

**ALESIS**  
**M1 Active MKII (8N)**

**SCHEMATIC**  
**AND**  
**PCB**  
**FILES**

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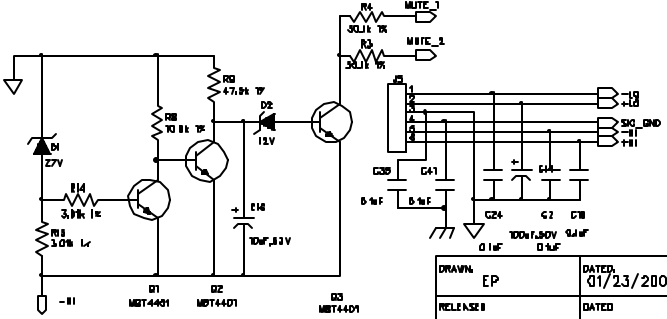
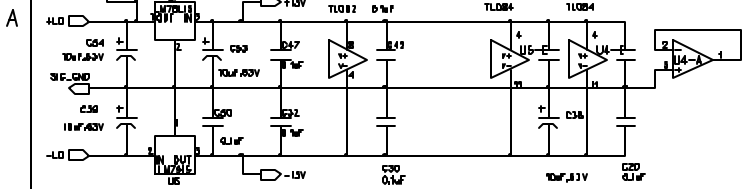
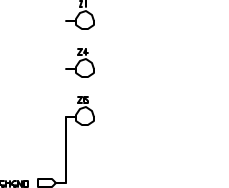
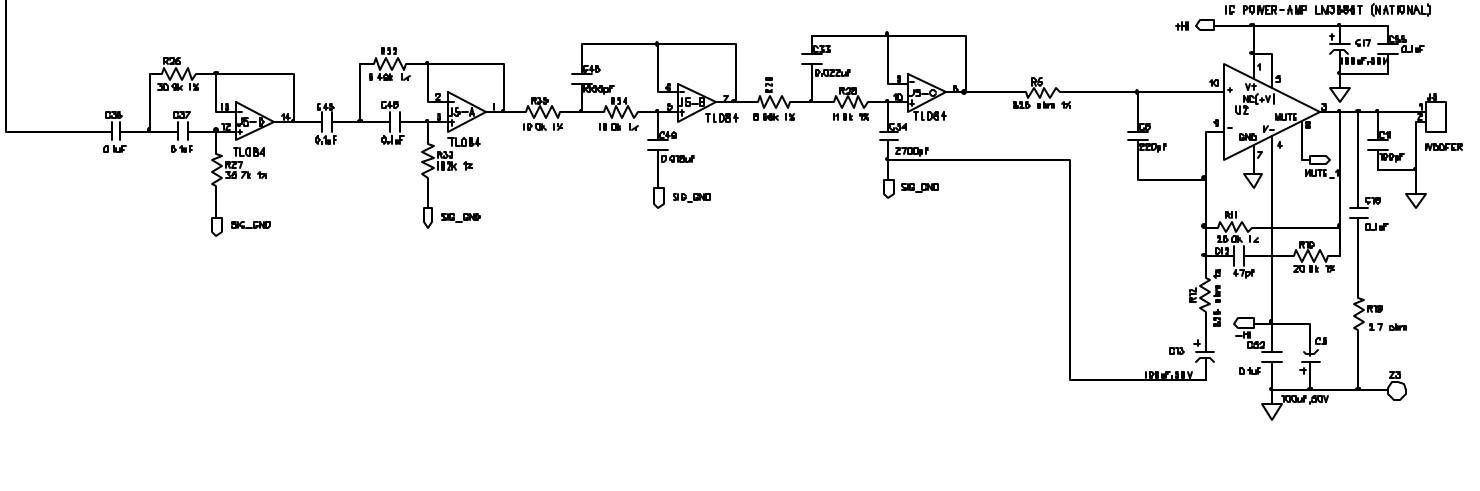
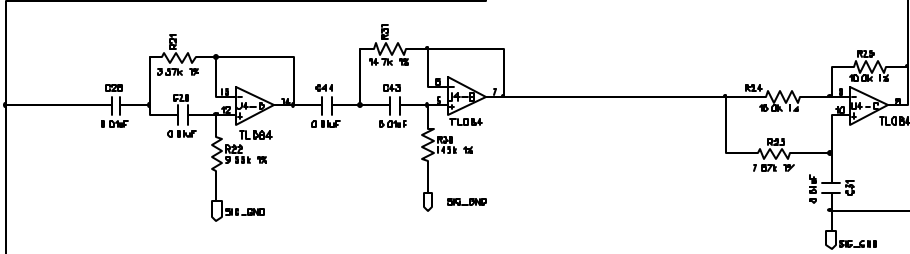
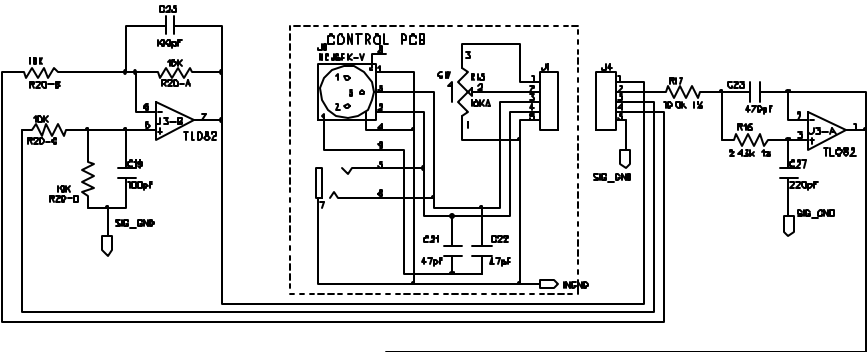
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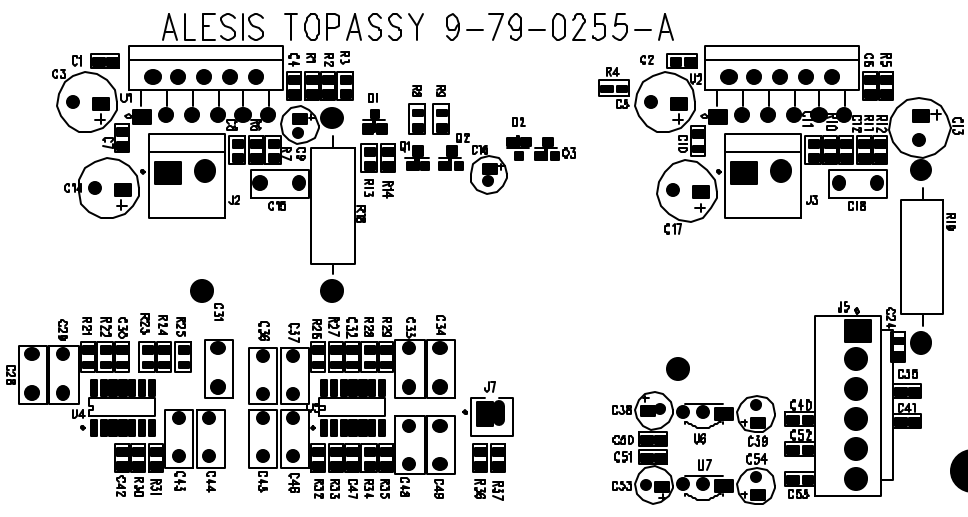
REVISION RECORD			
LTR	EDD NO	APPROVED	DATE



