Part	Value	Device	Package	Description	MFG	PN
C1	22uF	CAP_POL0805	0805-POL	Capacitor 22µF Molded Tantalum Polymer 10V 0805 200mOhm	KYOCERA AVX	F381A226MSA
C2	0.1uF	CAP0805	0805	Capacitor ceramic bypass		
C3	22uF	CAP_POL0805	0805-POL	Capacitor 22µF Molded Tantalum Polymer 10V 0805 200mOhm	KYOCERA AVX	F381A226MSA
C4	10uF	CAP0805	0805	Capacitor		
C5	10uF	CAP1206	C1206K	Capacitor 10μF ±10% 16V Ceramic X7R 1206	Kemet	C1206X105K4RACAUTO
C6	33uF	CAP_POL0805	0805-POL	Capacitor 33µF Molded Tantalum Polymer 10V 0805 200mOhm	KYOCERA AVX	F381A336MSALZT
C7	22uF	CAP0805	0805	Capacitor		
C8	10uF	CAP0805	0805	Capacitor		
C9	10uF	CAP_POL0805	0805-POL	Capacitor 10µF Molded Tantalum Polymer 10V 0805 200mOhm	KEMET	T529P106M010AAE200
C10	10uF	CAP0805	0805	Capacitor		
C11	22uF	CAP2220	C2220K	Capacitor Film 22uF 20% 16VDC 2220	Rubycon	16MU226MD35750
C12	0.1uF	CAP0805	0805	Capacitor ceramic bypass		
C13	0.1uF	CAP0805	0805	Capacitor ceramic bypass		
C14	47uF	CAP0805	C0805	Capacitor 47μF ±20% 10V Ceramic X5R 0805	KYOCERA AVX	0805ZD476MAT2A
C15	0.1uF	CAP0805	0805	Capacitor ceramic bypass		
C16	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C17	1nF	CAP0805	0805	Capacitor ceramic bypass COG		
C18	10uF	CAP_POL0805	0805-POL	Capacitor 10µF Molded Tantalum Polymer 10V 0805 200mOhm	KEMET	T529P106M010AAE200
C19	0.1uF	CAP0805	0805	Capacitor ceramic bypass		
C20	47uF	CAP0805	0805	Capacitor		
C21	10uF16V	CAP1206	C1206	Capacitor 10 μF ±10% 16V Ceramic X7R 1206	Kemet	C1206X106K4RACAUTO
C22	47uF	CAPPOL1206	1206	Capacitor Tantalum Polymer 6.3 V 1206 45mOhm	Vishay Spraque	T55A107M6R3C0045
C23	1nF	CAP0805	0805	Capacitor		
C24	1uF	CAP0805	0805	Capacitor		
C25	4.7uF25v	CAP1206	C1206	Capacitor		
C26	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C27	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C28	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C29	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C30	10nF x 8	CAP0603	C0603K	Capacitor ceramic bypass		
C31	33uF	CAP0805	0805	Capacitor 33 μF Molded Tantalum Polymer 10V 0805 200mOhm	KYOCERA AVX	F381A336MSALZT
C32	10nF	CAP0805	C0805	Capacitor ceramic bypass		
C33	0.1uF	CAP0603	C0603	Capacitor ceramic bypass		

C34	1uF16V	CAP1206	C1206	Capacitor 1 μF ±10% 16V Ceramic X7R 1206	Kemet	C1206X105K4RACAUTO
C35	0.1uF Film	CAP0805	0805	Capacitor Film 0.1uF 20% 16VDC 2220	Rubycon	25MU104KZ22012
C36	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C37	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C38	10nF	CAP0603	C0603K	Capacitor ceramic bypass		
C39	0.1uF	CAP0805	C0805	Capacitor ceramic bypass		
C40	0.1uF	CAP0603	C0603	Capacitor ceramic bypass		
C41	47uF	CAPPOL1206	1206	Capacitor Tantalum Polymer 6.3 V 1206 45mOhm	Vishay Spraque	T55A107M6R3C0045
D3	SZSM05T1G	DIODE_CA-AC	SOT23C	5V RS 9.8V Clamp 17A lpp Tvs Diode Surface Mount SOT-23-3	On Semiconductor	SZSM05T1G
FB1	1K	Ferrite Bead Inductor	0402	Ferrite Bead Inductor 1 kOhms @ 100 MHz SMD 0402	Murata	BLM15HG102SH1D
