

RPi-DAC BOM rev.6

blue: optional

Component	Value	pcs	package	Digikey part	Comments	Price	Sum	0603i=1608m
PCM1794A		1	SMD	296-21537-1-ND	DAC	12.87	12.87	1206i=3216m
TPA6120A2		1	SMD	296-16920-5-ND	AMP	6.05	6.05	
LME49990		4	SMD	LME49990MA-5/NOPB-ND	OpAmp	2.90	11.60	
or:OPA827		4	SMD	296-23816-5-ND	OpAmp	10.13	40.52	JFET for I/V
TPS7A4700		6	QFP	296-34769-1-ND	LDO	5.70	34.20	
Bridge Rectifier	60V, 2A	4	SMD	641-1434-1-ND	BRECT	0.84	3.36	with AC in, instead DC
Headphone Jack	Stereo	1	SMD	CP1-3515SJPICT-ND	3.5mm	1.45	1.45	
Header	1x2	6	through hole	A30786-ND		0.85	5.10	3 of 6 optional for DC rails
Header	1x3	1	through hole	641126-3-ND		0.81	0.81	optional GND
Header, female	2x4	1	through hole	S7107-ND, A106756-ND		0.84	0.84	RPi I2S
Jumper Header	2x3	2	through hole	A26569-ND	or 0R	2.24	4.48	optional, or 0R
Jumper Header	2x2	1	through hole	A106735-ND	or 0R	1.01	1.01	optional, or 0R
Resistor	33R	4	0603	A103087CT-ND	0.10%	0.10	0.40	1/16W
	10K	5		P10KDBCT-ND	0.10%	0.63	3.15	optional with Jumper
	10K	3		985-1278-1-ND	0.10%	0.54	1.62	on DAC, 1x 10K or 8.25K
or:	8.25K	1	0603	985-1277-1-ND	0.10%	0.54	0.54	on DAC, metal film
	1K	4		985-1373-1-ND	0.10%	0.79	3.16	AMP, metal film
	1.5K	4	0603	985-1427-1-ND	0.10%	0.54	2.16	AMP, metal film
	30R	2	0603	985-1428-1-ND	0.10%	0.74	0.22	AMP, metal film
or:	10R	2		A109916CT-ND	0,1%	0.11	0.22	AMP, 1/6W
	825R	4	0603	985-1372-1-ND	0.01%	0.67	2.68	OpAmp, metal film
	0R	10		541-0.0SBCT-ND	lot of 10x	0.21	2.10	instead jumper
	1.3K	4		P1.3KYCT-ND	1.00%	0.62	2.48	LED R 15V
	130R	1		ERJ-3EKF1300V	1.00%	0.10	0.10	LED R 3.3V
Capacitor	5.6n	4	0603	445-2666-1-ND	5.00%	0.32	1.28	OpAmp, CG0/NPO
	1μ	33	0603	445-7468-1-ND	50V	0.13	4.29	some optional
	47μ	2	1206	445-8047-1-ND	25V	1.05	2.10	on DAC
	47μ	48	1206	445-8047-1-ND	25V	1.05	50.40	some optional
or:	22μ	48	1206	1276-3047-1-ND	25V	0.50	24.00	Or:33μ, instead 47μ
	820μ	9	SMD 12x12	PCE5011CT-ND	25V	1.42	12.78	with AC in and BRECT
Osc.	24.576MHz	1	SMD 4pin	535-12038-1-ND	3.3V	4.88	4.88	optional, no need on Rpi
LED	ye/gr	5		VLMG1300-GS08CT-ND		0.73	3.65	optional

Sheet1

Sum					USD	124.70	+ TAX, USD
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Heat Sinks	1	294-1147-ND		3.8		
	3	345-1054-ND		1.26		
	2	ATS1332-ND	19x19, red	6.94 1x	1x Rpi	
	7	ATS1195-ND	15x15	7.15 2x	1x Rpi	
	7	ATS1096-ND	15x15, blue	8.32		
	2	AE10812-ND	6.5x19	0.61 2x		
	7	AE10819-ND	8.5x6.35	0.61 14x		
	11	AE10837-ND	10x10	0.78 3x		