COMPANY		ALESIS	
TITLE		POWERED MONITORS	
		BN PA and XQVER	
PART NUMBER	B-40-D255-A	REV.	A
ASSY NUMBER	9-79-0205-A		
FILENAME	BNPA01.SCH		
SCALE			
DRAWN		DATED	
EP	01/23/2001		
RELEASE		DATED	



SURFACE MOUNT SIDE

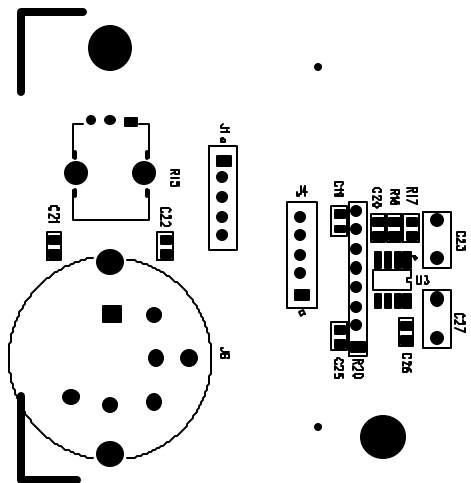


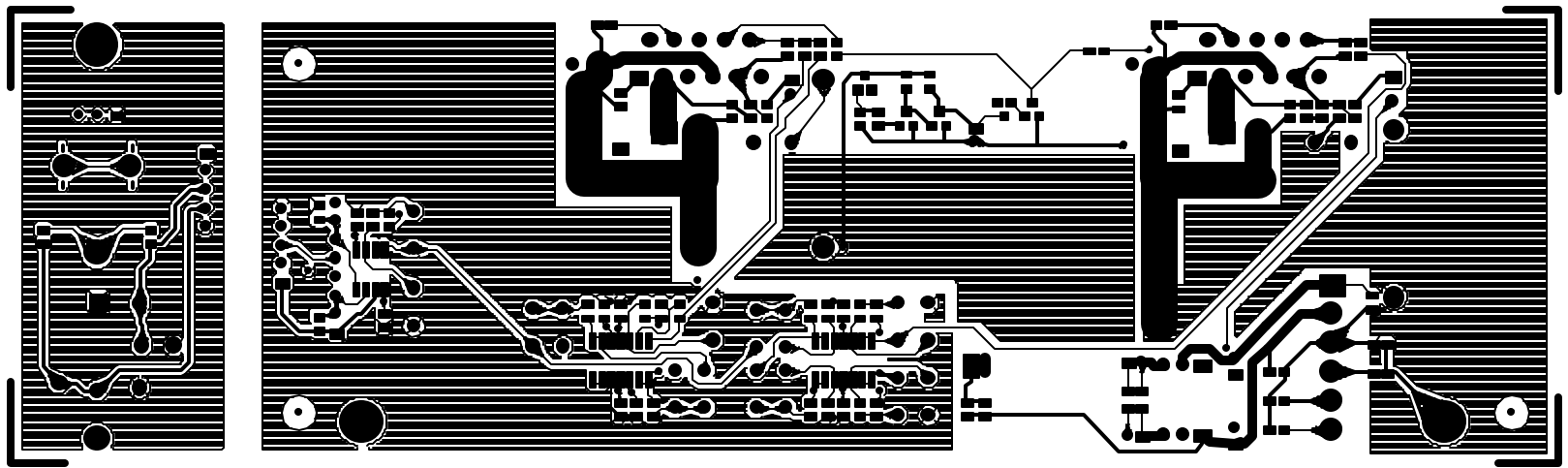
ALESIS TOPASSY 9-79-0255-A

