

Comment	Description	Designator	Manufacturer Part Number	Quantity
0.1uF	CL05 Series 0.1 uF 16 V ±10% Tolerance X7R SMT Multilayer Ceramic Capacitor	C1, C4, C8, C10, C11, C12, C13, C19, C21, C23, C25, C27, C29, C31, C33, C43, C50, C52, C54, C55, C57, C58, C60, C63, C64, C65, C66, C75, C83, C84, C85, C86	CL05B104KO5NNNC	32
110pF 5% COG	CAP CER 110PF 50V 5% NPO 0402	C7, Cg2	C0402C111J5GAC7867	2
2nF 5% COG	CAP CER 2000PF 50V 5% NPO 0603	C14, C46	GRM1885C1H202JA01D	2
100pF	Cap Ceramic 100pF 50V COG 5% SMD 0402 125°C Cardboard T/R	C18, C20, C22, C24, C26, C28, C30, C32, C49, C51, C82	CL05C101JB5NNNC	11
10nF 16V 2% PPS	Capacitor 0.01 uF 16 Volt PLYPH 2% 2 X 1.25 X 1.1mm Surface Mount Tape and Reel	C34, C35, C36, C37, C38, C39, C40, C41, C42, C44, C47	ECH-U1C103GX5	11
15nF 5%	CAP CER 0.015UF 35V NPO 0603	C45	C1608C0G1V153J080AC	1
240pF 5% COG	Multilayer Ceramic Capacitors MLCC - SMD/SMT 240pF 50Volts COG 2%	C48	C0402C241J5GAC7867	1
10uF 16V	Cap Multilayer Ceramic 0805 10uF 16V ±10% X7R CL21 Series	C56, C59, C62, C67, C81	CL21B106KOQNNNG	5
1uF 16V	CAP CER 1UF 16V X7R 0603	C70, C76, C78, C79, C80	CL10B105MO8NNWC	5
22uF Tant	Cap Tant Solid 10uF 10V B CASE 10% (3.5 X 2.8 X 1.9mm) Inward L SMD 3528-21 2.5 Ohm 125C T/R	C71	TAJB106K010RNJ	1
220uF	Cap Tant Solid 220uF 6.3V B CASE 20% (3.5 X 2.8 X 1.9mm) SMD 3528-21 0.045 Ohm 105°C T/R	C72, C74	T520B227M006ATE045	2
68pF	Cap, 68Pf, 25V, 5%, COG/Np0, 0402	CP	8.85E+11	1
68nF	Cap Cer 0.068UF 16V X7R 0402	CZ	CC0402KRX7R7BB683	1
1200pF 10%	CAP CER 1200PF 100V 5% X7R 0603	C_NFB	CL10B122KB8NNNC	1
BAV70LT1G	Dual Switching Diodes, Common Cathode, 3-Pin SOT-23, Pb-Free, Tape and Reel	D2	BAV70LT1G	1
MBR120	MBR120LSFT Series 20 V 1 A Surface Mount Schottky Power Rectifier - SOD-123FL	D5	MBR120LSFT1G	1
Bourns SRF0703-220M	Ind Power Shielded Wirewound 10uH/40uH 20% 100KHz Ferrite 2.08A/1.04A T/R	L1, L2	SRF0703-220M	2
Hirose DF13-12P-1.25H(76)	DF13 Series 12 Position Single Row 1.25 mm Right Angle SMT Pin Header	P6	DF13-12P-1.25H(76)	1
Molex 53261-0371	Conn Shrouded Header HDR 3 POS 1.25mm Solder RA SMD PicoBlade Embossed T/R	P21, P36	53261-0371	2
RK7002BM	N-Channel 60 V 0.2 W Surface Mount 2.5 V Drive Silicon Power Mosfet - SOT-23	Q1, Q2, Q3, Q4, Q5	RK7002BMT116	5
OR	Res Thick Film 0603 0 Ohm Molded SMD SMD Punched Carrier T/R	R4, R6, R53, R54, R69, R70, R94, R97, R110, R111, R113, R114, R115, R116, R117, R118, RC5	ERJ-3GEY0R00V	17
1k 1%	YAGEO (PHYCOMP) RC0402FR-071KL RESISTOR, RC32H 0402 1K	R9, R10, R11, R12, R13, R14, R44, R55, R57, R58, R59, R61, R62, R67, R68, R71, R72, R73, R74, R76, R77, R82, R87, R88, R91, R92, R108, R109	RC0402FR-071KL	28
10k2 1%	Thick Film Resistors - SMD 10.2K OHM 1%	R15, Rg2	RC0402FR-0710K2L	2
3k4 1%	Thick Film Resistors - SMD 3.4K OHM 1%	R16	RC0402FR-073K4L	1
17k8 1%	Thick Film Resistors - SMD 17.8K OHM 1%	R17	RC0402FR-0717K8L	1
10k7 1%	RES SMD 10.7K OHM 1% 1/16W 0402	R18	RC0402FR-0710K7L	1
442R 1%	Thick Film Resistors 442 OHM 1%	R21, R22	RMCF0402FT442R	2
560R 1%	RES SMD 560 OHM 1% 1/16W 0402	R23	RC0402FR-07560RL	1
