

ECE477 Bill of Materials v1.0

Year: 2017

Author: Clifton Somers

Created: 9/15

Last Modified: 9/15

Semester: Fall

Project Name: Super Susan

Project Component	ID	Qty	Value	Package	Manufacturer	Mfg. Part #	Supplier	Qty:	Supplier Part #	Link
LCD Pixel Display		1		Standalone	Newhaven	NHD-12232KZ	DigiKey		NHD-12232KZ-NSW-B8	https://www.digikey.com/pr
Stepper Motor		1		Standalone	Adafruit	324	DigiKey		1528-1062-ND	https://www.digikey.com/pr
NFC Reader		2		QFN	NXP	PN5120A0HN1	DigiKey		568-8611-ND	https://www.digikey.com/pr
Rotary Dial		1		Through-Hole	TE Connectivity	2-1825910-7	DigiKey		450-1642-ND	https://www.digikey.com/pr
Load Cell & HX711 Amplifier		2		Standalone	Aubreey Electronics	AREEY470	Amazon: Aubreey Elect		AREEY470	https://www.amazon.com/d
Hall Effect Sensors		24		3-SIP	Diodes Incorporated	AH1806-P-B	DigiKey		AH1806-P-BDI-ND	https://www.digikey.com/sc
WiFi Module		1		30-DI Breakout	Expressif	ESP 8266	Amazon: Kumanstore		-	https://hurdspac.nl/images
RGB LED		2		6-SMD	Cree Inc	CLX6F-FKC-CN	DigiKey		CLX6F-FKC-CNP15T1E1	https://www.digikey.com/sc
Tactile Switch		10		Through-Hole	TE Connectivity Alcoswi	2-1825910-7	DigiKey		450-1642-ND	https://www.digikey.com/sc
Rotary Encoder		1		Through-Hole	TT Electronics/BI	EN11-HSM18F	DigiKey		987-1398-ND	https://www.digikey.com/sc
N-Channel MOSFET		20		SC-70	Diode Electronics	DMG1012UW-	DigiKey		DMG1012UW-7DICT-N	https://www.digikey.com/sc
Cross Connector		4		Standalone	TE Connectivity AMP Co	10	DigiKey		10-ND	https://www.digikey.com/sc
DC-DC Convertor		2	.1A, -5V	8-SOIC	Texas Instruments	LMC7660IMX/	DigiKey		LMC7660IMX/NOPBCT	https://www.digikey.com/sc
RGB LED		4		4-PLCC	Cree Inc	CLVBA-FKA-CA	DigiKey		CLVBA-FKA-CAEDH8B8	https://www.digikey.com/sc
RGB LED		2		4-PLCC	Kingbright	AAA3528LSEE2	DigiKey		754-1967-1-ND	https://www.digikey.com/sc
Interconnector (F->M) 20 pin		1		Through-Hole	Amphenol FCI	20021311-000	DigiKey		609-3759-ND	https://www.digikey.com/sc
Barrel Jack Power Connector		10		Through-Hole	CUI Inc	PJ-037A	DigiKey		CP-037A-ND	https://www.digikey.com/sc
Digital Potentiometer		2	10k	8-SOIC	Microchip Technology	MCP4131-103	DigiKey		MCP4131-103E/SN-ND	https://www.digikey.com/sc
Serial to Parallel SR, 8b		2		16-TSSOP	Texas Instruments	74AHCT595	DigiKey		74AHCT595T16-13DICT	https://www.diodes.com/as
H-Bridge Motor Controller		1		16-DIP	Texas Instruments	L293D	Instrument Room		L293D	http://www.ti.com/lit/ds/sv
Resistor Array		3	100k	1608	Bourns Inc	CAT25-104JAL	DigiKey		CAT25-104JALFCT-ND	http://www.bourns.com/doc
Resistor		4	90	0805	Yageo	RC0805JR-0711	Instrument Room		-	http://www.yageo.com/doc
Resistor		2	150	0805	Yageo	RC0805JR-079	Instrument Room		-	http://www.yageo.com/doc
Capacitors, Decoupling		20	100n	0805	AVX Corporation	08055C104MA	Instrument Room		-	http://datasheets.avx.com/X
Capacitors, Polarized Charging		4	10u	2-SIP, radial	Kemet	ESK106M063A	Instrument Room		-	https://search.kemet.com/c
Interconnector (F->M) 40 pin		2		Through-Hole	On Shore Technology Inc	302-S401	DigiKey		ED10529-ND	http://www.on-shore.com/w
Interconnector (F->M) 24 pin		3		Through-Hole	On Shore Technology Inc	302-S241	DigiKey		ED10525-ND	http://www.on-shore.com/w
Level Translator		2		24-TSSOP	Nexperia USA Inc	74LVC4245AP	Digikey		1727-4308-1-ND	https://assets.nexperia.com/
DC-DC Convertor		1	1.5A, 5V	3-SIP	Murata Power Solutions	OKI-78SR-5/1.5	Digikey		811-2196-5-ND	http://power.murata.com/d
Low Dropout Regulator		1		TO-261-4	Diodes Incorporated	AP2114H-3.3T	Digikey		AP2114H-3.3TRG1DICT	https://www.diodes.com/as

<https://www.diodes.com/assets/Datasheets/AH1806.pdf><http://www.cree.com/led-components/media/documents/ds-CLX6F-FKC-1352.pdf><http://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchrtv&DocNm=1825910&DocType=Customer+Drawing&DocLang=En>http://www.ttelectronics.com/sites/default/files/download-files/Datasheet_RotaryEncoder_EN11Series.pdf<https://www.diodes.com/assets/Datasheets/ds31859.pdf><http://www.te.com/commerce/DocumentDelivery/DDEController?Action=srchrtv&DocNm=1437381-1&DocType=Customer+Drawing&DocLang=En><http://www.ti.com/lit/ds/symlink/lmc7660.pdf><http://www.cree.com/led-components/media/documents/ds-CLVBA-FKA.pdf><http://ww1.microchip.com/downloads/en/DeviceDoc/22060b.pdf>