All through-hole components to be assembled on TOP SIDE



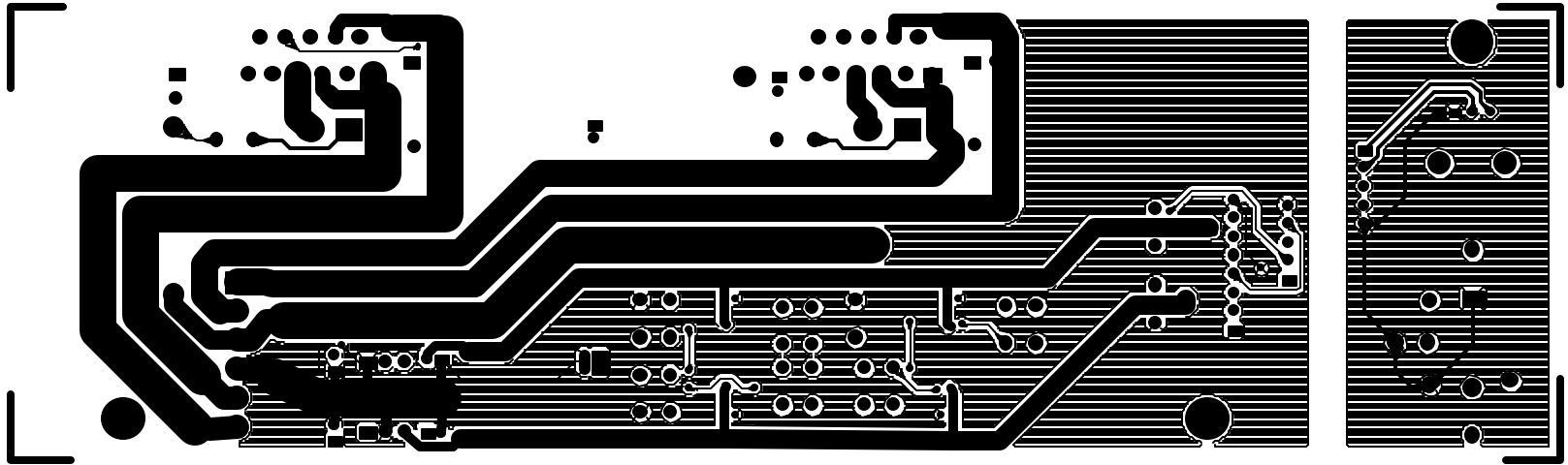
THROUGH-HOLE SIDE





ALESIS 09-40-0255-A "TOPTRACE" LAYER1

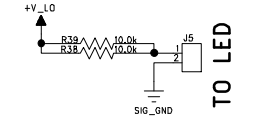
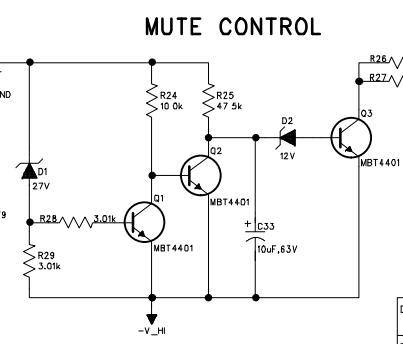
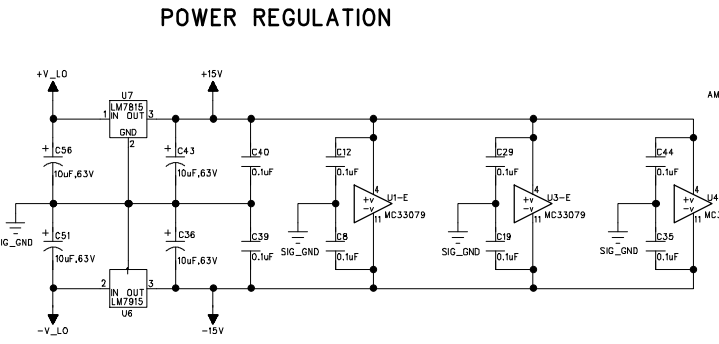
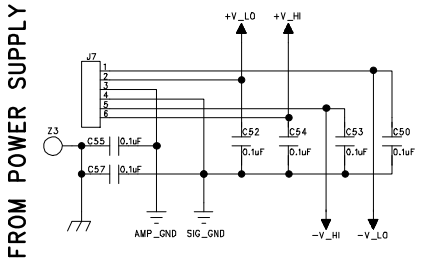
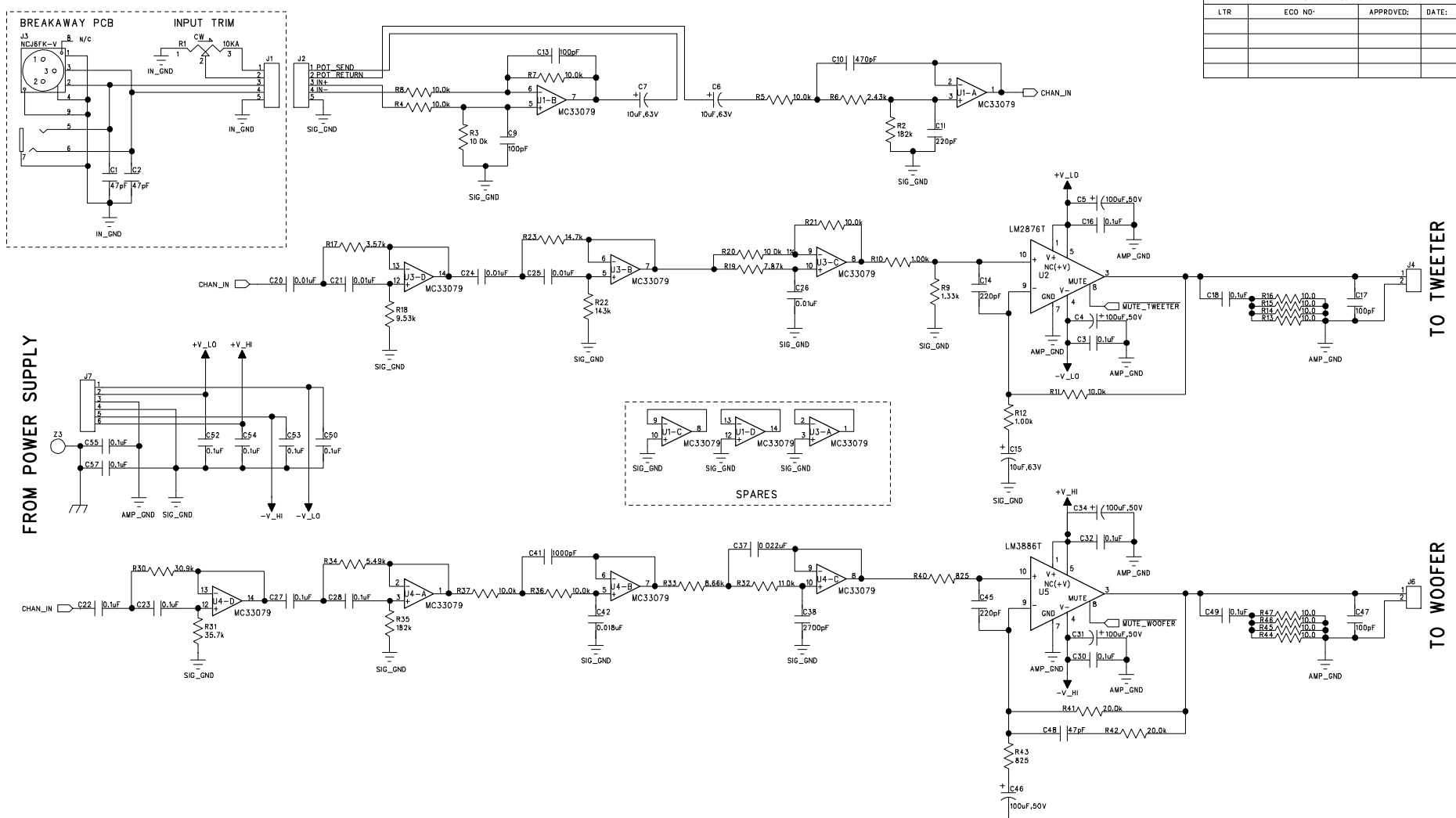