100k 0.1%	RES SMD 100K OHM 0.1% 1/16W 0402	R24, R25, R26, R27, R28, R29, R30, R31, R32, Rs,bat	RNCF0402DTE100K	10
162k 1%	Thick Film Resistors - SMD 0402 162Kohms 1% Tol	R42, R43, R51	RC0402FR-07162KL	3
4k42 1%	Thick Film Resistors - SMD 4.42K OHM 1%	R45, R48, R50	RC0402FR-074K42L	3
6k65 1%	Thick Film Resistors 6.65K OHM 1%	R49	RC0402FR-076K65L	1
232k 1%	Thick Film Resistors - SMD 0402 232Kohms 1% Tol	R52	RC0402FR-07232KL	1
10k	Res Thin Film 0402 10K Ohm 0.5% 0.063W(1/16W) ±25ppm/C Molded SMD Automotive Punched T/R	R56, R60, R65, R75, R78, R79, R80, R81, R83, R84, R95, R102, R103	RMCF0402FT10K0	13
2k2 5%	RES SMD 2.2K OHM 5% 1/16W 0402	R63, R106, R107	RC0402JR-072K2L	3
1k1	RES SMD 1.1K OHM 1% 1/16W 0402	R64	CRCW04021K10FKED	1
1M65 1%	Thick Film Resistors - SMD 1.65M OHM 1%	R66	RMCF0402FT1M65	1
91R 5%	Thick Film Resistors - SMD 91 OHM 5%	R85, R86, R89, R90	RMCF0402JT91R0	4
768k	Thick Film Resistors - SMD 0402 768Kohms 1% Tol	R98	ERJ-2RK7683X	1
249K	RES SMD 249K OHM 1% 1/16W 0402	R99	MCR01MRTF2493	1
29k4	Thick Film Resistors - SMD 29.4K OHM 1%	R100	RC0402FR-0729K4L	1
118k	RES SMD 118K OHM 1% 1/16W 0402	R101	CRCW0402118KFKED	1

100R 5% 1/4W	Res Thick Film 0603 100 Ohm 5% 1/4W +/-200ppm/8C Molded SMD SMD Paper T/R	R104, R105	ESR03EZPJ101	2
1k5 0.1%	RES SMD 1.5K OHM 0.1% 1/16W 0402	Rg	RT0402BRD071K5L	1
MUX36508	36-V, low-capacitance, low-leakage-current, precision, analog multiplexer 16-WQFN -40 to 125	U1, U4	MUX36508IRJR	2
OPA2141	10 MHz, Single Supply, Low Noise, JFET Precision Amplifier, 4.5 to 36 V, -40 to 125 degC, 8-pin SOP (DGK8), Green (RoHS & no Sb/Br)	U5	OPA2141AIDGKT	1
AD8220	SP Amp Instrumented Amp Single Rail to Rail O/P ±18 Volt 36 Volt 8-Pin MSOP	U6	AD8220BRMZ	1
OPA4141	10 MHz, Single Supply, Low Noise, JFET Precision Amplifier, 4.5 to 36 V, -40 to 125 degC, 14-pin SOP (PW14), Green (RoHS & no Sb/Br)	U7	OPA4141AIPW	1
ADXL345	3-Axis, +/-2 g / +/-4 g / +/-8 g / +/-16 g Digital Accelerometer with Digital Output, 1.6 KHz BW, Industrial, 14-pin LGA, Tray	U8	ADXL345BCCZ	1
MIC7221	MIC7221 Series Single 10 V 0.5 pA IttyBitty? Rail-to-Rail Comparator - SOT-23-5	U10	MIC7221	1
DRV2605L	Haptic Driver for ERM and LRA with Built-In Library and Smart Loop Architecture 10-VSSOP -40 to 85	U15	DRV2605L	1
REF3333AIDBZR	30 ppm / degC Drift, 3.9 uA Voltage Reference, -40 to 125 degC, 3-pin SOT-23 (DBZ), Green (RoHS & no Sb/Br)	U16	REF3333AIDBZR	1
3-Terminal Pico Blade Female Wire-To-Board			?0510210300?	2
Pico Blade Crimp Connector			?0500588000?	6
Hirose Female Wire-To-Board			DF13-12S-1.25C?	1
Hirose Low Insertion Force Gold Crimp Pin			DF13G-2630SCFA?	12
LED	LED; Red; 30mcd; 0.126In.Dia.; T-1; 150mA; 2V; 635nm; 60deg; Diffused; 85 to 85degC	D4, D6, D7, D8, D9	OVLLR8C7	5
ESP-12S	ESP-12S	A1		1
CM-01B				
100k DNP	THIN FILM, RESISTOR, 100KOHM, 63mW, ±0.5%	R5	ERA-2AED104X	1
10M 1%	YAGEO (PHYCOMP) RC0402FR-0710ML RESISTOR, 0402 0.063W 1% 10M	R33, R34, R35, R36, R37, R38, R39, R40, R41	RC0402FR-0710ML	9
