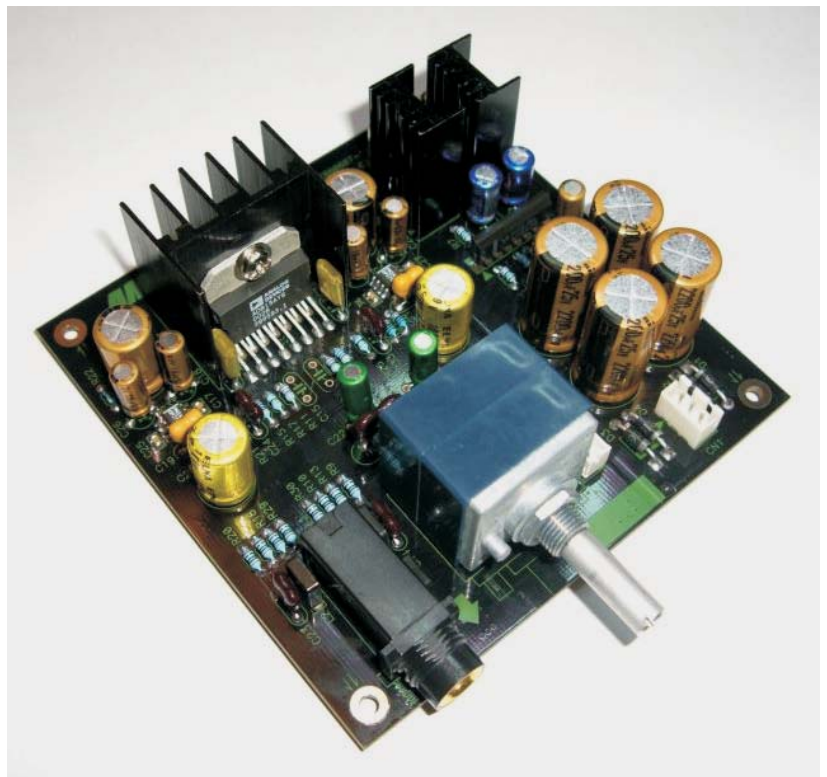


# Audio Modules

**AMT** ALTERNATIVE  
M U S I C A L  
T E C H N O L O G I E S

## High Fidelity AD815 Based Headphone Amplifier



ADPA01102-20 LE060607-1120 Rev A1

# ASSEMBLING HINTS

**GENERAL**

CHIP COMPONENT  
SOLDER  
COPPER TRACK  
P.C.B.

SERVICE PACKAGE

**DISMOUNTING**

VACUUM PISTON  
4822 395 10082

SOLDERING IRON  
e.g. WELDER solder tip PT-H7

SOLDER WICK  
4822 321 40042

e.g. A PAIR OF TWEEZERS

HEATING

CLEANING

A  
B  
C

**PRECAUTIONS**

SOLDERING IRON  
CORRECT

COPPER TRACK

SOLDERING IRON  
CHIP COMPONENT

**MOUNTING**

e.g. A PAIR OF TWEEZERS

SOLDER  
ø0.5-0.8mm

SOLDERING IRON

PRESSURE

SOLDERING TIME  
< 3 sec/side

SOLDER ø0.5-0.8mm

PRESSURE

SOLDERING IRON

A  
B

**EXAMPLES**

CORRECT

SOLDERING IRON

**Ⓜ WARNING**

All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wristband with resistance. Keep components and tools at this potential.

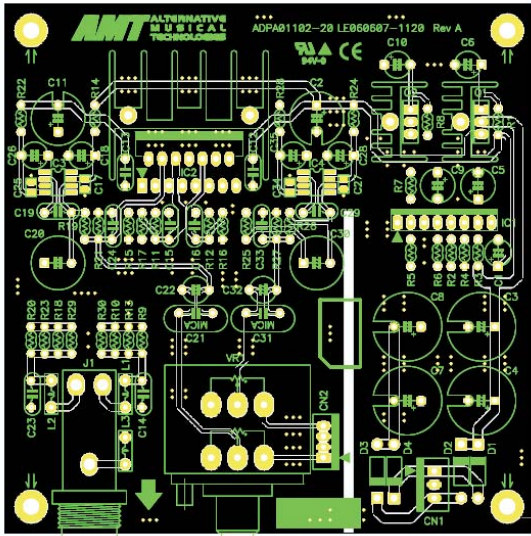
**ESD**



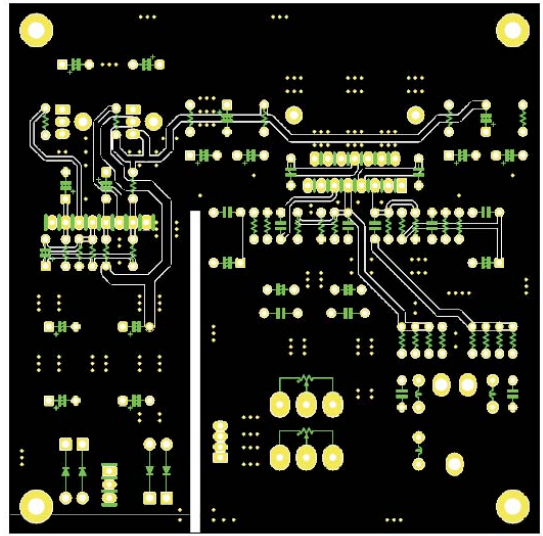
**Ⓜ ATTENTION**

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement réduite par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet muni d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

