

Description	Manufacturer	Manufacturer Part Number	Component Designators	Component Count
Capacitor Ceramic X7R 100nF 16V 10% 0402	Generic	X7R-100n-16V-10%-0402	C1, C2, C13, C32, C41, C51, C55, C56, C59, C62, C65, C66, C67, C70, C71, C74, C75, C87, C95, C96, C97, C98, C100, C102, C105, C106, C109, C111, C114, C115, C118, C120, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C133, C134, C138, C143, C148, C149, C150, C151, C152, C153, C154, C155, C161	55
Capacitor Ceramic NP0 100pF 50V 10% 0402	Generic	C-NP0-100p-50V-5%-0402	C14, C53, C54, C166, C167	5
Capacitor Ceramic X5R 1nF 50V 10% 0402	Generic	X7R-1n-50V-10%-0402	C15, C52, C58, C61, C64, C69, C89, C90, C91, C92, C93, C94, C99, C103	14
Capacitor Ceramic X7R 1nF 2KV 10% 1206	Generic	X7R-1nF-2KV-10%-1206	C16, C136, C137, C156, C157, C158, C159, C160	8
Capacitor Ceramic X5R 10uF 10V 20% 0603	Generic	X5R-10u-10V-20%-0603	C18, C104, C107, C113, C116, C139, C140, C141, C142, C144, C145, C146, C147, C170	14
Capacitor Ceramic X7R 10nF 50V 10% 0402	Generic	X7R-10nF-50V-10%-0402	C19, C33, C42, C45, C108, C110, C117, C119	8
Capacitor Ceramic X5R 47uF 10V 20% 0805	Generic	X5R-47u-10V-20%-0805	C23, C24, C37, C38, C76, C77	6
Capacitor Ceramic X7R 100nF 50V 10% 0402	Generic	X7R-100n-50V-10%-0402	C3, C17, C28, C36, C101	5
Capacitor Ceramic X5R 10uF 50V 20% 1206	Generic	X5R-10uF-50V-20%-1206	C4, C5, C6, C21, C22, C30, C31, C44, C47	9
Capacitor Ceramic X5R 100uF 10V 20% 1210	Generic	X5R-100uF-10V-20%-1210	C57, C60, C63, C135, C168, C169	6
Capacitor Ceramic X5R 22uF 10V 20% 0805	Generic	X5R-22uF-10V-20%-0805	C7, C50	2
Capacitor Ceramic NP0 15pF 50V 5% 0603	Generic	NP0-15p-50V-5%-0603	C78, C79, C80, C82, C83	5
Ceramic Capacitor 4.7uF 10V 10% 0603	Generic	X5R-4.7u-10V-10%-0603	C8, C9, C10, C11, C12, C20, C29, C85, C86, C132	10
Capacitor Ceramic X5R 1uF 16V 20% 0402	Generic	X5R-1uF-16V-20%-0402	C88	1
Battery Holder	Keystone	3000	BAT1	1
Header male, 1x2 Pins, 2.54 mm pitch	Assmann	AW140E-GG02B	JP1, JP2, JP3	3
MXM Socket - 4 additional pads	JAE	MM70-314B1-2-R300	X1	1
MicroSD card holder with card detect, Push-Push type	Würth Elektronik	693071010811	X10	1
RJ45 Ethernet Connector 1000BaseT Connector	LINK-PP	LPJK7436A98NL	X11	1
3.5mm Stereo Jack SMD With Detect Contact	CUI	SJ-43516-SMT-TR	X12	1
Header 2x10 pin 2.54mm pitch, Male	EVE	SL20G2	X14	1
0.50mm Pitch FFC/FPC Vertical RGB connector	Hirose	FH12-40S-0.5SVA(54)	X15	1
Touch Connector	Hirose	DF13C-6P-1.25V(51)	X16	1
HDMI 2.X Connector Right Angle THT	SwitchCraft	RAHHD19TR	X17	1
Header Male, 2X20 Pins, 1.25 mm pitch, shrouded	Hirose	DF13EA-40DP-1.25V(52)	X19	1