FB2	1K	Ferrite Bead Inductor	0402	Ferrite Bead Inductor 1 kOhms @ 100 MHz SMD 0402	Murata	BLM15HG102SH1D
FB3	1K	Ferrite Bead Inductor	0402	Ferrite Bead Inductor 1 kOhms @ 100 MHz SMD 0402	Murata	BLM15HG102SH1D
IC1	MAX14930	ISO7240	SO-16DW	Digital Isolator 2750Vrms 4 Channel 25Mbps 16-SOIC-Wide	Analog Devices Inc./Maxim	MAX14930EAWE+
IC2	S-1200B53-M5T1x	MIC5219XX	SOT23-5	IC REG LINEAR 5.3V 150MA SOT23-5	ABLIC Inc.	S-1200B53-M5T1U
IC3	24LC64SN	SO8-EEPROM	SO-08	Serial EEPROM 64/128/256/or 512K	MICROCHIP	24LC64-I/SN
J1	Encoder	M04X2	2X4	0.1" spacing Header, two rows of four	TE Connectivity AMP Connectors	826656-4
J2	Display	M04X1	1X04_LOCK	0.1" spacing Header 4 part of 1X16 piece	TE Connectivity AMP Connectors	1-825433-6
J3	Buttons	M06X1	1X06_LOCK	0.1" spacing Header 6 part of 1X16 piece	TE Connectivity AMP Connectors	
J4	Serial	M03X1	1X03_LOCK	0.1" spacing Header 3 part of 1X16 piece	TE Connectivity AMP Connectors	
H1T	Teensy-R	M14X1	1X14	Connector Header Through Hole 14 position 0.100" series 350	Mill-Max Manufacturing Corp.	350-10-114-00-006000
H1B	Teensy-R	F14X1	1X14	Connector Header Through Hole 14 position 0.100" series 350	Mill-Max Manufacturing Corp.	310-41-114-41-001000
H2T	Teensy-L	M14X1	1X14	Connector Header Through Hole 14 position 0.100" series 350	Mill-Max Manufacturing Corp.	350-10-114-00-006000
H2B	Teensy-L	F14X1	1X14	Connector Header Through Hole 14 position 0.100" series 350	Mill-Max Manufacturing Corp.	310-41-114-41-001000
Н3Т	Teensy-I	M05X1	1X5 -1	Connector Header Through Hole 5 position 0.100" Remove 1 pos	Mill-Max Manufacturing Corp.	350-10-105-00-006000
Н3В	Teensy-I	F05X1	1X5 -1	Connector Header Through Hole 5 position 0.100" Remove 1 pos	Mill-Max Manufacturing Corp.	310-41-105-41-001000
L1	Blue	0603-LED	0603	LED Blue 0603	Kingbright	APHM1608VRBXF/A-5
L2	22uH	1210-IND	1210	INDUCTOR 22µH Shielded Wirewound 120mA 480mOhm Max	TDK Corporation	NLFV32T-220K-EF
L3	100uH	0805-IND	0805	Inductors 100UH 50MA 4 OHM SMD	Taiyo Yuden	LBR2012T101KV
L4	Green	0603-LED	0603	LED Green 0603	Vishay Semiconductor	VLMTG1300-GS08
R1	10K	0805-RES	0805	Resistor 1% to 5%		
R2	4.7K	0603-RES	0603	Resistor Optional for testing - Do Not Install		
R3	4.7K	0603-RES	0603	Resistor Optional for testing - Do Not Install		
R5	330	0805-RES	0805	Resistor 1% to 5%		
R6	180	0805-RES	0805	Resistor 1% to 5%		

R8         20K         0805-RES         0805         Resistor 1% to 5%           R11         12.1K         0805-RES         0805         Resistor ±0.1% 0.125W, 1/8W         Vishay Dale         TNPW080512K1BEEA           R12         86.6K         0805-RES         0805         Resistor ±0.1% 0.125W, 1/8W         Vishay Dale         TNPW080580K6BEEN           R13         2.5K         0603-RES         0603         Resistor 1% to 5%         Vishay Dale         TNPW080580K6BEEN           U\$3         PIRC Teensy 3.2         TEENSY_3.1_DIL+4         TEENSY-DIL+4         