ALESIS 09-40-0255-A "BOTTRACE" LAYER2



REVISION RECORD			
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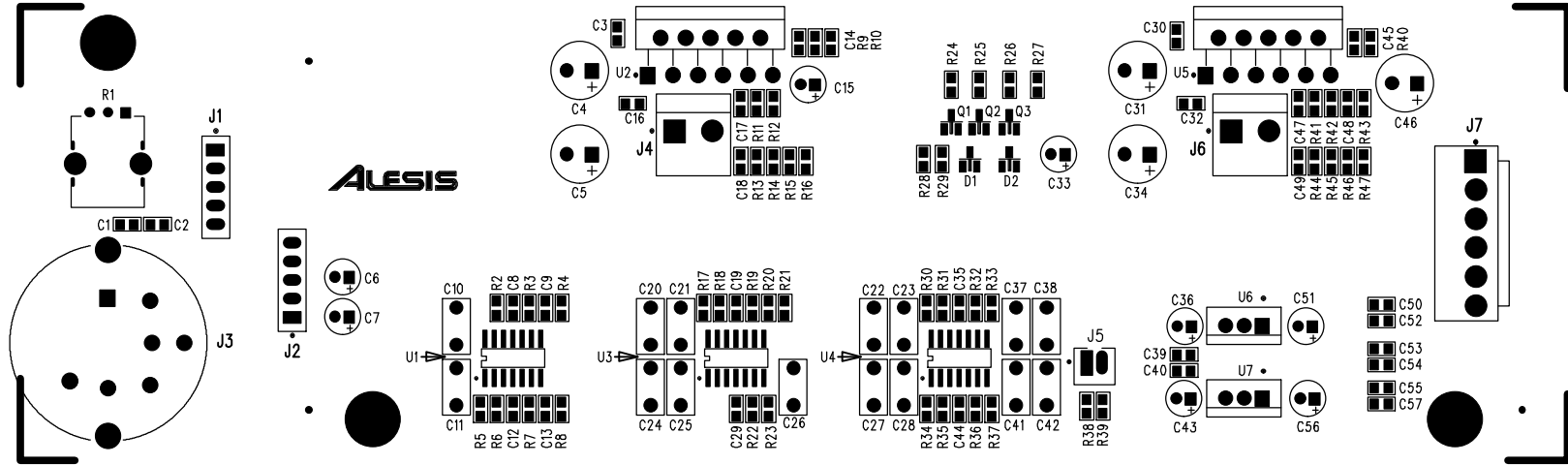


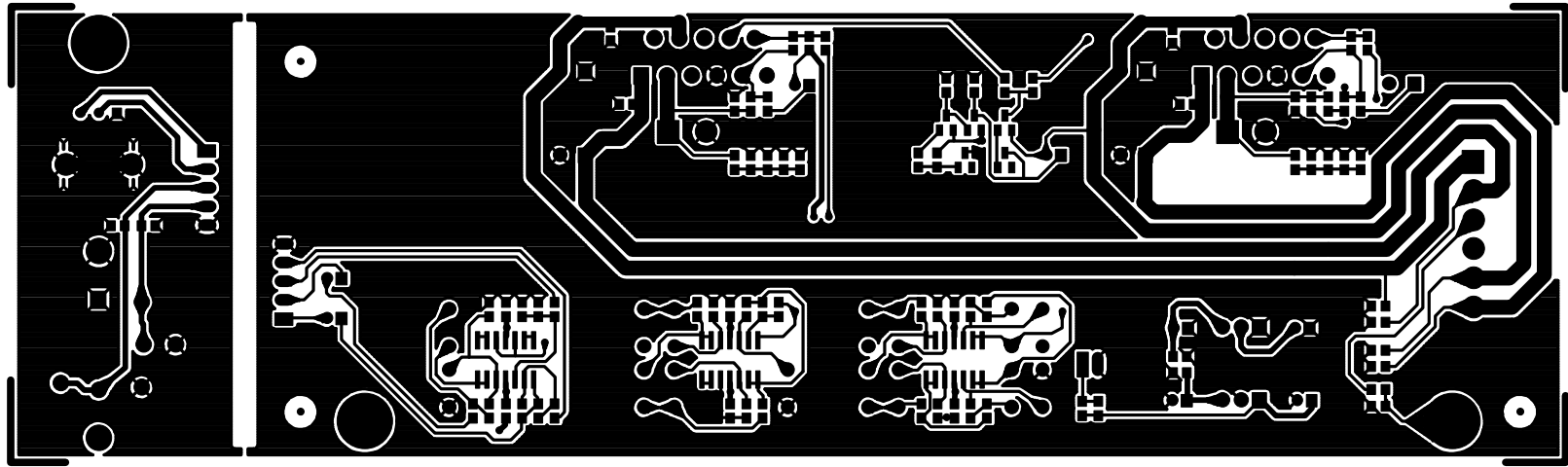
COMPANY: ALESIS	
TITLE: M1 ACTIVE MKII CROSSOVER AND POWER AMP	
PART NUMBER: 9-40-0255-B	REV:
ASSY NUMBER: 9-79-0255	
FILENAME: 8NPAB02A.SCH	SIZE: C
SCALE:	SHEET: 1 OF 1

