Comment	Description	Designator	Footprint	Footprint	Quantity
Button	Push button	B1, B2	IP_BTN_SMD	Button_IP	2
100nF	Capacitor	C1, C2, C45, C46, C47, C51, C52, C54, C55, C58, C60, C62, C63, C64, C66, C67, C68, C70, C73, C74, C76, C77, C78, C79, C80, C81, C85, C87, C89, C91, C92, C95, C97, C98, C103, C101, C102, C105, C104	IP_2005_CAP_SBS	CAP	38
4.7nF	Capacitor	C3, C4, C18	IP_2005_CAP_SBS	CAP	3
10uF	Capacitor	C5, C6, C8, C9, C10, C12	IP_2005_CAP_SBS	CAP	6
2.2nF	Capacitor	C11, C32, C33	IP_2005_CAP_SBS	CAP	3
220 uF	Aluminum Electrolytic Capacitor, 63 V, - 40 to 85 degC, 2-Pin CAP, RoHS	C14	NXC-25/9-10x12.5-2_V	CAP-1217-00031-1	1
220nF	Capacitor	C15, C16, C23	IP_2005_CAP_SBS	CAP	3
T491X107K035AT	Tantalum Surface Mount Capacitor, 100 uF, 35 V, - 55 to 125 degC, 2-Pin Molded, RoHS, Tape and Reel	C17	KEMET-T491-B1_L	CAP-2000-07304-1	1
100 uF	CAP ALUM 47UF 20% 50V THRUHOLE, 105,5mX5mX5H10.0-5	C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42	FP-LXH50E20-MFG	CAP-35379-000008-1	24
CAP_AC_68uF	Cap Film 68uF 100V PST 10% (15.5 X 22 X 36.5mm) Radial, C Series LQG, Bulk	C44	Capacitor_AC_68_uF	CAP_AC_68uF	1
220nF	Capacitor	C46, C70	IP_2005_CAP_SBS	CAP	2
22nF	Capacitor	C48	IP_2005_CAP_SBS	CAP	1
1uF	Capacitor	C51, C52, C55, C57, C58, C61, C65, C66, C68, C69, C82, C86, C88, C90	IP_2005_CAP_SBS	CAP	16
47nF	Capacitor	C50	IP_2005_CAP_SBS	CAP	1
68nF	Capacitor	C69	IP_2005_CAP_SBS	CAP	1
15pF	Capacitor	C72	IP_2005_CAP_SBS	CAP	1
2.2uF	Capacitor	C75, C77, C79, C81, C83, C84	IP_2005_CAP_SBS	CAP	6
Connector	2pin connector	CON1	IP_2100N32_SMT_2Bd_Wire_W	Connector_2pin	1
Back_STDN-3A		CON#1, CON#2	Back_STDN-3A20-A20	Back_STDN-3A	1
MBR0530T1G	onsemiCHANDDIETAG Power Rectifier, 0-Pin DPAK, Pb-Free, Tape and Reel	D1, D2, D3, D4, D5	DIODE-DPAK-3-300C-PL_V	DIOD-10155-00302-1	5
KBM5-C380	Chip LED, Green, 2.2 V, - 40 to 85 degC, 2-Pin 1608, RoHS, Tape and Reel	D51, D52, D56, D58, D57	KUNG-HSMX-C192_V	LED_0_CMP-1733-00015_0_CMP-1733-00015_0	5
KSD-H5M5-C190	LED Uni-Color Red, 50 mW, 20 mA, - 40 to 85 degC, 2-Pin 1608, RoHS, Tape and Reel	D53, D54, D55, D59	KUNG-HSMX-C192_V	LED-CMP-2003-00027-1	4
Fuse	0775125.V(6A 63V 37/50/100) Automotive Fuse, 63V 125 Fuse, 6A, Fast Acting, 32 A, - 40 degC, 2-Pin, 4Pin	F1		Fuse_Fuse_125_327.3-7.55-3021	1
BLM18EG221TN1D	Chip Ferrite Bead, 0603, 220Ω @ 100MHz, 20%, 0.35Ω, 0.2A	FB1	IP-BLM18-0_10-FE_S-PO_A	CMP-0686-00066-3	1