TEENSY-DIL+4         TEENSY-DIL+4         TEENSY-S.1 and 3.2 in a DIL package with the inner 4 pins         Wishay Dale         MCP1755T-5002E/OT           U\$4         MCP1755         V_REG_LDOSMD         SOT-23-5         IC REG LINEAR 5V 300MA SOT23-5 LDO         Microchip Technology         MCP1755T-5002E/OT           U\$5         MAX829         MAX829EUK+T         SOT-23-5         Switched-Capacitor Voltage Inverters         Maxim         MAX829EUK+T           U\$6         AD5541LR2         AD5541LR2         SOT-23-5         General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5         Texas Instruments         LP38798SD-ADJ/NOPB           U\$7         POPA388         LP38798SD-ADJ         DNT12         Texas Instruments         LP38798SD-ADJ/NOPB	R7	180	0805-RES	0805	Resistor 1% to 5%		
R12 86.6K 0805-RES 0805 Resistor ±0.1% 0.125W, 1/8W Vishay Dale TNPW080580K6BEEN R13 2.5K 0603-RES 0603 Resistor 1% to 5% R14 2K 0603-RES 0603 Resistor 1% to 5% U\$3 PJRC Teensy 3.2 TEENSY_3.1_DIL+4 TEENSY-DIL+4 Teensy 3.1 and 3.2 in a DIL package with the inner 4 pins U1 MCP1755 V_REG_LDOSMD SOT-23-5 IC REG LINEAR 5V 300MA SOT23-5 LDO Microchip Technology MCP1755T-5002E/OT U2 MAX829 MAX829EUK+T SOT-23-5 Switched-Capacitor Voltage Inverters Maxim MAX829EUK+T U3 OPA365 OPA365 SOT-23-5 General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5 Texas Instruments OPA365AIDBVR U4 LP38798 LP38798SD-ADJ DNT12 Texas Instruments LP38798SD-ADJ/NOPB U6 AD5541LRZ AD5541LRZ SOIC-8 16-Bit Digital-to-Analog Converters Analog Devices AD5541LRZ U7 OPA388 LTC2050IS8PBF SOIC-8 Zero-Drift Operational Amplifi ers Linear Technology OPA388 U8 MAX6126AASA25+ Voltage Reference SOIC-8 Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC Analog Devices Inc./Maxim MAX6225ACSA+ U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	R8	20K	0805-RES	0805	Resistor 1% to 5%		
R13 2.5K 0603-RES 0603 Resistor 1% to 5% R14 2K 0603-RES 0603 Resistor 1% to 5% U\$3 PJRC Teensy 3.2 TEENSY_3.1_DIL+4 TEENSY-DIL+4 Teensy 3.1 and 3.2 in a DIL package with the inner 4 pins U1 MCP1755 V_REG_LDOSMD SOT-23-5 IC REG LINEAR 5V 300MA SOT23-5 LDO Microchip Technology MCP1755T-5002E/OT U2 MAX829 MAX829EUK+T SOT-23-5 Switched-Capacitor Voltage Inverters Maxim MAX829EUK+T U3 OPA365 OPA365 SOT-23-5 General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5 Texas Instruments OPA365AIDBVR U4 LP38798 LP38798SD-ADJ DNT12 Texas Instruments LP38798SD-ADJ/NOPB U6 AD5541LRZ AD5541LRZ SOIC-8 16-Bit Digital-to-Analog Converters Analog Devices AD5541LRZ U7 OPA388 LTC2050IS8PBF SOIC-8 Zero-Drift Operational Amplifi ers Linear Technology OPA388 U8 MAX6126AASA25+ Voltage Reference SOIC-8 Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC Analog Devices Inc./Maxim MAX6225ACSA+ U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	R11	12.1K	0805-RES	0805	Resistor ±0.1% 0.125W, 1/8W	Vishay Dale	TNPW080512K1BEEA
