

NEXT THING CO.

CREATIVE COMMONS: CC-BY-SA

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PCBA BOM

Model	C.H.I.P. Pro
Version	v1.0
Item Number	100456
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NAME	CATEGORY	QTY	REF DES	MFG P/N	MANUFACTURER
IC CPU GR8 BGA252	IC	1	U1		Next Thing Co.
AXP209	IC	1	U2		Allwinner
IC DC-DC LP3220SAB5F SOT23-5	IC	2	U3, U4	MT3410LA	Pace Electronics
SMD MODULE WIFI	IC	1	U5	8723DS	FN-link
SMD INDUCTOR 2.2uH DCR<0.1R-1.7A 3518	Inductor	5	L1,L2,L3,L4,L5	MPA3015S2R2M	Mottotech
SMD LED 0603 white color (e.g. Everlight QTL603CIWTR or similar)	LED	1	D1	HQ19-2101UWC	HQG
SMD LED EC01-0603QRC-E-Ag pink color (e.g. lowcost versions of Panasonic LNJP12X8ARA or similar)	LED	1	D2	HQ19-2132UFD	HQG
WiFi/Bluetooth Antenna	Antenna	1	ANT2	AA055	Unictron
SMD TRANSISTOR MMBT3904 NPN SOT-23	Transistor	1	Q2	MMBT3904	Pace Electronics
SMD C-MOS N-channel BSN20 SOT-23	Transistor	1	Q1	2N7002K	Pace Electronics
SMD JACK MICRO USB A01SB141BH2_4A	Jack	1	J4	U-F-M5DW-Y	Han Rong Parts Co.
SMD KEY SW_4P_TC3061B/IT-1100AE	Switch	1	SW2	K2-1807SA	Han Rong Parts Co.
CHIP CAP 0201 47P 16V NPO	Capacitor	2	C16,C31	CC0201JRNPO8BN470	YAGEO
CHIP CAP 0201 102 16V +/-20%	Capacitor	3	C11,C15,C84	CC0201KRX7R8BB102	YAGEO
CHIP CAP 0201 104 10V +/-20%	Capacitor	1	C54	CC0201KRX5R6BB104	YAGEO
CHIP CAP 0402 105 10V +/-20%	Capacitor	26	C4,C18,C19,C23,C34,C52,C57,C58,C60,C61,C62,C63,C65,C69,C70,C71,C72,C74,C77,C78,C79,C80,C81,C82,C83,C85	CC0402KRX5R6BB105	YAGEO
CHIP CAP 0603 4.7uF 10V +/-20%	Capacitor	8	C5,C6,C7,C21,C26,C27,C33,C55	CC0603KRX5R6BB475	YAGEO
CHIP CAP 0603 10uF 10V +/-20%	Capacitor	7	C8,C9,C12,C13,C17,C28,C48	CC0603MRX5R6BB106	YAGEO
CHIP CAP 0805 22uF 10V +/-20%	Capacitor	2	C44,C45	CC0805MKX5R5BB226	YAGEO
CHIP RESISTOR 0201 240ohm 1/20W +/-5%	Resistor	2	R100,R101	RC0201JR-0724RL	YAGEO
CHIP RESISTOR 0201 2400ohm 1/16W +/-1%	Resistor	2	R2,R3	RC0201FR-07240RL	YAGEO
CHIP RESISTOR 0201 1Kohm 1/20W +/-5%	Resistor	3	R15,R20,R21	RC0201JR-071KL	YAGEO
CHIP RESISTOR 0201 2Kohm 1/16W +/-1%	Resistor	2	R1,R4	RC0201FR-072KL	YAGEO
CHIP RESISTOR 0201 2.2Kohm 1/20W +/-5%	Resistor	5	R22,R59,R60,R61,R62	RC0201JR-072K2L	YAGEO
CHIP RESISTOR 0201 10Kohm 1/20W +/-5%	Resistor	8	NSR1,R5,R9,R10,R46,R47,R51,R64	RC0201JR-0710KL	YAGEO
CHIP RESISTOR 0201 33Kohm 1/20W +/-5%	Resistor	5	R38,R39,R41,R42,R43	RC0201JR-0733KL	YAGEO
CHIP RESISTOR 0201 47Kohm 1/20W +/-5%	Resistor	2	R14,R18	RC0201JR-0747KL	YAGEO
CHIP RESISTOR 0201 100Kohm 1/20W +/-5%	Resistor	2	R48,R49	RC0201JR-07100KL	YAGEO
CHIP RESISTOR 0201 0ohm 1/20W +/-5%	Resistor	2	R36,R58	RC0201JR-070RL	YAGEO
CHIP RESISTOR 0402 1ohm 1/16W +/-5%	Resistor	2	R8,R53	RC0402JR-071RL	YAGEO
CHIP RESISTOR 0201 100Kohm 1/20W +/-1%	Resistor	2	R11,R16	RC0201FR-07100KL	YAGEO
CHIP RESISTOR 0201 150Kohm 1/20W +/-1%	Resistor	1	R17	RC0201FR-07150KL	YAGEO
CHIP RESISTOR 0201 200Kohm 1/20W +/-1%	Resistor	2	R13,R57	RC0201FR-07200KL	YAGEO
CHIP RESISTOR 0603 0.03ohm 1/8W +/-1%	Resistor	1	R7	RL0603FR-070R03L	YAGEO
CHIP CAP 0201 8p 16V NPO	Capacitor	1	C49	1.0pF C0201	YAGEO
CHIP RESISTOR 0201 2Kohm 1/16W +/-5%	Resistor	1	R19	RC0201JR-072KL	YAGEO
SLC NAND TC58NVG2S0HTA00	Memory	1	U7	TC58NVG2S0HTA00	Toshiba
CHIP CAP 0201 104 6.3V +/-20%	Capacitor	23	C1,C2,C3,C22,C32,C35,C37,C64,C66,C75,C86,C88,C90,C91,C93,C94,C95,C96,C97,C98,C148,C151,C153	CC0201KRX5R5BB104	YAGEO
CHIP RESISTOR 0201 442Kohm 1/16W +/-1%	Resistor	1	R12	RC0201FR-07442KL	YAGEO
WiFi Module RF Shield	Sheet metal	1		n/a	Custom
RDASW282/XMSS1R6G0PA-001	Switch	1	U8	RDASW282	Arrow China
CHIP RESISTOR 0402 0ohm 1/8W	Resistor	1	R32	RC0402JR-070RL	YAGEO
CHIP CAP 0603 4.7uF 6.3V +/-20%	Capacitor	9	C20,C24,C25,C29,C30,C36,C53,C56,C89	CC0603KRX5R5BB475	YAGEO
CHIP CAP 0603 10uF 6.3V +/-20%	Capacitor	7	C10,C14,C59,C68,C76,C87,C92	CC0603MRX5R5BB106	YAGEO
CHIP CAP 0201 20P 16V NPO	Capacitor	2	C67,C73	CC0201JRNPO8BN200	YAGEO
SMD CRYSTAL 24MHz +/-10ppm 20pF	Crystal	1	X1	7U024000W120	SJK Crystal Tech
I-PEX Connector	Connector	1	ANT1	C-7.005A0	HuaChuangxiang
0402 ESD Diode SE10F10B5.0MA	Diode	5	ESD1, ESD2, ESD5, ESD3, ESD4	SE10F10B5.0MA	芯晶图
SDCW2012-2-900TF	Inductor	2	L9,L10	SDCW2012-2-900TF	Sunlord
	Capacitor	1	R33	1.2pF C0201	YAGEO
PCB + PCBA		1	PCB Material + PCBA		