	Title	
	Revision	
	Date	
	Generated	9/2/2018 3:06:34 PM
	Company	
	Comment 1	
	Comment 2	
	Comment 3	
	Comment 4	
	Total Parts	35
	Total Unique Parts	22

	Ref	Qty	Value	What	Spec	KiCad Footprint	Purpose	Mouser Part Number	Notes
x	C4	1	10v/560uF	Cap TH 10mm Diam	Organic polymer	Capacitor_THT:CP_Radial_D10.0mm_P5.00mm	PSU decoupling	647-RR71A681MDN1	
x	C1	1	6.3v/3300uF	Cap TH 10mm Diam	Electrolytic	Capacitor_THT:CP_Radial_D10.0mm_P5.00mm	tda1387 pin7/vref	647-UVZ0J332MPD1TD	
x	C15	1	6.3v/220uF	Cap TH 6.3mm Diam	Electrolytic	Capacitor_THT:CP_Radial_D6.3mm_P2.50mm	Common base transistor supply (BREF)	667-EEU-EB1A221S	
x	C5	1	10v/2200uF	Cap TH 10mm Diam	Electrolytic	Capacitor_THT:CP_Radial_D10.0mm_P5.00mm	PSU decoupling	647-UHN1A222MPD	
x	C7 C8	2	2.2uF	Cap TH Rec 29x16mm	Film	Capacitor_THT:C_Rect_L29.0mm_W16.0mm_P27.50mm_MKT	Output DC blocking	667-ECQ-UAAF225K	
x	C9 C10 C11	3	1nF	Cap SMD 1206	C0G/NP0	Capacitor_SMD:C_1206_3216Metric	C9, C10: i/v resistor HF filter; C11: tda1387 pin5/vdd PSU HF bypass	77-VJ1206A102JXAMT	
x	C12	1	1uF	Cap SMD 1206	X7R 100v	Capacitor_SMD:C_1206_3216Metric	tda1387 pin5/vdd PSU HF bypass	963-HMK316B7105KLHT	
x	C14 C13 C2 C3 C6	5	0.1uF	Cap SMD 1206	C0G/NP0	Capacitor_SMD:C_1206_3216Metric	C2,C3,C6: max6071 BREF circuit; C13,C14: BREF bypass for J323	80-C1206C104F3GECLR	
x	D3	1	LED	LED SMD	1206	LED_SMD:LED_1206_3216Metric	power-on indicator	604-APTR3216SGC	
x	IC1	1	TDA1387	IC SMD SO-8		mng_footprints:TDA1387_SO8	actual tda1387 chip	n/a - ebay, aliexpress, etc	
x	J2	1	RPi_GPIO	Hdr TH 2x20		RPi_Hat:Pin_Header_Straight_2x20	OPTIONAL: RPI GPIO header if connecting to Raspberry Pi	517-929975-01-20	
x	J1	1	Conn_01x03_Ma	TrmBlk TH 1x3	5.08mm pitch	TerminalBlock_Phoenix:TerminalBlock_Phoenix_MKDS-1 5-3-5.(	Line-level DAC output (to buffer or power amp)	538-39880-0303	
x	J3	1	Conn_01x02	TrmBlk TH 1x2	5.08mm pitch	TerminalBlock_Phoenix:TerminalBlock_Phoenix_MKDS-1 5-2-5.(	OPTIONAL: +5V power input if powering DAC directly	538-39889-0042	
x	J4	1	Conn_02x03_To	Hdr TH 2x3	2.54mm pitch	Connector_PinHeader_2.54mm:PinHeader_2x03_P2.54mm_Ver	OPTIONAL: I2S header if using as a standalone DAC (instead of RPI HA	538-10-89-7061	
x	JP1	1	Jumper	Jumper TH	2.54mm pitch	Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Ver	Select power from J2 (RPI) or J4 (dedicated 5V power)	538-22-28-5023	
x	L1 L2	2	Ferrite_Bead	TH	6.3mm, 10mm L	Inductor_THT:L_Axial_L6.6mm_D2.7mm_P10.16mm_Horizontal_	I-OUT HF filter	963-FBA04HA450VB-00	
x	Q1 Q2	2	J327	SOT23	PNP MOSFET	Package_TO_SOT_SMD:SOT-23	I/V transistor	757-SSM3J327RLF	
x	R4 R9	2	2k7	Res SMD 1206		Resistor_SMD:R_1206_3216Metric	I/V resistor - max 3.5k	279-CPF1206B2K7E1	
x	R4 R9 (alt)	2	1.1k	MELF	3.6mm len	Resistor_SMD:R_1206_3216Metric	I/V resistor - MELF	71-SMM02040D1101BB30	alternate MELF version
x	R11	1	2k	Res SMD 1206		Resistor_SMD:R_1206_3216Metric	LED current limit	603-RT1206FRE072KL	potential alternate: 791-WF12U1003BTL
x	R6 R8 R10	3	470	Res SMD 1206		Resistor_SMD:R_1206_3216Metric	I2S input	279-CPF1206B470RE1	
x	R12 R13	2	1M	Res SMD 1206		Resistor_SMD:R_1206_3216Metric	DC blocking capacitor (C7, C8) load	279-CPF1206B1M0E1	
x	U1	1	MAX6071	SOT23-6		Package_TO_SOT_SMD:SOT-23-6	precision voltage reference for J327 I/V transistor	700-MAX6071BAUT25+T	

BOM made with KICAD_BOM_WIZARD (https://github.com/HashDefineElectronics/KiCad_BOM_Wizard.git)

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