

Radioberry-amp-controller beta0.1 BOM

Assembly Build - October 14, 2023

Line	Description	Part Number	Sub OK	Designators	Footprint	Pins	Quantity
	100pF 0805NP0 \geq 50V \leq 5%	CC0805JRNPO0BN101	N	C101,C105	0805	2	2
	0.1uF 0805 \geq X5R \geq 50V \leq 20%	C0805C104K1RECAUTO	Y	C102,C103,C106,C107, C201,C202,C204	0805	2	7
	10uF 0805 \geq X5R \geq 6.3V \leq 20%	GRM21BR60J106ME19L	Y	C104,C108	0805	2	2
	1uF 0805 \geq X5R \geq 25V \leq 20%	CL21B105KAFNNNE	Y	C203	0805	2	1
	Schottky-diodes	BAT43W-G3-08	Y	D201,D202,D203,D204, D205,D206	0805	2	6
	LED RA	LTST-S220KFKT	N	D207	2.1x1.0mmRightAngle	2	1
	IC REG LINEAR 3.3V 800MA	LD1117S33TR	Y	IC101	SOT223	4	1
	LDO-spanningregelaars 5.0V 0.8A Positive	NCP1117LPST50T3G, TS 1117 CW50	N	IC102	SOT223	4	1
	100-ppm/ C precision microp- ower shunt voltage reference	LM4040DIM3X- 3.0/NOPB	Y	IC301	Custom	3	1
	CONN HEADER VERT 2POS 2.54MM Würth Elektronik	61300211121	Y	J101	Custom	2	1
	CONN HEADER VERT 10POS 2.54MM Würth Elek- tronik	TMS-110-01-L-S-RA	Y	J201	Custom	10	1
	CONN HEADER VERT 2POS 2.54MM Würth Elektronik	61300211121	Y	J202	Custom	2	1
	CONN HEADER VERT 3POS 2.54MM Würth Elektronik	61300311121	Y	J203	Custom	3	1
	CONN HEADER VERT 4POS 2.54MM Würth Elektronik	61300411121	Y	J204	Custom	4	1
	CONN HEADER VERT 2POS 2.54MM Würth Elektronik	61300211121	Y	J205	Custom	2	1
	CONN HEADER VERT 2POS 2.54MM Würth Elektronik	61300211121	Y	J206	Custom	2	1
	0Ohm 0805 \leq 5% \geq 1/10W	RC0805JR-070RL	Y	J207,J208	0805	2	2
	CONN HEADER VERT 2POS 2.54MM Würth Elektronik	61300211121	Y	J209	Custom	2	1
	CONN HEADER VERT 3POS 2.54MM Würth Elektronik	61300311121	Y	J210	Custom	3	1

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	CONN HEADER VERT 2POS 2.54MM Würth Elektronik	61300211121	Y	J212	Custom	2	1
	CONN HDR 14POS 0.1 GOLD PCB R/A	SFH11-PBPC-D07-RA-BK	Y	J301	Custom	14	1
	MOSFET N-CH 60V 300mA	2N7002K-T1-E3	N	Q201,Q202	SOT-23-3	3	2
	680 0805 $\leq 1\% \geq 2/10W$	71-TNPW0805680RBEEA	Y	R101	0805	2	1
	10K 0805 $\leq 5\% \geq 1/10W$??	Y	R201,R203,R207,R209, R214	0805	2	5
	4.7K 0805 $\leq 1\% \geq 2/10W$	71-TNPW08054K70BEEN	Y	R202,R204,R215,R216, R217,R218	0805	2	6
	330K 0805 $\leq 1\% \geq 2/10W$	71-71-TNPW0805330KBEEN	Y	R205	0805	2	1
	1K 0805 $\leq 5\% \geq 1/10W$	RC0805FR-071KL	Y	R206	0805	2	1
	20K 0805 $\leq 1\% \geq 2/10W$	71-TNPW080520K0BEEN	Y	R208,R213	0805	2	2
	50-V, 7-ch darlington array	ULN 2003D1013	Y	U201	Custom	16	1
	Interface - I/O Expanders In/Out I2C int	MCP23008-E/SS	Y	U202	Custom	20	1
	RP2040-PICO-HDR (SBC)	RP2040-PICO-HDR	Y	U301	Custom	40	1

Line Items: SMT:23 Assembled TH:10

Parts: SMT:51 Assembled TH:10

Pins: SMT:143 Assembled TH:74

Do Not Assemble: C205 J211 Q203 Q204 R210 R211 R212