R14 2K 0603-RES 0603 Resistor 1% to 5%  U\$3 PJRC Teensy 3.2 TEENSY_3.1_DIL+4 TEENSY-DIL+4 TEENSY-DIL+5 TECNST-DIL-1 TEENSY-DIL+4 TEENSY-DIL+5 TEENSY-DIL-1 TEENSY-DIL+5 TEENSY-DIL-1 TEENSY	R12	86.6K	0805-RES	0805	Resistor ±0.1% 0.125W, 1/8W	Vishay Dale	TNPW080580K6BEEN
U\$3PJRC Teensy 3.2TEENSY_3.1_DIL+4TEENSY-DIL+4Teensy 3.1 and 3.2 in a DIL package with the inner 4 pinsU1MCP1755V_REG_LDOSMDSOT-23-5IC REG LINEAR 5V 300MA SOT23-5 LDOMicrochip TechnologyMCP1755T-5002E/OTU2MAX829MAX829EUK+TSOT-23-5Switched-Capacitor Voltage InvertersMaximMAX829EUK+TU3OPA365OPA365SOT-23-5General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5Texas InstrumentsOPA365AIDBVRU4LP38798LP38798SD-ADJDNT12Texas InstrumentsLP38798SD-ADJ/NOPBU6AD5541LRZSOIC-816-Bit Digital-to-Analog ConvertersAnalog DevicesAD5541LRZU7OPA388LTC2050IS8PBFSOIC-8Zero-Drift Operational Amplifi ersLinear TechnologyOPA388U8MAX6126AASA25+Voltage ReferenceSOIC-8Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOICAnalog Devices Inc./MaximMAX6225ACSA+U9LTC6655BHLS8-5.0Voltage ReferenceLCC-8_LS8Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCCLinear TechnologyLTC6655BHLS8-5.000	R13	2.5K	0603-RES	0603	Resistor 1% to 5%		
U1 MCP1755 V_REG_LDOSMD SOT-23-5 IC REG LINEAR 5V 300MA SOT23-5 LDO Microchip Technology MCP1755T-5002E/OT U2 MAX829 MAX829EUK+T SOT-23-5 Switched-Capacitor Voltage Inverters Maxim MAX829EUK+T U3 OPA365 OPA365 SOT-23-5 General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5 Texas Instruments OPA365AIDBVR U4 LP38798 LP38798SD-ADJ DNT12 Texas Instruments LP38798SD-ADJ/NOPB U6 AD5541LRZ AD5541LRZ SOIC-8 16-Bit Digital-to-Analog Converters Analog Devices AD5541LRZ U7 OPA388 LTC2050IS8PBF SOIC-8 Zero-Drift Operational Amplifi ers Linear Technology OPA388 U8 MAX6126AASA25+ Voltage Reference SOIC-8 Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC Analog Devices Inc./Maxim MAX6225ACSA+ U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	R14	2K	0603-RES	0603	Resistor 1% to 5%		
U2MAX829MAX829EUK+TSOT-23-5Switched-Capacitor Voltage InvertersMaximMAX829EUK+TU3OPA365OPA365SOT-23-5General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5Texas InstrumentsOPA365AIDBVRU4LP38798LP38798SD-ADJDNT12Texas InstrumentsLP38798SD-ADJ/NOPBU6AD5541LRZAD5541LRZSOIC-816-Bit Digital-to-Analog ConvertersAnalog DevicesAD5541LRZU7OPA388LTC2050IS8PBFSOIC-8Zero-Drift Operational Amplifi ersLinear TechnologyOPA388U8MAX6126AASA25+Voltage ReferenceSOIC-8Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOICAnalog Devices Inc./MaximMAX6225ACSA+U9LTC6655BHLS8-5.00Voltage ReferenceLCC-8_LS8Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCCLinear TechnologyLTC6655BHLS8-5.000	U\$3	PJRC Teensy 3.2	TEENSY_3.1_DIL+4	TEENSY-DIL+4	Teensy 3.1 and 3.2 in a DIL package with the inner 4 pins		