310-105	Precision Microdrives 310-105 10mm Vibration Motor - 4mm Type	P24	310-105	1
Omron B3U-3000P	TACTILE SWITCH, SIDE ACTUATED, SMD	SW1,SW2,SW3	B3U-3000P	1
MKL02Z32VFG4	32 Bit Microcontroller, Kinetis L Series Ultra Low Power, ARM Cortex-M0+, 48 MHz, 32 KB, 4 KB, 16	U3	MKL02Z32VFG4	1
LiPo	2 Positions Header, Shrouded Connector 0.079 (2.00mm) Surface Mount	BT1	S2B-PH-SM4-TB(LF)(SN)	1
Microsemi UPS115UE3/TR7	Standard Recovery Diode And Rectifier	D10	UPS115UE3/TR7	1
33R	Thick Film Resistors - SMD 1/16W 33ohm 1%	R1, R2	AC0402FR-0733RL	2
120	Chip Ferrite Bead for Power Lines, 120 Ohm, 2000 mA, -55 to 125 degC, 1 x 0.5 x 0.55 mm SMD, Tape and Reel	FB3, FB4	BLM15PX121SN1D	2
600	Chip Ferrite Bead for Power Lines, 600 Ohm, 900 mA, -55 to 125 degC, 1 x 0.5 x 0.55 mm SMD, Tape and Reel	FB1, FB2	BLM15PX601SN1D	2
470R	Thick Film Resistors - SMD 0402 470ohms 5% Tol, Thick Film Resistors - SMD 0402 470ohms 5% Tol, RES SMD 470 OHM 1% 1/16W 0402	R3, R7, R8	ERJ-2GEJ471X, ERJ-2GEJ471X, CRCW0402470RFKED	3
32.768kHz	Crystal 0.032768MHz ±20ppm (Tol) 12.5pF Flexural 50000Ohm 2-Pin SMD T/R	X2	TFE322P32K7680R	1
LT1306	LT1306 - Synchronous, Fixed Frequency Step-Up DC/DC Converter	U13		1
LT1611	Inverting 1.4 MHz Switching Regulator, 5-pin SOT23 (S5-5), 0 to 70 degC, Pb-Free, Tape and Reel	U14	LT1611CS5#TRPBF	1
NXP Semiconductors MK66FX1M0VMD18	Kinetis K66: 180MHz Cortex-M4F MCU, 1.2MB Flash, 256KB SRAM, 2xUSB, Ethernet, 144-MAPBGA	U2	MK66FX1M0VMD18	1
BQ21040	0.8A Single Input Single-Cell Li-Ion and Li-Pol Battery Charger 6-SOT-23 0 to 125	U9		1
16MHz	CRYSTAL 16MHZ 8PF SMD	X1	NX32255A-16.000MHZ-STD-CSR-1	1
Micro SD Card Connector	Conn Micro SD Card HDR 8 POS 1.09mm Solder RA SMD Embossed T/R 0.5A	P1	1051620001	1
1uF	Cap Tant Polymer 1uF 35VDC W9 CASE 20%(2 X 1.25 X 0.9mm) SMD 2012-09 0.5 Ohm 105C T/R	C69	T58W9105M035C0500	1
MMDL914T3G	High-Speed Switching Diode, 2-Pin SOD-323, Pb-Free, Tape and Reel	D11	MMDL914T3G	1
MBR0520	Rectifier, Schottky Power; Plastic Sod-123; 0.5 a @ +90c If; +125; 20v; 1000	D12	MBR0520LT1G	1
22uF	Cap Tant Polymer 22uF 10VDC M CASE 20%(1.6 X 0.85 X 1mm) Undertab SMD 1608-09 0.5 Ohm 60C T/R	C73	F381A226MMAAXE	1
22uF 6.3V	Cap Ceramic 22uF 6.3V X5R 10% SMD 0805 85°C Cardboard T/R	C77	CL21A226KQCLRNC	1
SSM3J328R	Trans MOSFET P-CH Si 20V 6A 3-Pin SOT-23F	Q6	SSM3J328R	1
LP5907QMF3-3.3	IC REG LDO 3.3V 0.25A SOT23-5	U11, U12	LP5907MFX-3.3/NOPB	2
CUS-12TB	Switch Slide SPDT Side Slide 0.3A 20VDC Gull Wing SMD Embossed T/R	SW4	CUS-12TB	1
USB microB	MICRO USB AB, RECEPTACLE, TOP MOUNT	J1	47590-0001	1
2.2uF	Multilayer Ceramic Capacitor, GRM Series, 2.2 F, 10%, X5R, 10 V, 0402 [1005 Metric]	C2, C3, C9, C16, C61, C68	GRM155R61A225KE95D	6
10nF	Cap Ceramic 0.01uF 16V X7R 10% SMD 0402 125°C Paper T/R	C5, C6	C0402C103K4RECAUTO	2
10uF Tant	10µF Molded Tantalum Polymer Capacitor 10V 0603 (1608 Metric) 300mOhm @ 100kHz	C15, C17, C53	F381A106MMAAH1	3

LED	SMD mono-color Chip LED, WL-SMCW, Super Red	D1,D3	150060SS75000	1
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