1N4148W	Clamp Diode, Fast Switch Surface Mount 0-402	FC3	IND-P-D0G-3-0_M-duplicate1	1N4148W	1
USB_MIN	MINI USB B Type, 5-Pin SMD, RoHS, Tape and Reel	J1	FCI-10033640-N2632LF_V	USB_MIN_CMP-3898-00003-3	1
61800928121	Female RJ45 Connector with Integrated Magnetics, 8-Position, Angled, 8pins	J2	61800928121	CMP-1502-00200-1	1
61301021121	2x2 Vertical Pin Header SMT-PAD, Pitch-2.54 mm, Dual Row, 16 pins	J3, J4	61301021121	CMP-1502-01307-1	2
1714956	PC Terminal Block, Pitch-5.08 mm, 1 x 2 Position, Height 31.5 mm, Tail Length 5.1 mm, RoHS, Bulk	J5, J6, J7, J8, J_Aux_GND, J_Aux_Out, J_Fuse_GND, J_Fuse_In, J_Input_GND, J_Input_PWR	Terminal-PHDS-1714956_V	Terminal-CMP-2000-00767-1	10
JUMPER	Jumper Wire	J#1, J#2	IP_2100N32_TH3H3_2P-Bulkbar	JUMPER	2
RELAY_SRD-05VDC-SL-C	5V Trigger Relay Module For Arduino And Raspberry Pi 5V Trigger Relay Module For Arduino And Raspberry Pi	K	IP_2100N32_2MM_80	RELAY_SRD-05VDC-SL-C	1
LP-s4-2.0-A	Inductor Power Wirewound, 4.5uH 30% 1000mA Ferrite Core, Shielded SMD Automotive 1.0	L1	Teleonic_BE0379-4L4T3-M - duplicate	Inductor_BE0379-4L4T3-M	1
Coil	10uH, 10.0uH Inductor	L2, L3	Teleonic_BE_R8R8T6	Coil, Teleonic	2
Header 8	Header, 8-Pin	P2, P3, P4, P5	2x2R1X8	Header 8	4
68305E-6	Male Header, Pitch-2.54 mm, 1 x 6 Position, Height 10.03 mm, Tail Length 3.56 mm, -55 to 105 degC, 6pin	P6, P7	TECD-68305E-6_V	CMP-2000-05801-1	2
61300811121	Male Header SMT-PAD, Pitch-2.54 mm, Single Row, 8 pins	P8, P9	61300811121	CMP-1502-01376-1	2
Output Connector	4pin connector	P10	IP_2100N32_SMT_2Bd_Wire	Connector_2pin	1
Connector	4pin connector	P13	IP_2100N32_SMT_2Bd_Wire	Connector_2pin	1
BSP41P	P-Channel SPMOS Transistor, 60 V, Transistor, - 60 V, 100 mA, 2.9 A ID, - 55 to 150 degC, PG-SOT223-3-73, Reel, Green	Q1	IND-PG-SOT223_SO-F3_M	CMP-1098-00021-1	1
FDMN8B5-100P5	N-channel 100 V 8.0 mΩ standard level MOSFET in TDSON	Q2, Q3, Q4, Q5, Q6, Q7	IP-TO-220AB-MFG	NMOS-2	6
BC548BRL1G	Amplifier Transistors NPN Silicon, 3-Pin TO-92, Pb-Free, Tape and Reel	Q8	DIOD-TO-92-3-09-01_KM_BL	CMP-1048-01803-1	1
BC548B	Amplifier Transistors NPN Silicon, 3-Pin TO-92, Pb-Free, Tape and Reel	Q9, Q10, Q11	DIOD-TO-92-3-09-01_KM_BL	CMP-1048-01803-1	3
4.7K	Resistor	R1, R2, R3, R4, R5, R6, R7, R10, R11, R12, R13	IP_2005_RES	RES	13
1K	Resistor	R8, R9, R88, R89, R91, R98, R99, R100, R101, R104, R102	IP_2005_RES	RES	13