DRAWN: ATM/PHM	DATED: 11/27/2001
RELEASED:	DATED:



ALESIS TOPASSY 9-79-0255-B

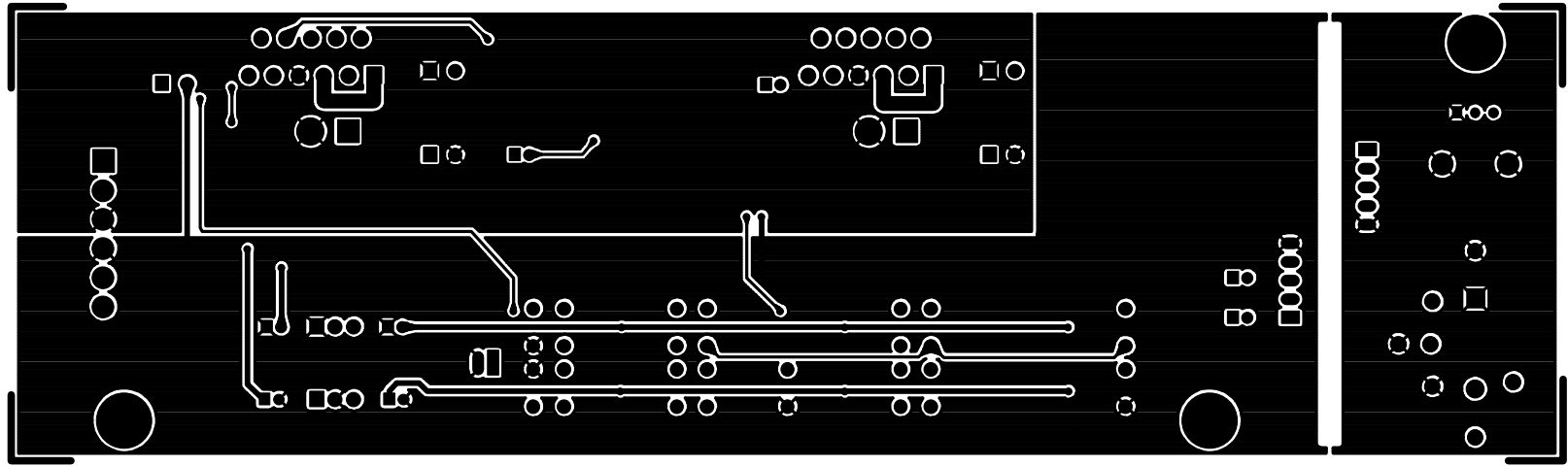




ALESIS 09-40-0255-B "TOPTRACE"







ALESIS 09-40-0255-B "BOTTRACE"



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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