	SwitchCraft	RAPC722X		
Header Male, 2x3 Pins, 2.54mm pitch	EVE	SL6G2	X20	1
Header Male, 2x5 Pins, 2.54mm pitch	EconConnect	SLSD10GA	X21, X22	2

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Mini PCIe Connector	Molex	67910-5700	X23, X25	2
FFC/FPC, 1 Sided Contact, 0.50mm Pitch, 10 pins	Hirose	FH12-10S-0.5SVA(54)	X24	1
6 Contacts Mini Sim Card Holder	Würth	693012040811	X26	1
Header male, 2x18 Pins, 2.54 mm pitch	EconConnect	SLSD36GA	X27	1
FFC/FPC Connector, 24 Position, Top and Bottom contact, Pitch 0.020" (0.50mm) Surface Mount, Right Angle	Würth Elektronik	687124182122	X28	1
	Samtec	SSW-103-01-G-D		
Header male with friction lock, 1x3 pins, 2.54mm pitch	Molex	2211-2032	X6	1
USB 2.0 Type A Connector Vertical	Leamax	3210-SRWE	X7	1
USB 3.0 Type A Stacked Right Angled	Amphenol	GSB311231HR	X8	1
Micro USB 2.0 OTG Connector	Molex	47589-0001	X9	1
Crystal	Micro Crystal	CC4V-T1A-32.768kHz-12.5pf-20ppm	OSC1	1
Bidirectional ESD protection	Littelfuse	SMAJ30CA	D1	1
Zener Diode, Vz=15V, 300mW, SOD-323	ON Semiconductor	MM3Z15VT1G	D14, D16	2
BIDIRECTIONAL TVS DIODE 5V SOD923	Diodes Inc	D5V0L1B2S9-7	D20, D21, D22, D25, D26, D27, D28, D40, D41, D17, D42, D43, D44, D45	14
Diode Schottky 60 V 2.4A Surface Mount DO-220AA (SMP)	Vishay	V3P6-M3/85A	D2	1
		V3P6-M3/84A		
TVS Array low cap	Nexperia	PESD2IVN24-T	D24, D31	2
BAT54 Schottky Diode	ON Semiconductor	BAT54CLT1G	D3, D18, D19	3
4 CHANNEL LOW CAPACITANCE TVS DIODE ARRAY	Diodes Incorporated	DT1240-04LP-7	D13, D15, D4, D23, D29, D30	6
ESD Protection Diode	ON Semiconductor	ESD9101P2T5G	D32, D33, D5, D6, D7, D8, D9, D10, D11, D12, D34, D35, D36, D37, D38, D39	16
Fast Fuse, Rated 10A, 63V(DC), 1206 (3216 Metric)	Schurter	3413.0328.24	F1	1
		3413.0328.26		
		3413.0328.11		
		3413.0328.22		
LDO regulator, Vout = 5V, Iout(max) = 0.4A, Vin = 5.5V to 40V, SOT-223	ON Semiconductor	NCV4274CST50T3G	IC1	1
5 kV rms/3 kV rms, Signal and Power Isolated, CAN Transceivers for CAN FD	Analog Devices	ADM3057EBRWZ	IC10, IC11	2
Multichannel RS-232 Compatible Line Driver/Receiver	TI	MAX3243IDBR	IC12, IC13	2
EEPROM, 2Kbit (256 x 8), TSSOP-8 package	Microchip / Atmel	AT34C02D-XHM-B	IC14	1
6A (Iout(max)) Synchronous Buck Regulator, QFN-22L (4mmx4mm), Vin = 6.5V to 28V	A&O	AOZ2260AQI-10	IC15	1

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LDO TO 2A	Semtech	SC4215ASTRT	IC16, IC17	2
High Side Load Switch, TDFN4 1.2 x 1.6	Microchip Micrel	MIC94073YMT	IC18, IC19, IC20, IC21, IC22	5
8A (Iout(max)) Synchronous Buck Regulator, QFN-22L (4mm x 4mm), Vin = 6.5V to 28V	A&O	AOZ2261AQI-10	IC2	1