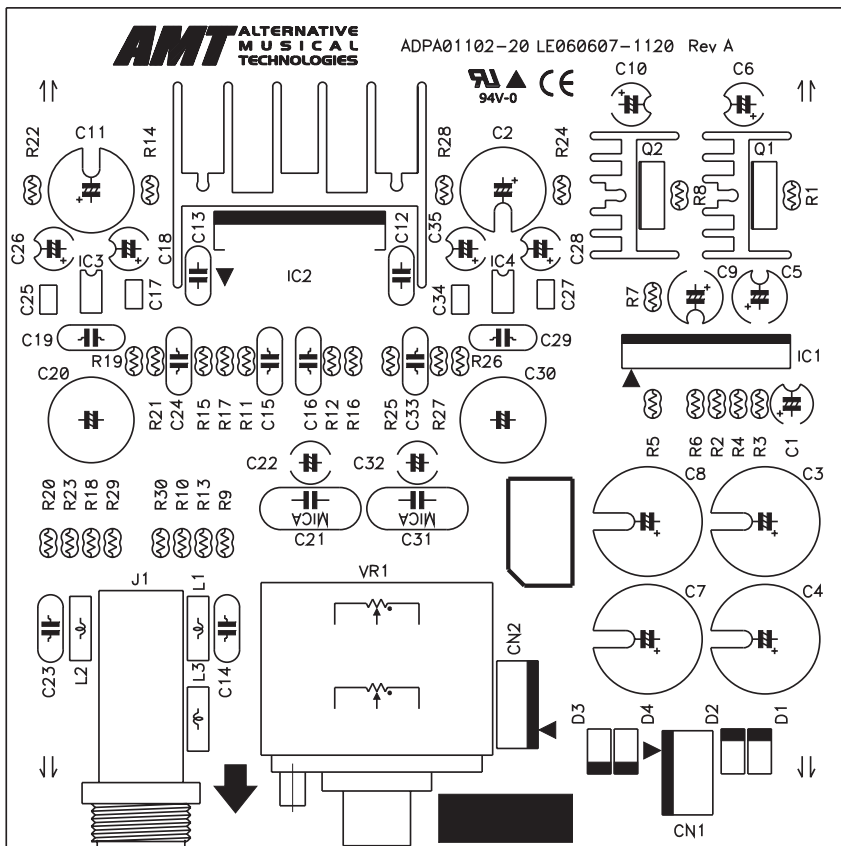
# PCB VIEW



TOP



BOTTOM



TOP SILK

# SCHEMATICS

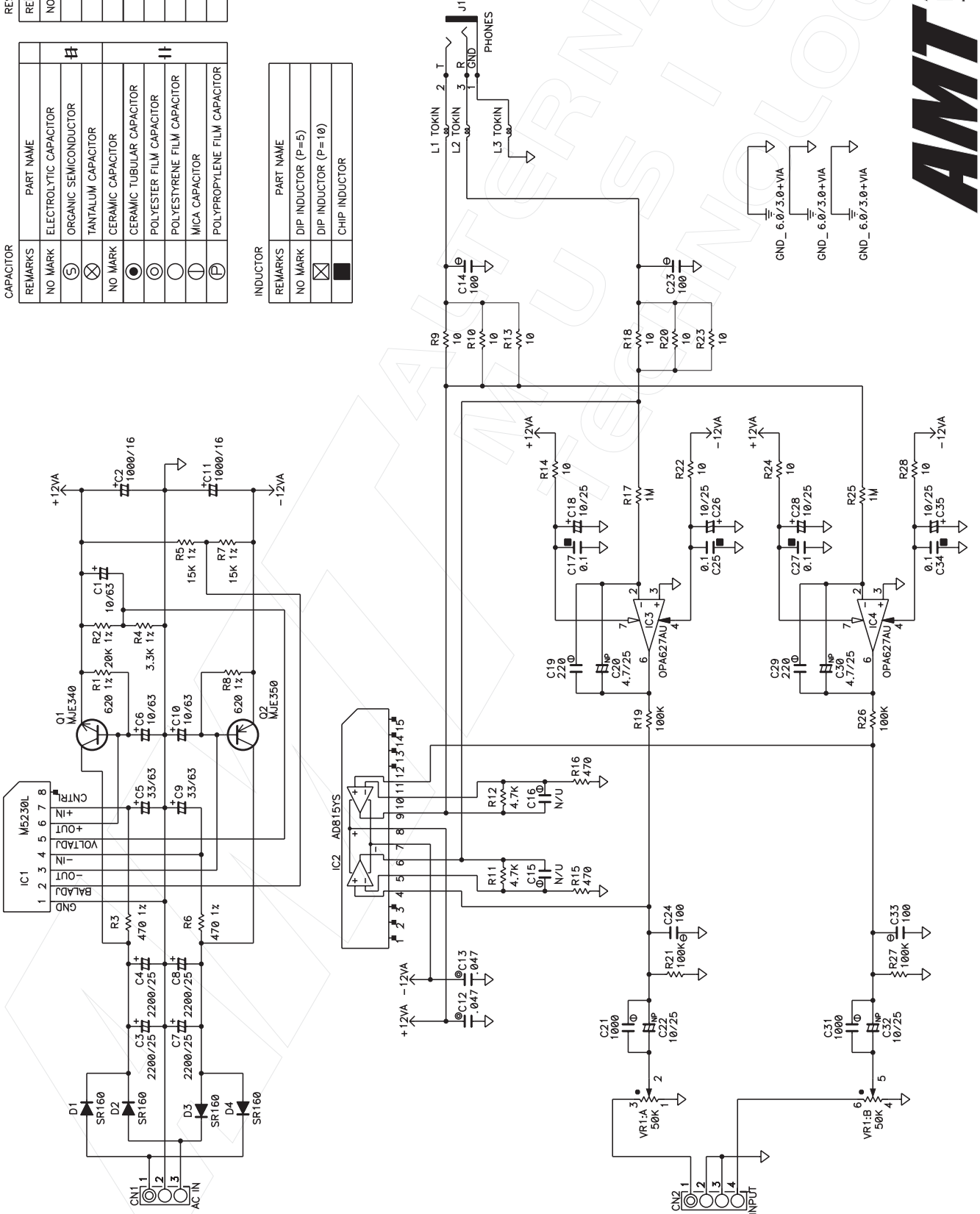
Rev A1



REMARKS	PART NAME	PART NAME
NO MARK	ELECTROLYTIC CAPACITOR	CARBON FILM RESISTOR (P=5)
⊗	ORGANIC SEMICONDUCTOR	CARBON FILM RESISTOR (P=10)
⊙	TANTALUM CAPACITOR	METAL OXIDE FILM RESISTOR
○	CERAMIC CAPACITOR	METAL FILM RESISTOR
⊖	CERAMIC TUBULAR CAPACITOR	FIRE PROOF CARBON FILM
⊕	POLYESTER FILM CAPACITOR	CEMENT MOLDED RESISTOR
⊖	POLYESTYRENE FILM CAPACITOR	SEMI VARIABLE RESISTOR
⊖	MICA CAPACITOR	CHIP RESISTOR
⊖	POLYPROPYLENE FILM CAPACITOR	

REMARKS	PART NAME	PART NAME
NO MARK	ELECTROLYTIC CAPACITOR	
⊗	ORGANIC SEMICONDUCTOR	
⊙	TANTALUM CAPACITOR	
○	CERAMIC CAPACITOR	
⊖	CERAMIC TUBULAR CAPACITOR	
⊕	POLYESTER FILM CAPACITOR	
⊖	POLYESTYRENE FILM CAPACITOR	
⊖	MICA CAPACITOR	
⊖	POLYPROPYLENE FILM CAPACITOR	

REMARKS	PART NAME	PART NAME
NO MARK	DIP INDUCTOR (P=5)	
⊗	DIP INDUCTOR (P=10)	