D

D

C

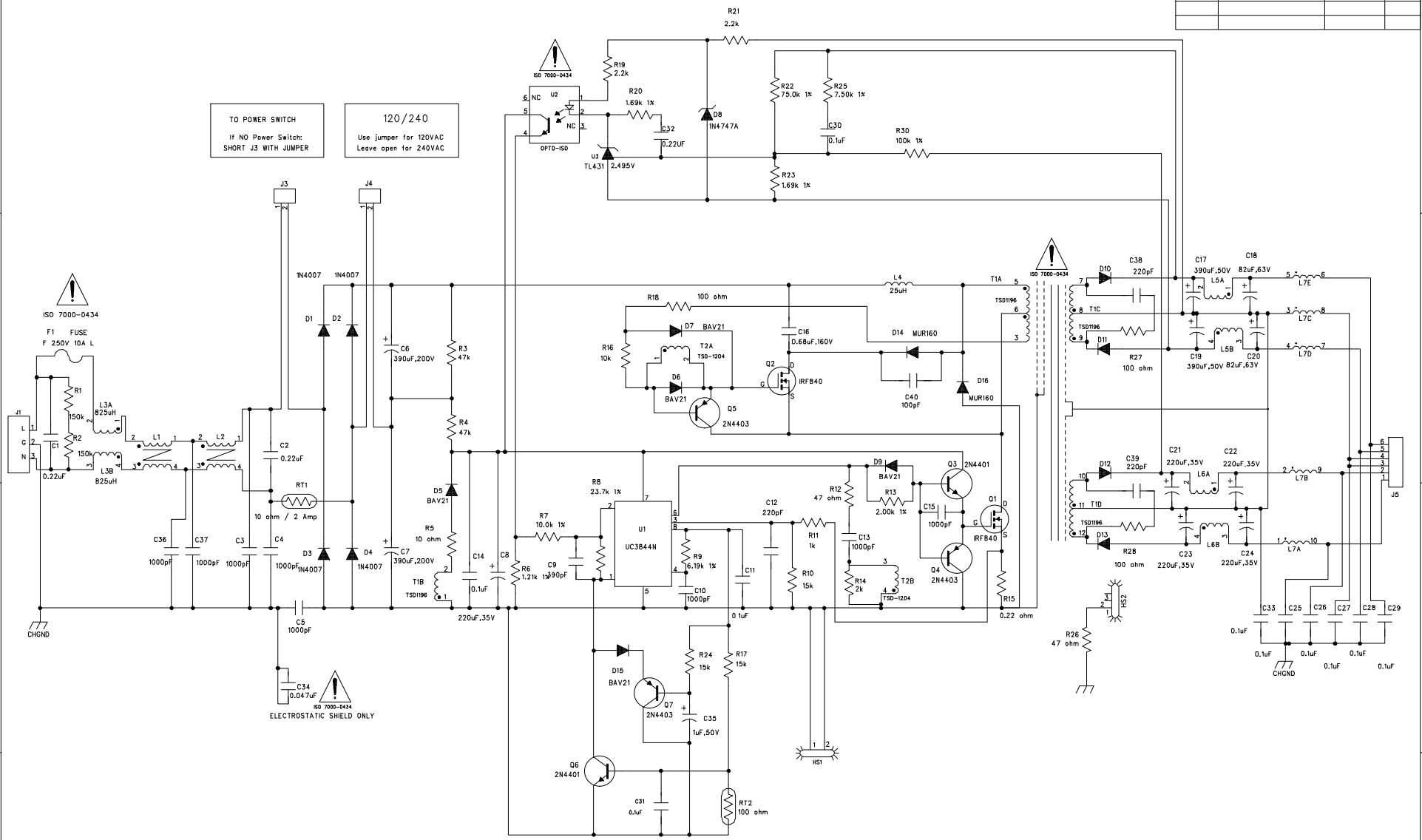
C

B

B

A

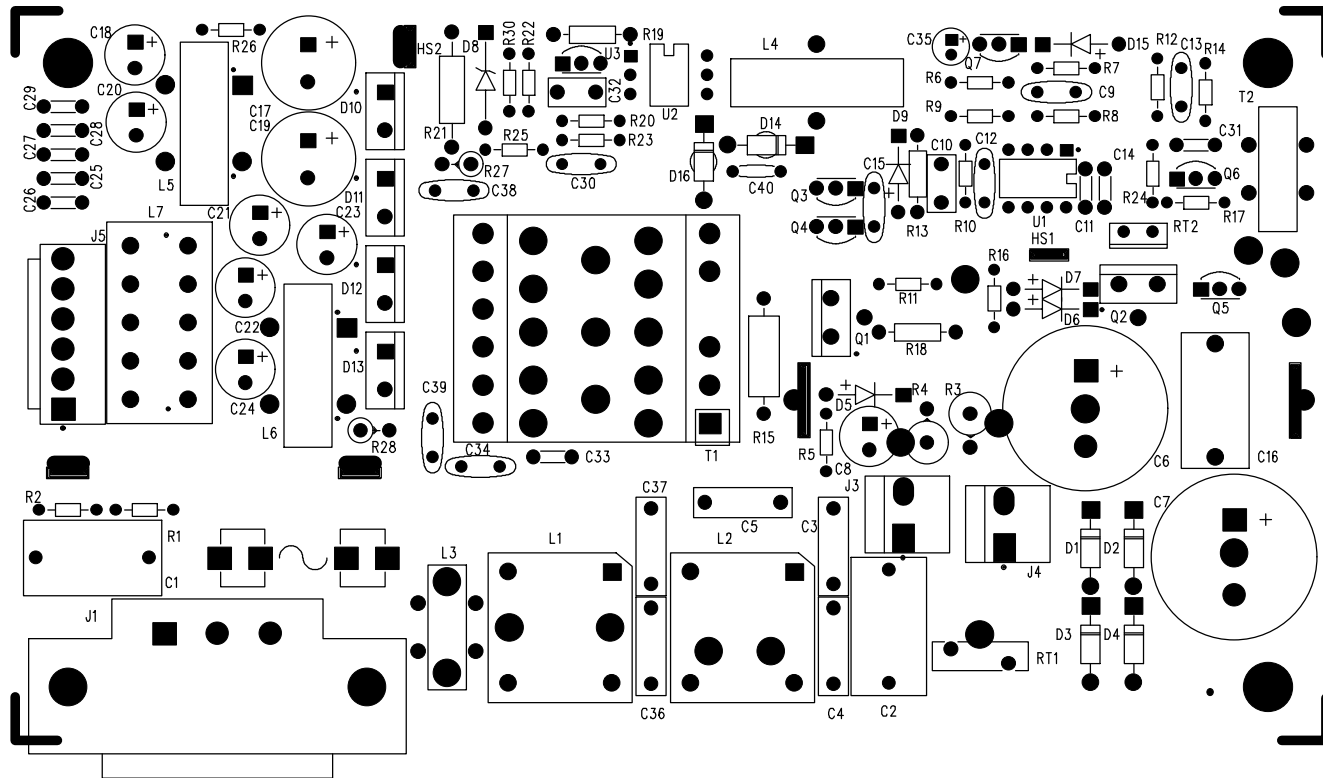
A



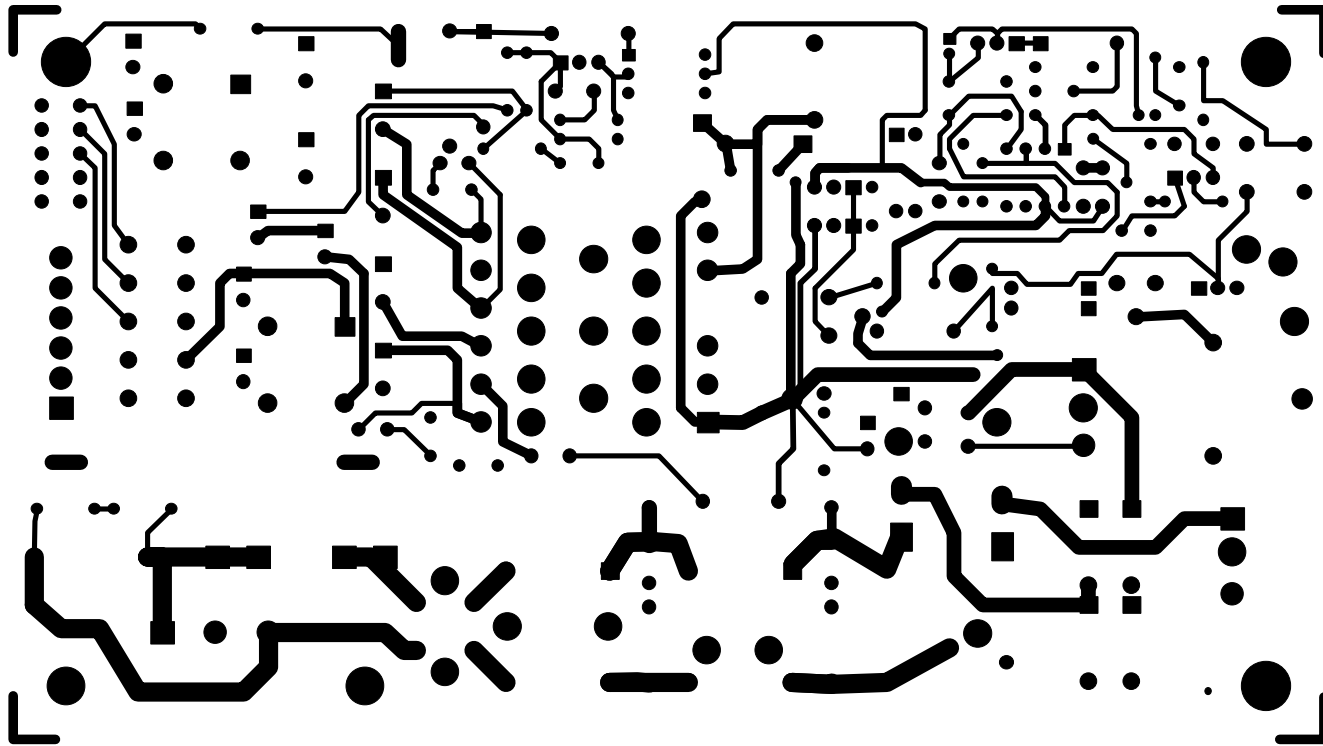
COMPANY.	ALESIS		
TITLE:	B6 CONVERTER		
PART NUMBER.	9-40-B601-E	REV:	E
ASSY NUMBER.			
FILENAME.	B6MNE04A.SCH	SIZE:	C
