Radioberry 2.0 beta4 BOM

Assembly Build - October 2, 2020

Part ID	Description	Part Number	Sub OK	Designators	Footprint	Pins	Quantity
15331	0.1uF 0603≥X5R≥50V≤20%	C0603C104M5RACTU	Y	C201,C202,C203,C210, C211,C212,C216,C219, C224,C225,C226,C227, C228,C229,C230,C231, C233,C234,C235,C236, C237,C239,C240,C245, C246,C248,C249,C250, C251,C252,C253,C254, C255,C256,C257,C258, C259,C401,C402,C409, C410,C411,C412,C414, C415,C416,C425,C426, C427,C428,C437,C438	0603	2	52
1940	1nF 0603≥X5R≥50V≤20%	C0603C102M5RACTU	Y	C204,C205,C206,C217, C417,C418,C419,C420	0603	2	8
58143	10nF 0603≥X5R≥50V≤20%	C0603C103M5RACTU	Y	C207,C208,C209,C218, C241,C242,C243,C421, C422,C423,C424	0603	2	11
	100uF 1206≥X5R≥6.3V≤20%	GRM31CR60J107ME39K	Y	C213,C214,C215,C220	1206	2	4
20411	10uF 0603≥X5R≥6.3V≤20%	GRM188R60J106KE47D	Y	C221,C222,C223,C232, C238,C244,C247,C433, C434,C435,C436	0603	2	11
2142	100pF 0805NP0≥50V≤5%	CC0805JRNPO0BN101	N	C403	0805	2	1
	180pF 0805NP0≥50V≤5%	CC0805JRNPO0BN181	N	C405	0805	2	1
2137	10pF 0805NP0≥50V≤5%	CC0805JRNPO9BN100	Y	C406	0805	2	1
14236	10uF 1206≥X5R≥25V≤20%	CL31A106KAHNNNE	Y	C408	1206	2	1
	8.2pF 0805NP0≥25V≤5%	CL21C8R2DBANNNC	Y	C413	0805	2	1
16531	1uF 0603≥X5R≥6.3V≤20%	GRM188R61E105KA12D	Y	C429,C430,C431,C432	0603	2	4
	GPIO Header for Raspberry Pi 3 - 2x20 Female Header	ADA product id 2222	Y	CN302	2x20	40	1
	TVS Diode	CDSOD323-T05LC	N	D401	SC-76, SOD-323	2	1
	FILTER LC(PI) 305NH/84PF SMD	NFL21SP506X1C3D	Y	F401,F402	Custom	4	2

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	FB 0603 ≥600R@100MHz ≤200mOhm@DC 1A ≤25%	MPZ1608S601ATA00	Y	FB201,FB202,FB203, FB204,FB205,FB206, FB207,FB208,FB401, FB402,FB403,FB404, FB405,FB406	0603	2	14
	IC REG LINEAR 2.5V 800MA	LD1117S25TR	Y	IC201	SOT223	4	1
	IC REG LINEAR 3.3V 800MA	LD1117S33TR	Y	IC202,IC203	SOT223	4	2
	IC REG LINEAR 1.2V 800MA	LD1117S12TR	Y	IC204	SOT223	4	1
	RF ADC DAC	AD9866BCPZ	N	IC401	64-VFQFN EP	64	1
	330nH	LQW2BASR33J00L	N	L401,L402	0805	2	2
18125	120R 0603≤1%≥1/10W	RC0603FR-07120RL	Y	R201	0805	2	1
26547	10K 0603≤5%≥1/10W	RC0603FR-0710KL	Y	R301,R302	0603	2	2
	1.6K 0603≤5%≥1/10W	RC0603FR-071K6L	Y	R403	0603	2	1
	1:1 RF Transformer	MABAES0060	N	T401	SM-22-5 3.81x3.81mm	5	1
	8:1 RF Transformer	MABA-010143-FLUX18	N	T402	SM-22-5 3.81x3.81mm	5	1
	FPGA	10CL016YE144C8G	N	U1	EQFP-144	144	1
	38.4MHz Osc 3.3V≤10ppm	ASTXR-12-38.400MHZ-514054-T	N	X400	2.5x2mm	4	1
	CONN SMA JACK R/A 50 OHM PCB	5-1814400-1	N	X401,X402	BU-SMA-H	5	2

Line Items: SMT:26 Assembled TH:2
Parts: SMT:127 Assembled TH:3
Pins: SMT:478 Assembled TH:50
Do Not Assemble: C404 C407 CN301 R303 R304 R305 R306 R307 R308