AP22653W6-7 LDO Regulator	Diodes Incorporated	AP22653W6-7	IC23	1
Push Button On/Off Controller IT range	Linear	LTC2954ITS8-2#PBF	IC3	1
NC7SZ126M5X Buffer Three-State Output	Fairchild Semiconductor	NC7SZ126M5X	IC4	1
RTC M41T0M6	ST Microelectronics	M41T0M6F	IC5	1
Dual High Side Switch With OC_DET 500mA/CH	Texas Instruments	TPS2052BD	IC6	1
1A Dual High Side Switch (Current Limiting (Fixed), Over Temperature, Reverse Current, UVLO)	Texas Instruments	TPS2066CD	IC7	1
NCP511SN33T1G LDO Regulator	ON Semi	NCP511SN33T1G	IC8	1
Buffer, I2C ReDriver 1 Channel 1MHz 8-TSSOP	NXP	PCA9617ADPJ	IC9	1
Power Supply FB 10A	Laird	35F0121-0SR-10	L1, L2	2
Ferrite Bead	Generic	220R-2A-25%-0603	L11, L12, L16, L24, L25, L26	6
33R@100MHz 3A EMI FILTER	Murata	BLM18PG330SN1D	L27, L28	2
Ferrit Bead	Generic	600R-1A-25%-0603	L3, L10, L18, L19	4
Inductance 1.5uH, 20%, Irms=16A, Isat=33A, DCR=4.6 mOhm	Pulse Electronics	PA4342.152NLT	L4	1
Inductance 3.3uH, 20%, Irms=10A, Isat=18.6A, DCR=11.8 mOhm	Vishay	IHLP4040DZER3R3M01	L5	1
Common Mode Choke High Speed 90R 330mA	Murata	DLW21SN900SQ2L	L8, L13, L15	3
Standard-LEDs - SMD Green Clear, Right Angled	Kingbright	KPA-1606CGCK	LED1, LED10, LED11, LED12, LED13	5
Surface mount LED green 20mA	Avago	HSMG-C190	LED3	1
Standard-LEDs - SMD Green/Red Clear	LiteON	LTST-S326KGJRKT	LED4, LED5	2
Shunt Jumper	Assmann	AKSPT/G-BLACK	JMP2, JMP3	2
Mini PCI-E Latch with Cover	Molex	48099-5701	MECH20, MECH21, MECH1	3
Broaching Nut stand offs for plastics	PEM	KFE-M3-3ET	MECH4, MECH5, MECH6	3
Broaching Nut stand offs	PEM	KFE-M3-8ET	MECH7, MECH8	2
PCB	Generic	PCB Ixora V1.3.002	PCB1	1
Barcode Label	Generic	Label	LBL1	1
Resistor 560 ohm 63mW 5% 0402	Generic	560R-63mW-5%-0402	R1, R44, R45, R66, R67, R123, R138, R139, R140	9
Resistor 100 Kohm 63mW 5% 0402	Generic	100K-63mW-5%-0402	R11, R12, R13, R20, R26, R27, R30, R31, R32, R34, R37, R43, R51, R125, R147, R158, R196, R198, R210	19
Resistor 40.2 Kohm 63mW 1% 0402	Generic	40.2K-63mW-1%-0402	R132, R143, R204	3

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Resistor 20 Kohm 63mW 1% 0402	Generic	20K-63mW-1%-0402	R133, R144, R206	3
Resistor 100 ohm 63mW 5% 0402	Generic	100R-63mW-5%-0402	R148	1
Resistor 2.2 Kohm 63mW 5% 0402	Generic	2.2k-63mW-5%-0402	R149	1
Resistor 1 Mohm 63mW 5% 0402	Generic	1M-63mW-5%-0402	R168, R169, R170, R175, R176, R205	6
Resistor 100 Kohm 63mW 5% 0603	Generic	100K-63mW-5%-0603	R172, R174	2
Resistor 10 Kohm 63mW 5% 0402	Generic	10K-63mW-5%-0402	R2, R8, R18, R19, R49, R105, R111, R183, R186, R189, R190, R191, R194, R195, R200, R201, R202, R48, R52, R57, R59, R65, R85, R88, R89, R116, R134, R154, R159, R160, R167, R3, R209	33