5.1k	Resistor	R14, R15	IP_2005_RES	RES	2
10k	Resistor	R16	IP_2005_RES	RES	1
680	Resistor	R17, R25, R49	IP_2005_RES	RES	3
10K	Resistor	R18, R19, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R41, R42, R43, R44, R45, R46, R47, R48, R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85	IP_2005_RES	RES	38
120k	Resistor	R20	IP_2005_RES	RES	1
100k	Resistor	R21	IP_2005_RES	RES	1
33k	Resistor	R22, R23, R87, R86, R76, R81, R84	IP_2005_RES	RES	7
470k	Resistor	R24	IP_2005_RES	RES	1
820k	Resistor	R26	IP_2005_RES	RES	1
1.5k	Resistor	R38, R39	IP_2005_RES	RES	2
1.8k	Resistor	R40, R90	IP_2005_RES	RES	2
1.8k	Resistor	R52, R53, R54, R55	IP_2005_RES	RES	4
1k	Resistor	R56, R57, R58	IP_2005_RES	RES	3
470	Resistor	R59, R60	IP_2005_RES	RES	2
470k	Resistor	R68	IP_2005_RES	RES	1
1.8k	Resistor	R69	IP_2005_RES	RES	1
470	Resistor	R92	IP_2005_RES	RES	1
Transformator	Pulse Transformer for LAN interface, 1.5 kV, - 40 to 85 degC, 8-Pin SMD, RoHS, Tape and Reel	T1	TDK-ALT3232_V	CMP-2000-01771-1	1
TM4320F3300WFCT	Fusion Microcontroller, High Efficiency 32-bit CPU, 100 kB, 80 MHz, 0Pin, 0-C1, 10-C3-PWM, 64 GPIO, 3.3V, -40 to 125 degC, 100-Pin LQFP-EP, Green (RoHS & no Sb/Br)	U1	F28335_N	CMP_U0_CMP-5649-00002-2	1
MCP6T00-E/TO	MINI OPA AMUDO-Amplifier, 1-Pin SOT-23, Reel	U2, U3, U4, U5, U7, U8	IP-C04-101-MFG	CMP-0160-00001-2	6
MCP6030T-I/OT	1 MHz, Low Power Operational Amplifier, 5-Pin SOT-23, Industrial Temperature, Tape and Reel	U6, U11	SOT-23-OT5_M	CMP-0187-00689-2	2
74F324M	Low Power Quad Operational Amplifier, 14-pin SOIC150, RoHS	U9	IP_SOIC14	74F324M	1
74F08DRG4	Quad 2-Input AND Gates, 14-Pin SOIC, Reel	U10	IP-TSI-07-IPC_J	CMP-1132-00301-2	1
TJA1038-20 V50	Stop-Ocean-DC/DC-Controller, - 40 to 125 degC, PG-DSO-14-1, Reel, Green	U12	IND-PG-DSO-14-1_M	CMP-1050-00004-1	1
74F08DRG4	Low Offset Voltage Dual Comparator, 8-Pin SOIC, Pro 70 degC, RoHS, Tape and Reel, Pb-Free, Tape and Reel	U13, U21	DIOD-SOIC-8-7E1-01_V	CMP-1305-00068-1	2
FT231	USB UART Asynchronous Serial Data Transfer Chip, 28-pin SSOP, Tape and Reel	U14	SSOP-28_N	FT2x-CMP-28-5579-00028-2	1
2EDN8524RXUMA2	INTEGRATED PUMA2 Gate Driver DR	U15, U16, U17	VSNP-WSDC-8_N	INTE_DRVER_2EDN8524RXUMA2	3
FX27BLCB-05B-PF7	HIROSE DUPONT-HDF-SERIES	U18, U19	F-C8-5-PF7-MFG	FX27BLCB-CMP-00012-00004-1	2
MCP2551-I/P	Dual Channel CAN Transceiver, 8-Pin PDIP, Industrial Temperature	U22	PDIP300-P8	CMP-0166-00031-2	1