SCALE:			SHEET: 1 OF 1

DRAWN:	EM	DATED:	5/20/99
RELEASED:		DATED:	

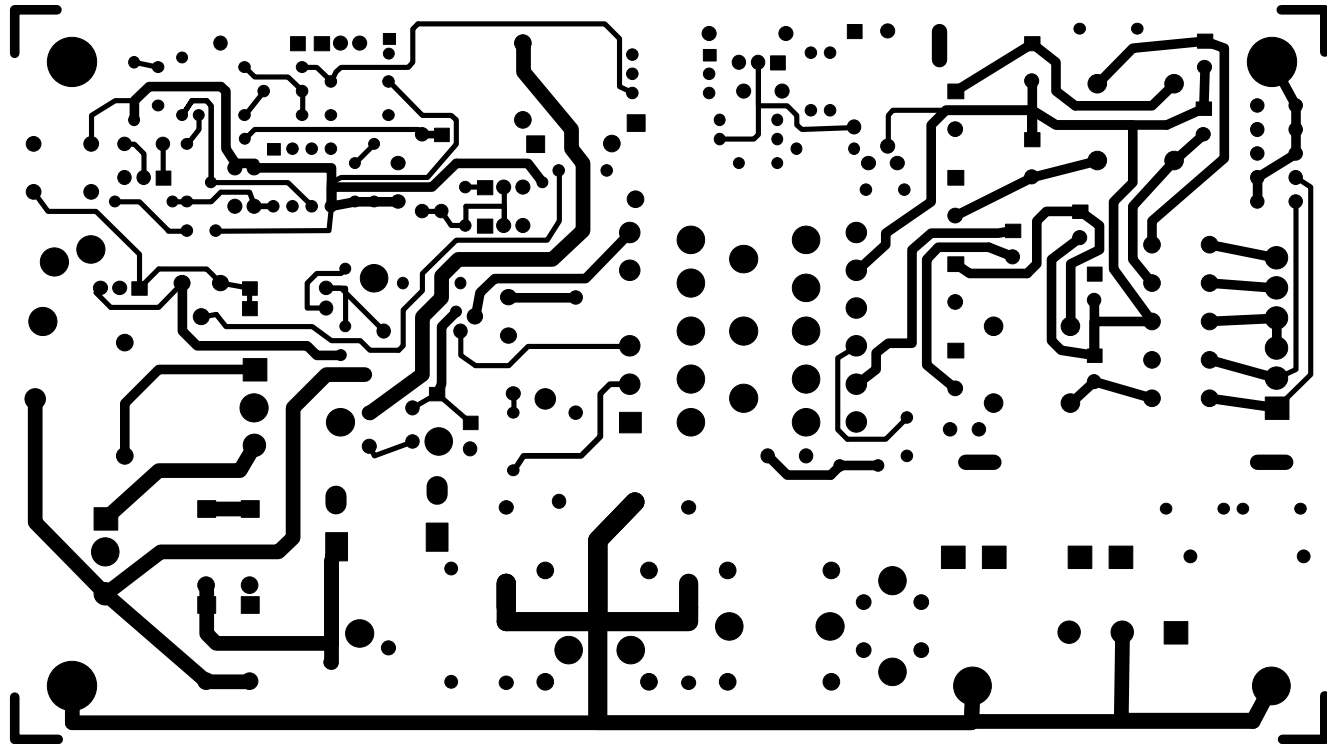
# ALESIS 9-79-B601-E "TOP ASSY"



1. Trim component leads on solder side  
lead length not to exceed 2mm



ALESIS 9-40-B601-E "TOPTRACE"



ALESIS 9-40-B601-E "BOTTRACE"

