Bill Of Materials (BOM) for Item 43, BOM Rev 1.20

AMP6-BASIC kit

	Type		Pos
Bag 0			
AMP6-BASIC PCB	1	-	PCB
Printed Circuit Board			*Double weight / 70um copper, double sided. Prints on both sides.*
Bag 1			
Screw machine Phil 4-40x5/8 SS	4	-	Mounting
Mounting screw			*M3 or 4-40*
Cap 50V Cer 0.1uF X7R 10% RM2.5	6	hmt	C16,C17,C20,C26,C50,
Decoupling			*X7R RM2.5*
Res Ax. Met. Film 0.4W 3.4mm 8.2Kohm	2	hmt	R3,R7
Mute pull-up, Ref voltage resistor			*1% axial*
Res Ax. Met. Film 0.4W 3.4mm 22Kohm	4	hmt	R2,R4
Input resistors, alternative for feedback			*1% low noise*
Spacer nylon nat 6 mm diam 4/6	4	-	Mounting
Stand-off spacer			
Nut HEX 4-40 SS	4	-	Mounting
Nut			
Res Ax. Met. Film 0.125W 3.4mm 931R	2	hmt	R8, R11
LED current limiting			*930K*
Bag 2			
Cap 25V Elect 10uF std Low Prof	1	hmt	C2
Decoupling for +5V			*10 uF 10V*
Cap 50V Elect 3.3uF Low ESR D5	2	hmt	C14,C15
Input capacitors			*3.3 uF quality / low ESR caps*
Cap 50V Elect 1uF Low ESR	1	hmt	C5
Charge pump capacitor			*1 uF 25V*
Res Ax. Met. Film 0.4W 3.4mm 82Kohm	2	hmt	R5,R6
Feedback resistor			*1% low noise*
Res Ax. Met. Film 0.4W 3.4mm 1Mohm	1	hmt	R1
Sleep pin current limiter			*1M axial*
Bag 3			
Cap 50V Film 0.47uF Polyester RM5	4	hmt	C22,C25,C27,C28
Output filter			
Cap 50V Film 0.22uF Polyester RM5	2	hmt	C12,C13
Output zobel filter			
Dual inductor 10uH 5A SMD	2	smt	L1,L2
Output filter inductors			*10 uH 5A*
Res Ax. Met. Film 1W 6.5mm 10ohm	2	hmt	R9,R10
Output Zobel filter			*1W 10ohm*
Bag 4			
Conn Jack stereo R/A 3pin 3.5mm	1	hmt	J5
Stereo 3.5 mm input			

Fuse Holder 2AG PCB 1 pos Brass *Fuse holder for 2AG size fuse*	2	hmt	Fuse Holder
Fuse 125V Slo-Blo 2AG 4A -	1	-	In Fuse Holder *4A slow-blow, 2AG size*
Conn header double-row gold 2.54mm *2-pin header for mute and sleep*	2	hmt	J2 *RM 2.5 mm gold plated*
Cap 16V Elect 1500uF U-low ESR *Chip power supply decoupling*	1	hmt	C1819 *U-low ESR D12.5 H20 RM5*
Conn Pwr jack 5.5x2.5mm high curr Coax *Power connector*	1	hmt	J3 *Coax high current 2.5mm center pin*
Term Block PCB 2 Pos 5.0mm w. pins, 10A *Speaker connector screw terminal*	2	hmt	J1 2 pcs *RM5x4 min 5A*
Conn Jumper Shorting Gold *Jumper*	2	-	Mute and sleep jumpers
Bag 5			
Diode Schottky 40V 4A SMC *Reverse supply voltage protection*	1	smt¤	D1 *4A continous SMA*
Tripath TA2020 *Tripath chip*	1	hmt¤	Q1
Cap 50V Cer 0.1uF X7R 10% RM5 *Decoupling for Tripath chip power conn.*	2	hmt	C6,C7 *Mount with Tripath chip*
Diode Switch 100V 200mA DO-35 *FAULT-Mute connection*	1	hmt¤	D2 *100mA switch diode*
Diode Schottky 30V 1A SMB *Output clamping diode*	8	smt¤	D5,D6,D7,D8,D9,10,D11,D12 *1A ultrafast or schottky SMA package*
LED Red-Amber Bright Diff. 3mm *Error LED*	1	hmt	LED2

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