

Comment	Description	Designator	Footprint	Value	Manufacturer	Part Number	Digikey Number	Stuff
Pancake Motor	Vibrator Motor	B1	PANCAKE_MOTOR		JinLong Machinery	Pancake Motor	All electronics	Yes
Batteries	Multicell Battery	BT1	4AAA HOLDER		Keystone Component	2481	2481K-ND	Yes
Cap	Capacitor	C1, C2, C6, C7, C11, C15, C16, C17, C52, C53, C54, C55, C56	0603	0.1uF	Kemet	ECJ-1VB1C104K	PCC1762CT-ND	Yes
Cap	Capacitor	C3,C4	0603	12pF	Kemet	ECJ-1VC1H120J	PCC120ACVCT-ND	Yes
Cap	Capacitor	C5	0603	47nF	Kemet	ECJ-1VB1C473K	PCC1758CT-ND	Yes
Cap Pol3	Polarized Capacito	C9, C25, C26, C27	6032-28	10uF	Kemet	T491C106K010AS	399-1571-1-ND	Yes
Cap	Capacitor	C10	1206	22uF	Kemet	ECJ-3YB0J226M	PCC2242CT-ND	Yes
Cap	Capacitor	C12	0603	27pF	Kemet	ECJ-1VC1H270J	PCC270ACVCT-ND	Yes
Cap	Capacitor	C13	0603	330pF	Kemet	ECJ-1VC1H331J	PCC331ACVCT-ND	Yes
Cap	Capacitor	C14, C29	1206	2.2uF	Kemet	ECJ-3YB1C225K	PCC1931CT-ND	Yes
Cap	Capacitor	C18, C19	0603	100pF	Kemet		PCC101ACVCT_ND	Yes
Cap	Capacitor	C20, C21	0603	0.01uF	Kemet	C0603C103K5RACTU	399-1091-1-ND	Yes
Cap Pol3	Polarized Capacito	C22	6032-28	33uF	Kemet	T491C336K016AS	399-1599-1-ND	Yes
Cap Pol3	Polarized Capacito	C23	6032-28	15uF	Kemet	T491C156K010AS	399-1572-1-ND	Yes
Cap Pol3	Polarized Capacito	C24	6032-28	47uF	Kemet	T491C476K010AS	399-1575-1-ND	Yes
Cap	Polarized Capacito	C28	6032-28	22uF	Kemet	T491C226K010AS	399-1573-1-ND	Yes
LED2	Typical RED, GREE	DS1, DS2, DS3, DS4	LED-1206	BLUE	Lite-On	LTST-C150CBKT	160-1401-1-ND	Yes
LED	Typical RED, GREE	DS5 THRU DS49	LED-1206	YELLOW	Lite-On	LTST-C150KYKT	160-1407-1-ND	Yes
IR LED	Typical RED, GREE	DS50	PIN2		Agilent	HDSL-4220	Future Electronics	Yes
TPS62056	TI STEP DOWN CO	IC1	MSOP10		Texas Instruments	TPS62056DGS	296-14212-5-ND	Yes
TPS60110	TI CHARGE PUMP	IC2	TSOP/PWP/20		Texas Instruments	TPS60110PWP	296-2265-5-ND	Yes
MIC and SPEAKER	Audio Jack	J2	SMT AUDIO		CUI Inc	SJ-3514-SMT-1	CP-3514SJ-ND	Yes
JTAG/ISP CONN	Header, 7-Pin, Dua	JP1	HDR2X7		Molex	10-88-1141	WM6914-ND	Yes
MHDR1X16	Header, 16-Pin	JP2, JP3, JP4, JP5	MHDR1X16		Molex	90325-0016	90325-0016-ND	No
Power, C2 CONNs	Header, 4-Pin	JP6, JP20	HDR1X4		Molex	22-23-2041	WM4202-ND	Yes
Header 3	Header, 3-Pin	JP7	HDR1X3		Molex	22-23-2031	WM4201-ND	No
Inductor	Inductor	L1	DN4835	10uH	tyco/Coev	DN4835-100M	436-1011-2-ND	Yes
Mic2	Microphone	MK1	MIC54B		Panasonic	WM-54B	P9949-ND	Yes
