

BILL OF MATERIALS

microPIMP3 portable Audio Player, Rev 2

Name	Value	Package	Count	Description	Distributor	Part Number	Price/Unit	Unit Size	Total Cost
C3	4.7µF	0805	1	Capacitor, 0805	DigiKey	PCC2323CT-ND	1,58 €	10 Cut Tape, 10x	0,16 €
C6, C8, C25, C26	22pF	0603	4	Capacitor, 0603	DigiKey	PCC220ACVCT-ND	0,26 €	10 Cut Tape, 10x	0,10 €
C16, C21	10µF	0603	2	Capacitor, 0603	DigiKey	PCC2367CT-ND	2,53 €	10 Cut Tape, 10x	0,51 €
C1, C18, C19	10nF	0603	3	Capacitor, 0603	DigiKey	PCC1750CT-ND	0,28 €	10 Cut Tape, 10x	0,08 €
C20	47nF	0603	1	Capacitor, 0603	DigiKey	PCC1758CT-ND	0,28 €	10 Cut Tape, 10x	0,03 €
C2, C30, C31	10µF	0805	3	Capacitor, 0805	DigiKey	PCC2182CT-ND	1,48 €	10 Cut Tape, 10x	0,44 €
C32	100pF	0805	1	Capacitor, 0805	DigiKey	PCC101CGCT-ND	0,38 €	10 Cut Tape, 10x	0,04 €
C4, C9, C33, C34	1µF	0805	4	Capacitor, 0805	DigiKey	587-1242-1-ND	0,73 €	10 Cut Tape, 10x	0,29 €
D3	MBRS120LCT-ND	SMB	1	Schottky Diode, SMB	DigiKey	MBRS120T3GOSCT-ND	2,54 €	10 Cut Tape, 10x	0,25 €
L2, L3	10µH	1210	2	Induktor, 1210	DigiKey	587-1625-1-ND	2,57 €	10 Cut Tape, 10x	0,51 €
Q1	12.288 MHz	5 x 3.2 mm	1	SMD-Crystal	DigiKey	300-8198-1-ND	1,50 €	1	1,50 €
Q2	12.000 MHz	5 x 3.2 mm	1	SMD-Crystal	DigiKey	300-8197-1-ND	1,50 €	1	1,50 €
R1	1M	0603	1	Resistor, 0603	DigiKey	311-1.0MGRCT-ND	0,51 €	10 Cut Tape, 10x	0,05 €
R2	10k	0603	1	Resistor, 0603	DigiKey	311-10KGRCT-ND	0,51 €	10 Cut Tape, 10x	0,05 €
R3, R7, R8, R10, R11, R12, R13, R14, R15, R16, R18, R20	100k	0603	12	Resistor, 0603	DigiKey	311-100KGRCT-ND	0,51 €	10 Cut Tape, 10x	0,61 €
R4, R5	20R	0603	2	Resistor, 0603	DigiKey	311-20GRCT-ND	0,51 €	10 Cut Tape, 10x	0,10 €
R6	10R	0603	1	Resistor, 0603	DigiKey	311-10GRCT-ND	0,51 €	10 Cut Tape, 10x	0,05 €
R9	22k	0603	1	Resistor, 0603	DigiKey	311-22KGRCT-ND	0,51 €	10 Cut Tape, 10x	0,05 €
R17	220k	0603	1	Resistor, 0603	DigiKey	311-220KGRCT-ND	0,51 €	10 Cut Tape, 10x	0,05 €
U\$3	AUDIO	SJ1-3513-SMT	1	Audio Jack 3,5mm, SMD	DigiKey	CPI-3513SJCT-ND	0,49 €	1	0,49 €
U\$9	JS1200	JS1200	1	4-Way Navigation Sw.	DigiKey	EG4357CT-ND	1,93 €	1	1,93 €
U\$16	IRLML6402	SOT23	1	MOSFET, SOT23	DigiKey	IRLML6402PBFACT-ND	0,60 €	1	0,60 €
U\$1	Molex	--	1	microSD Card Socket	DigiKey	WM19081CT-ND	3,57 €	1	3,57 €
IC2 (*)	VS1033	LQFP-48	1	MP3-Decoder-IC (*)	Egnite.de	VS1033C-L	17,50 €	1	17,50 €
U2 (**)	MAX1598EZK25-T	SOT23-5L	1	LDO linear Regulator (**)	Maxim	MAX1598	Sample	1	- €
IC1	PIC18F67J50	TQFP64-10X10	1	8-Bit Microcontroller	Microchip	PIC18F67J50	Sample	1	- €
U\$2	MCP73811	SOT23-5L	1	LiPoly-Charger IC	Microchip	MCP73811	Sample	1	- €
IC7	25AA256-I/ST	TSSOP8	1	64kByte SPI EEPROM	Microchip	25AA256	Sample	1	- €
D1	BAT54C	SOT23	1	Double Diode, SOT23	Reichelt	BAT 54C SMD	0,07 €	1	0,07 €
C5, C7, C10, C11, C12, C13, C14, C15, C17, C23, C24, C27, C28, C29	100nF	0603	14	Capacitor, 0603	Reichelt	X7R-G0603 100N	0,05 €	1	0,70 €
L1	10nH	1206	1	Induktor, 1206	Reichelt	L-1206AS 10N	0,24 €	1	0,24 €
U\$6, U\$7	--	--	2	Button, SMD	Reichelt	TASTER 9313	0,24 €	1	0,48 €
U\$17	BSS138	SOT23	2	MOSFET, SOT23	Reichelt	BSS 138 SMD	0,44 €	1	0,88 €
X1	--	--	1	Mini USB Connector	Reichelt	USB BWM SMD	0,50 €	1	0,50 €
--	--	--	1	Li-Ion Battery Pack	Reichelt	HCP 410-LI	4,40 €	1	4,40 €
U\$8 (***)	--	--	1	Nokia 6100 LCD (***)	Sparkfun	LCD-00569	13,52 €	1	13,52 €
--	--	--	1	LCD Connector	SparkFun	LCD-00570	1,32 €	1	1,32 €
IC6	TPS61040	SOT23-5	1	Step-Up-Regulator	Texas Instruments	TPS61040	Sample	1	- €
U1	TPS62203DBV	SOT23-5L	1	Step-Down Regulator	Texas Instruments	TPS62203	Sample	1	- €
--	--	--	1	Printed Circuit Board	Q-PCB	www.q-pcb.de	45,48 €	2	22,74 €

Notes:

(*) Audio Codec vs1033c and vs1053 can be used (vs1053 not tested yet!)

(**) for vs1033c: use MAX1598EZK25-T or MAX8877EZK25-T

(**) for vs1053: use MAX8877EZK18-T

(***) Firmware is designed for Nokia 6100 LCD with Epson S1D15G10 Controller

Overall Costs: 75,33 €