

## Rpi-DAC-SPDIF BOM rev.2

blue: optional

Component	Value	pcs	package	Digikey part	Comments	Price	Sum	0603i=1608m
DIR9001		1	28-TSSOP	296-21389-5-ND	Receiver IC	5.44	5.44	1206i=3216m
74LVU04		1	14-SOIC	296-31933-1-ND	Inverters, 6x	0.44	0.44	opt., if S/PDIF
74HC541		1	20-SOIC	296-1202-1-ND	Bus Driver, 8x	0.64	0.64	opt., if LEDs
TPS7A4700		1	QFP	296-34769-1-ND	LDO	5.70	5.70	optional
RCA female		1	through hole	SC1852-ND	Phono Jack	0.99	0.99	el. S/PDIF
PLR135/T9		1	through hole	1080-1432-ND	opt. Rx	2.00	2.00	opt. TOSLINK
or: PLR135/T10		1	through hole	1080-1433-ND	opt. Rx	1.86	1.86	no mounting hole
USB B conn.		1	SMT	732-3152-1-ND	USB B	3.30	3.30	USB B connector
Header	1x2	2	through hole	A30786-ND	3.3/5V, H2		0.00	1 optional
Header	1x3	1	through hole	641126-3-ND	GND	0.81	0.81	optional
Header	1x6	1	through hole	A1923-ND	H3	0.30	0.30	optional
Header, male	2x4	1	through hole	A26571-ND	H1	3.59	3.59	Rpi I2S
Jumper Header	2x2	4	through hole	A106735-ND	J1..J4	1.01	4.04	opt. or 0R
Jumper Header	1x2	2	through hole	WM4374-ND	3.3V, /RES	0.36	0.72	
Jumper Header	2x3	1	through hole	24338K-ND6569-ND		2.24	2.24	
connector	1x7 female	1	through hole	S55443-ND	ext. USB	0.86	0.86	XMOS USB
connector	1x7 male	1	through hole	S1311E-06-ND	ext. USB	1.11	1.11	XMOS USB
Resistor	75R	1	0603	P75DBCT-ND	0.10%	0.43	0.43	S/PDIF
	47K	2	0603	P47KDBCT-ND	0.10%	0.43	0.86	S/PDIF, /RES
	2.2K	1	0603	P2.2KDBCT-ND	0.10%	0.43	0.43	S/PDIF
	470R	1	0603	P470DBCT-ND	0.10%	0.43	0.43	/RES
	680R	1	0603	P680DBCT-ND	0.10%	0.43	0.43	FILT
	130R	6	0603	P130ABCT-ND	1.00%	0.11	0.66	LED R 3.3V
Capacitor	4.7n	1	0603	445-2712-1-ND	5.00%	0.24	0.24	FILT
	68n	1	0603	399-7952-1-ND	5.00%	0.37	0.37	FILT
	0.1μ	1	0603	399-1097-1-ND	5.00%	0.11	0.11	S/PDIF
	1μ	11	0603	587-1242-1-ND	10V, 5.00%	0.10	1.10	Cb, some optional
	10μ	1	1206	399-9309-1-ND	16V, 5.00%	2.50	2.50	/RES
	47μ	18	1206	445-8037-1-ND	6.3V	0.94	16.92	Cb, some optional
or:	68μ	18	1206	445-14671-1-ND	6.3V	1.24	22.32	Cb
or:	68μ	18	1206	445-14673-1-ND	10V	1.65	29.70	Cb
or:	100μ	18	1206	445-6008-1-ND	6.3V	1.10	19.80	Cb
Diode	Si Diode	1	0603	641-1282-1-ND	Schottky, 30V	0.45	0.45	/RES

Sheet1

Inductor	47µH	1	1206	490-6592-1-ND	100mA, 8R	0.77	0.77	TOSLINK
Oscillator	24.576MHz	1	SMD 4pin	535-12038-1-ND	3.3V	2.94	2.94	OSC
LED	ye/gr	6		VLMG1300-GS08CT-ND		0.73	4.38	LED
	gn	4	0603	1080-1405-1-ND		0.46	1.84	
	rd	1	0603	1080-1403-1-ND		0.38	0.38	
	ye	1	0603	1080-1404-1-ND		0.38	0.38	
	bl	0	0603	1080-1401-1-ND		0.85	0.00	3.15..3.8V !
	wh	0	0603	160-1721-6-ND		0.54	0.00	
<b>Sum</b>						<b>USD</b>	<b>65.28</b>	<b>+ TAX</b>
<b>Sum minimal</b>						<b>USD</b>	<b>33.48</b>	<b>w/o opt., just TOSLINK</b>

Spacers			R938-7	round, 11.13mm	0.19	0.00	
Standoff			952-1500-ND	hex, metal, 9mm	0.63	0.00	
			952-1503-ND	hex, metal, 12m	0.67	0.00	M3, with shaft
			952-2313-ND	hex, metal, 12m	0.5	0.00	M3, no shaft
			24338K-ND	hex, metal, 12m	0.66	0.00	M3, with shaft
			24434K-ND	hex, plastic, 12n	0.42	0.00	M3, no shaft
	30		<b>25502K-ND</b>	hex, <b>plastic</b> , 12n	0.52	15.60	M3, with shaft
	12		<b>25511K-ND</b>	hex, <b>plastic</b> , 12n	0.61	7.32	M3, no shaft
			25522K-ND	hex, plastic, 12n	0.52	0.00	M4, with shaft
			25531-ND	hex, plastic, 12n	0.61	0.00	M4, no shaft
			952-2179-ND	hex, metal, 5mm	0.39	0.00	M3, no shaft
	20		<b>25508K-ND</b>	hex, <b>plastic</b> , 6mm	0.57	11.40	M3, no shaft
Fuse holder	1		WK0011-ND		0.39	0.39	
Pwr connector	1		WM3212-ND			0.00	
			WM3234-ND			0.00	
			WM13500-ND			0.00	
						<b>124.89</b>	