

Bill Of Materials (BOM) for Item 796, BOM Rev 1.20.0

AMP9-BASIC

	Type	Pos
Bag 0		
AMP9-BASIC PCB	1	- PCB
<i>PCB, two sided double weight copper</i>		
Bag 1		
Res Ax. Met. Film 0.4W 3.4mm 100R	3	hmt R5,R9,R15
<i>Current limit for control signals</i>		
		<i>100 ohm 0.25W</i>
Res Ax. Met. Film 2W 10mm 10ohm	4	hmt R1,R2,R3,R4
<i>Output filter. Mount vertical</i>		
		<i>10 ohm 2W</i>
Res Ax. Met. Film 0.4W 3.4mm 56Kohm	2	hmt R6,R8
<i>Signal Pull-up</i>		
Res Ax. Met. Film 0.125W 3.4mm 931R	4	hmt R10,R12,R11,R13
<i>LED current limit</i>		
		<i>Depends on LEDs used / intensity wanted</i>
Cap 50V Cer 0.01uF X7R 10% RM2.5	8	hmt C14,C15,C24,C25,C34,C35,C44,C45
<i>Output EMI filter caps</i>		
Screw machine Phil 4-40x5/8 SS	4	- Mounting
<i>Screw</i>		
Nut HEX 4-40 SS	4	- Mounting
<i>Nut</i>		
Spacer nylon nat 9 mm round #4	4	- Mounting
<i>Stand-off spacers</i>		
		<i>Nylon 9mm</i>
Cap 50V Cer 0.1uF X7R 10% RM2.5	11	hmt C6,C9,C38,C39,C51,C53,C57,C61,C62,C63,C64
<i>Misc decouplin</i>		
Res Ax. Met. Film 0.4W 3.4mm 220Kohm	1	hmt R7
<i>Unmute delay w C5</i>		
		<i>220K</i>
Bag 2		
Cap 35V Elect 1800uF U-low ESR D16	2	hmt C71,C72
<i>Power supp, close-up bulk</i>		
		<i>1500uF 35V U-low ESR</i>
Cap 50V Film 0.22uF Polyester RM5	4	hmt C13,C23,C33,C43
<i>Output filter</i>		
		<i>Film, 0.22uf / 50V</i>
Cap 50V Film 0.56uF Polyester RM5	8	hmt C11,C12,C21,C22,C31,C32,C41,C42
<i>Output filter</i>		
		<i>0.47uF or 0.56uF Plastic film 50V</i>
Cap 50V Film 1.0uF Polyester RM5	4	hmt C1,C2,C3,C4
<i>Signal Input</i>		
		<i>1uF polyester</i>
Cap 50V Elect 3.3uF Low ESR D5	6	hmt C5,C7,C8,C52,C54,C56
<i>Decoupling and time delays</i>		
		<i>3.3uF 50V</i>
Bag 3		
Dual inductor 10uH 10A SMT	4	smt L1,L2,L3,L4
<i>Output filters</i>		
		<i>Shielded linear audio inductors</i>
Conn header double-row gold	1	-

2.54mm <i>Signal connector 2x10</i>	10	hmt	J1,J2,J3
Term Block PCB 2 Pos 5.0mm w. pins, 10A <i>Power input, speaker out</i>	5	hmt	J4x4,J10 c/c 5.08mm (.2") 16A
DIL Socket IC Open frame 16-pin <i>Socket for IC</i>	1	hmt	IC3 Socket DIL 16
Choke bead core 3.5X5mm Axial <i>Separates agnd <=> gnd</i>	1	hmt	L5
Bag 4			
LED Yellow Diffused 3mm <i>LED 3mm for front panel</i>	1	hmt α	OVRLD
Diode Switch 100V 200mA DO-35 <i>Input clamping and charge pump</i>	10	hmt α	D10,D11,D20,D21,D25,D30,D31,D36,D40,D41 1N4148 switching
Diode Schottky 1A 40V mini-SMA <i>Output clamping</i>	16	smt	D51,D52,D53,D54,D55,D56,D57,D58,D59,D60,D61,D62,D63,D64,D65,D66 Ultra fast or schottky 40V, SMA
Voltage Reg Pos 5V 100mA TO-92 <i>5V regulator for digital signals</i>	1	hmt α	IC2 78L05 TO-92
Diode Schottky CC 2x10A 35V D2PAK <i>Power polarity protection</i>	1	smt	D1 15A Schottky, 30V D2PAK
HEX Bus Buffer M74HC365B1R DIL-16 <i>Signal buffer</i>	1	hmt α	IC3 M74HC365B1R
LED Green clear 3mm <i>LED 3mm</i>	1	hmt	D2 / Awake
Tripath TAA4100A <i>Main Tripath Chip</i>	1	hmt α	IC1

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Notes:
 α = ESD sensitive
 hmt=Hole Mount
 smt=Surface Mount