Resistor 27 Kohm 63mW 5% 0402	Generic	27K-63mW-5%-0402	R203	1
Resistor 510 Kohm 63mW 1% 0402	Generic	510K-63mW-1%-0402	R21	1
Resistor 8.87 Kohm 63mW 1% 0402	Generic	8.87KR-63mW-1%-0402	R23	1
Resistor 470 Kohm 63mW 1% 0402	Generic	470K-63mW-1%-0402	R33, R124	2
Resistor 150 ohm 63mW 1% 0402	Generic	150R-63mW-1%-0402	R38, R70, R71	3
Resistor 22 ohm 63mW 5% 0402	Generic	22R-63mW-5%-0402	R40, R46, R47, R79, R80, R82, R130, R131, R141, R142	10
Resistor 1.8 Kohm 63mW 1% 0402	Generic	1.8K-63mW-1%-0402	R41, R42, R77, R78, R192, R193	6
Resistor 0 ohm 63mW 5% 0603	Generic	0R-63mW-5%-0603	R5, R10, R15, R17, R28, R35, R53, R84, R87, R91, R96, R97, R100, R103, R118, R119, R127, R128, R137, R157, R207	21
Resistor 0 ohm 63mW 5% 0402	Generic	0R-63mW-5%-0402	R54, R55, R56, R81, R104, R106, R112, R115, R145, R150, R151, R152, R153, R156, R161, R162, R164, R165, R184, R185, R187, R188, R197	23
Resistor 1 Kohm 63mW 5% 0402	Generic	1K-63mW-5%-0402	R58, R129	2
Resistor 330 Kohm 63mW 1% 0402	Generic	330K-63mW-1%-0402	R6	1
Resistor 47 Kohm 63mW 1% 0402	Generic	47KR-63mW-1%-0402	R7, R22	2
Resistor 15 Kohm 63mW 1% 0402	Generic	15k-63mW-1%-0402	R9	1
Resistor Array 22 R 63mW 5% 4x0603	Generic	22R-63mW-5%-4x0603	RA1, RA2, RA3, RA4, RA5, RA6, RA7, RA8, RA9, RA10, RA11, RA12, RA13, RA14, RA15, RA16, RA18, RA19, RA20, RA21, RA23, RA25, RA27, RA29	24
Tactile Switches 50MA@12VDC 160G OF	E-Switch	TL3340AF160QG	SW1, SW2, SW3	3
N-Channel MOSFET Enhancement Mode	Diodes Inc.	BSS138-7-F	T1, T4, T9, T11	4
Bipolar (BJT) Transistor PNP 65V 100mA 100MHz 250mW Surface Mount SOT-23-3	NXP	BC856B-SOT23	T17	1
N- and P-Channel MOSFET 20V	ON Semi	NTZD3155CT1G	T3	1
p-channel MOSFET, DMP2022LSS-13	Diodes Inc.	DMP2022LSS-13	T5	1
2x N-Channel MOSFET 20V	Vishay	SI1024X-T1-E3	T7, T12, T13, T14, T15, T16	6

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P-Channel MOSFET, 40V, 9.1A(Ta), Vgss +/-25V, SOIC-8	Diodes	DMP4015SSS-13	T8, T10	2
	Generic	No Physical Component	C25, C26, C39, C40, C72, C162, C163, C164, C165, C27, C34, C35, C46, C48, C49, C68, C73, C81, C84, C112, C121, JMP1, JMP4, JP4, L6, L7, L20, LED2, MECH2, R4, R14, R29, R36, R50, R69, R83, R86, R90, R98, R101, R120, R126, R171, R173, R177, R178, R179, R180, R24, R25, R92, R93, R94, R95, R99, R102, R155, R39, R181, R182, R60, R61, R62, R63, R64, R68, R72, R73, R74, R75, R76, R109, R110, R121, R122, R135, R136, R163, R166, R199, R107, R108, R113, R114, R117, T6, TP5, TP6, X3, X4, X18, C43, R16, R208, R146	95