Header 9X2	Header, 9-Pin, Dua	P1, P2	2MM18PIN-SMT		Molex	87267-1850	WM18163-ND	Yes
NFET ZVNL110A	N-Channel MOSFET	Q1	BCY-W3/H.8		Zetex	ZVNL110A	ZVNL110A-ND	Yes
BC847B	NPN Bipolar Transis	Q8, Q9	SOT-23		Diodes Inc	BC847BT	BC847BT-ND	Yes
Res1	Resistor	R1, R11, R12	0603	100K	Yageo	9C06031A1003FKHFT	311-100KHCT-ND	Yes
Res1	Resistor	R2, R3, R4, R5, R22, R23, R73, R74	0603	0R	Yageo	9C06031A0R00JLHFT	311-0.0GCT-ND	Yes
Res1	Resistor	R6, R21	0603	10K	Yageo	9C06031A1002FKHFT	311-10.0KHCT-ND	Yes
Res1	Resistor	R8	0603	4.7K	Yageo			Yes
Res1	Resistor	R9	0603	91K	Yageo			Yes
Res1	Resistor	R10	0603	300K	Yageo			Yes
Res1	Resistor	R14	0603	56K	Yageo			Yes
Res1	Resistor	R16	0603	DNM	Yageo			No
Res1	Resistor	R17, R25, R26, R28, R29, R32, R33	0603	47K	Yageo			Yes
Res1	Resistor	R18	0603	475K	Yageo			Yes
Res1	Resistor	R19	0603	470	Yageo			Yes
Res1	Resistor	R20	0603	3K	Yageo			Yes
Res1	Resistor	R23	0603	DNM	Yageo			No
Res1	Resistor	R24, R27	0603	27K	Yageo			Yes
Res1	Resistor	R30	0603	51K	Yageo			Yes

Res1	Resistor	R31	0603	33K	Yageo			Yes
Res1	Resistor	R36	0603	51	Yageo	9C06031A51R0FKHFT	311-51.0HCT-ND	Yes
Res2	Resistor	R40, R75, R76, R92	0603	1K	Yageo	9C06031A1001FKHFT	311-1.00KHCT-ND	Yes
Res2	Resistor	R41, R91	0603	3.8	Yageo	9C06031A3R90JLHFT	311-3.9GCT-ND	Yes
RPot1	Potentiometer	R38, R93	TPOT-P5E	10K	Panasonic	EVN-5ESX50B14	P5E103CT-ND	Yes
3 WAY NAV	Navigation Switch	SW1	3WAY NAV		ITT Industries	TPC1133G	401-1264-1-ND	Yes
MSP430F149	Microcontroller	U1	QFP64		Texas Instruments	MSP430F149	296-9615-ND	Yes
ATMEL DATAFLASH	Memory	U2	TSSOP48/DF	256MB	Atmel	AT45DB2562-TC	Arrow Electronics	No
ATMEL DATAFLASH	Memory	U2A	TSSOP28/DF	16MB	Atmel	AT45DB161B-TI	Arrow Electronics	Yes
LMV324	Quad Low Voltage	U3	TSSOP14		National Semiconduc	LMV324MT	LMV324MT-ND	Yes
MAX6951	LED Driver	U7	QSOP16		Maxim Semiconducto	MAX6951CEE	Maxim Direct	Yes
MAX3232CUE	3.0V TO 5.5V, Low	U22	QSOP16		Sipex Inc	MAX3232EEUE	Future Electronics	Yes
C8051F301	Microcontroller	U32	MLP-11		Cygnal	C8051F301	336-1044-1-ND	Yes
PNA4613	IR Receiver	U42	PNA-XD		Panasonic	PNA4612M00XD	PNA4612M00XD-ND	Yes
LCD HD44780 4X20	LCD Module 4x20	X1	HDR1X16		Optrex	DMC-20481NYU-LY-ACE-BG	73-1097-ND	No
LCD VARI 16x2	LCD Module 2x16	X3	HDR1x16		Varitronix	MDL(S)-16263	MDLS16263-CGLED1G-ND	No
8MHz	Crystal Oscillator	Y1	HCM49	8MHz	Citizen	HCM49-8.000MABJT	300-6117-1-ND	Yes