U3 OPA365 OPA365 SOT-23-5 General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5 Texas Instruments OPA365AIDBVR U4 LP38798 LP38798SD-ADJ DNT12 Texas Instruments LP38798SD-ADJ/NOPB U6 AD5541LRZ AD5541LRZ SOIC-8 16-Bit Digital-to-Analog Converters Analog Devices AD5541LRZ U7 OPA388 LTC2050IS8PBF SOIC-8 Zero-Drift Operational Amplifi ers Linear Technology OPA388 U8 MAX6126AASA25+ Voltage Reference SOIC-8 Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC Analog Devices Inc./Maxim MAX6225ACSA+ U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	U1	MCP1755	V_REG_LDOSMD	SOT-23-5	IC REG LINEAR 5V 300MA SOT23-5 LDO	Microchip Technology	MCP1755T-5002E/OT
U4LP38798LP38798SD-ADJDNT12Texas InstrumentsLP38798SD-ADJ/NOPBU6AD5541LRZAD5541LRZSOIC-816-Bit Digital-to-Analog ConvertersAnalog DevicesAD5541LRZU7OPA388LTC2050IS8PBFSOIC-8Zero-Drift Operational Amplifi ersLinear TechnologyOPA388U8MAX6126AASA25+Voltage ReferenceSOIC-8Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOICAnalog Devices Inc./MaximMAX6225ACSA+U9LTC6655BHLS8-5.0Voltage ReferenceLCC-8_LS8Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCCLinear TechnologyLTC6655BHLS8-5.000	U2	MAX829	MAX829EUK+T	SOT-23-5	Switched-Capacitor Voltage Inverters	Maxim	MAX829EUK+T
U6AD5541LRZAD5541LRZSOIC-816-Bit Digital-to-Analog ConvertersAnalog DevicesAnalog DevicesAD5541LRZU7OPA388LTC2050IS8PBFSOIC-8Zero-Drift Operational Amplifi ersLinear TechnologyOPA388U8MAX6126AASA25+Voltage ReferenceSOIC-8Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOICAnalog Devices Inc./MaximMAX6225ACSA+U9LTC6655BHLS8-5.0Voltage ReferenceLCC-8_LS8Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCCLinear TechnologyLTC6655BHLS8-5.000	U3	OPA365	OPA365	SOT-23-5	General Purpose Amplifier 1 Circuit Rail-to-Rail SOT-23-5	Texas Instruments	OPA365AIDBVR
U7 OPA388 LTC2050IS8PBF SOIC-8 Zero-Drift Operational Amplifi ers Linear Technology OPA388 U8 MAX6126AASA25+ Voltage Reference SOIC-8 Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC Analog Devices Inc./Maxim MAX6225ACSA+ U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	U4	LP38798	LP38798SD-ADJ	DNT12		Texas Instruments	LP38798SD-ADJ/NOPB
U8 MAX6126AASA25+ Voltage Reference SOIC-8 Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC Analog Devices Inc./Maxim MAX6225ACSA+ U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	U6	AD5541LRZ	AD5541LRZ	SOIC-8	16-Bit Digital-to-Analog Converters	Analog Devices	AD5541LRZ
U9 LTC6655BHLS8-5.0 Voltage Reference LCC-8_LS8 Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC Linear Technology LTC6655BHLS8-5.000	U7	OPA388	LTC2050IS8PBF	SOIC-8	Zero-Drift Operational Amplifi ers	Linear Technology	OPA388
	U8	MAX6126AASA25+	Voltage Reference	SOIC-8	Series, Buried Zener Reference. Fixed 2.5V 0.04% 15mA 8-SOIC	Analog Devices Inc./Maxim	MAX6225ACSA+
VD1 2.5K-2.5K LM50 SOT-23 SOT-23 Voltage Divider	U9	LTC6655BHLS8-5.0	Voltage Reference	LCC-8_LS8	Series Voltage Ref. IC Fixed 5V 0.025% 5 mA 8-CLCC	Linear Technology	LTC6655BHLS8-5.000
	VD1	2.5K-2.5K	LM50	SOT-23	SOT-23 Voltage Divider		