic		Amazon	
-	Performix		Menards	
-	Big Bends	-	Guitar Audio	
-	lotmusic		Amazon	
	Home Depot	#203539900	Home Depot	# 06558
0805 SMD	Stackpole Electro	RMCF0805JT68R0	Digikey	RMCF0805JT68RC
0805 SMD	Stackpole Electro	RMCF0805JT330K	Digikey	RMCF0805JT330K
0805 SMD	Vishay Dale	TNPW08051K00BEEA	Digikey	TNP1.00KABCT-N
0805 SMD	Vishay Dale	TNPW080510K0BEEA	Digikey	TNP10.0KABCT-N
0805 SMD	Yageo	RC0402FR-071ML	Digikey	311-1.00MLRCT-N
0805 SMD	Yageo	RC0402FR-07100RL	Digikey	311-100LRCT-ND
MNR04	Rohm Semiconduc	MNR04MRAPJ680	Digikey	RHM1361CT-ND
Gull Wing	E-Switch	LL3301NF065QG	Mouser	612-LL3301NF065
TQFP	Microchip Techno	PIC32MX570F512L	FREE	SAMPLES
SOT-223	Texas Instrument	LM1117IMPX-3.3/NOPB	Digikey	LM1117IMPX-3.3
TSSOP	Nexperia USA Inc	74HC595PW,118	Digikey	568-2263-1-ND
SOIC-14	Texas Instrument	LM324	-	-
5 mm x 3.2 mm	TXC Corporation	AA-16.000MALE-T	Digikey	887-1660-1-ND
-	Adafruit	353	Adafruit	-
-	Adafruit	2465	Adafruit	-
Tray	Microchip Techno	BM78SPP05NC2-0002AA	Digikey	BM78SPPS5NC2-C

4814P

Bourns Inc.

4814P-T01-101LF

Digikey

4814P-T01-101LF-I

	Individual Price	Total Price	Purchase Link	Do we have it?	Comments
6RTA	2.85	8.55	Link	Yes	Purchased extras
GAC	0.36	0.72	Link	Yes	
	0.55	0.55	Link	Purchased	
5R	0.1	0.7	Link	Yes	Purchased extras
	0.61	0.61	Link	Yes	
	0.25	0.25	Link	Purchased	
	0.61	85.4	Link	Yes	Purchased extras
	27.99	27.99	Link	Yes	
	6.98	6.98	Link	Yes	
	5.9	5.9	Link	Yes	Unnecessary?
	5.85	5.85	Link	No	
	0.26	1.04	Link	Check Joe	
		0		Yes	Purchased extras
DOCT-ND	0.1	0.1	Link	yes	
DOCT-ND	0.1	2.2	Link	yes	
D	0.6	0.6	Link	yes	Purchased extras
D	0.6	0.6	Link	yes	
ND	0.1	0.1	Link	yes	
	0.1	0.1	Link	yes	Purchased extras
	0.1	4.6	Link	Purchased	
5QG	0.57	0.57	Link	No	
	0.597	2.985	Link	Yes	Purchased extras
/NOPBCT-ND	1.04	1.04	Link	Yes	
	0.361	8.303	Link	Yes	
	0.39	0.39	Link	Yes	Taken from Joe's
	0.83	0.83	Link	Purchased	Purchased extras
	29.5	29.5	Link		
	19.95	19.95	Link		
0002AA-ND	6.79	6.79	Link		

Total Qty	273
Total Cost	223.198

VD

1.12

8.96 [Link](#)

just use a regular switch for power

Cabinet. No extra cost.