■	CHIP INDUCTOR	



CAPACITOR

RESISTOR

INDUCTOR

# BOM

Rev A1

Ref. Des.	Part Name	Value	Manufacturer	Remarks
C1 C6 C10 C18 C26 C28 C35	CAPPOL	10/63	Nichicon	5mm
C22 C32	CAPPOL	10/25	Nichicon	5mm / NP
C5 C9	CAPPOL	33/63	Panasonic	6.5mm
C2 C11	CAPPOL	1000/16	Nichicon	10mm
C20 C30	CAPPOL	4.7/100	Elna	10mm / NP
C3 C4 C7 C8	CAPPOL	2200/25	Nichicon	13mm
C14 C23 C24 C33	CAPMICA	100	CDM	8X3 MICA
C19 C29	CAPMICA	220	CDM	8X3 MICA
C15 C16	CAPMICA	N/U	-	-
C21 C31	CAPMICA	1000	CDM	12X5 MICA
C12 C13	CAP_AMF.	0.047	Nissei	7X3
CN2	CONNECTOR	INPUT	ALPS	PH2.0
CN1	CONNECTOR	AC IN	ALPS	ZH2.54
D1 D2 D3 D4	DIODE	SR160	DK	DO-41H
L1 L2 L3	INDUCTOR	25uH	Tokin	2.5X7
J1	JACK	PHONES	Jalco	CK-6.35
IC1	STABILIZER	M5230L	Matsushita	
Q1	NPN	MJE340	ON	TO126
IC3 IC4	OPAMP	OPA627AU	BB	
Q1	PNP	MJE350	ON	TO126
VR1	POT	50K	ALPS	RK27
R17 R25	RESISTOR MF1/6	1M	Nissei	1%
R4	RESISTOR MF1/6	3.3K	Nissei	1%
R11 R12		4.7K		1%
R9 R10 R13 R14	RESISTOR MF1/6	10	Nissei	1%