**ALESIS**  
**M1 Active MKII (8N)**

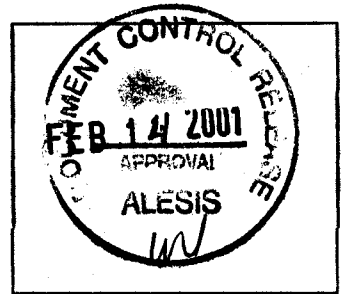
**ECN**  
**HISTORY**

X3, X4, X5, Y1, Z1-9, ZA, ZB, ZC  
QA, RH, RL, UI

# ALESIS

NP, NS, Q6, Q7 ENGINEERING CHANGE NOTICE

UB, NC CL, D3, D5, D6 DAC, CB, CE, CF, CG  
NU, PA G4, G5, G6, M4 IN, IP, 7R, 8M, A6C, B4



ECN B03301 PRODUCT(S): ALL FOREIGN BUILD PRODUCTS  
DATE: 2/1/01 ASSEMBLY(S): TOP LEVEL

## WAS CHANGE TO BE MADE IS

FLAGS CHANGE ON BOM:	:	FLAGS CHANGE ON BOM:
FROM: OPT.10 FRN: (NO) VNDR FRN: (NO)	:	TO: OPT.20 FRN: (YES) VNDR FRN: (YES)
	:	
For below parts:	:	
1) 7-51-0000-A CARD WARRANTY (DOMESTIC ONLY)	:	
REV.A	:	
2) 7-51-1217 SHEET SERVICE-CENTER-CONTACTS	:	
8.5 x 11"	:	
3) 7-51-1219 SHEET WELCOME-TO-ALESIS-FAMILY	:	
4) 7-51-1248 BROCHURE CLOTHING/ACCESSORIES	:	
5) 7-53-0001 STICKER BUMPER ALESIS	:	

**REASON FOR CHANGE:**  
OVERSEA VENDOR WILL SUPPLY THE ABOVE PARTS.

**SPECIAL INSTRUCTIONS:** Number of pages attached:       
EFFECTIVE 0401 WO.

**MATERIAL DISPOSITION:** "X" all that apply...

	USE AS IS	REWORK	SCRAP
ON ORDER	X		
WIP	X		
STOCK	X		
RETURNS	X		

PROJECT ENGINEER:  
\_\_\_\_\_  
MANF. ENGINEER: / DIRECTOR'S INITS.  
[Signature] / WJM

BOM UPDATED: 02/14/01  
UPDATED BY: [Signature]  
WORK ORDER UPDATED:   /  /    
COORDINATOR: \_\_\_\_\_

# ALESIS

## M1 Active MKII (8N)

# BOM



Part.Number	UM	Description	Quantity	Ref.Designator
<b>8N-UL</b>	<b>PR</b>	<b>MONITOR ONE ACTIVE SPEAKER SYSTEM PHASE II - UL</b>	<b>1</b>	
10.00	CON	Alesis Consigned Materi		
20.00	VF	Vendor Furnished Materi		
7-41-0005	EA	CABLE POWER UL/CSA SJT	2	
7-51-1219-B	EA	SHEET "WELCOME TO ALESIS FAMILY" 5 x 8"	1	
<b>8N</b>	<b>PR</b>	<b>MONITOR ONE ACTIVE SPEAKER SYSTEM - MK II</b>	<b>1</b>	
10.00	CON	Alesis Consigned Materi		
20.00	VF	Vendor Furnished Materi		
4-74-0021-B	EA	CABLE LOW-FREQ TRANSDUCER	2	
4-74-0022-B	EA	CABLE HIGH-FREQ TRANSDUCER	2	
5-00-0115	EA	SCREW 6 X 1/2" PFB SMA	4	BEZEL TO BAFFLE
5-00-0117	EA	SCREW 6 x 3/4" PPB SMA	14	(6)HIGH FREQ - CABINET (8)LOW FREQ - CABINET
5-00-0815	EA	SCREW #8 x 1 PTB SMA	20	R/P-CABINET
5-04-0056	EA	RING TRIM 8N	2	LOW-FREQ TRANSDUCERS
7-02-0028	EA	TRANSDUCER HIGH-FREQ 1N/8N	2	
7-02-0030	EA	TRANSDUCER LOW-FREQ 6.5" NWCF w/MAGNET 8-HOLE 8N	2	
7-50-0144	EA	STICKER BARCODE S/N 8N	1	
7-51-0092	EA	MANUAL REFERENCE 8N	1	
7-53-0018	EA	STICKER QC W/ MFR DATE (UL APPROVED)	2	BACK PANEL
7-53-0160	EA	LABEL LOGO 8N	2	CABINET
7-80-0276	EA	BOX SHIPPING 8N	1	PACKOUT
7-80-0277	EA	BOX GIFT 8N	1	PACKOUT
7-81-0147	EA	FOAM SET TOP&BOTTOM 1N/8N	1	
7-90-0709	EA	POLYBAG 7" x 9" - 2 MIL	1	LIT
7-90-1228	EA	POLYBAG 12 x 14 x 28 - 2 MIL	2	CABINET
9-04-0023	EA	CABINET LEFT SPEAKER 8N	1	
9-04-0024	EA	CABINET RIGHT SPEAKER 8N	1	
9-34-0033	EA	FOAM SKID PAD EVA 159.5 x 129mm 8M	2	SKID
<b>9-96-0034</b>	<b>EA</b>	<b>ASSY AMP-P/S 8M</b>	<b>2</b>	
10.00	CON	Alesis Consigned Materi		
20.00	VF	Vendor Furnished Materi		
5-00-0006	EA	SCREW 4-40 x 1/2" PPZ	2	AMP-HEATSINK
5-00-0106	EA	SCREW M3 x 8mm PPZ w/NYLOC PATCH	7	(1)STANDOFF-JACK PCB (4)P/S-SHIELD (2)AMP PCB-R/P
5-00-0311	EA	SCREW M3 x 10mm PPB PLASTITE	3	(2) JACK-R/P (1)STANDOFF-R/P
5-00-1013	EA	SCREW #8 x 1/2" PPB HI-LO W/#8 HEAD	2	IEC-R/P
5-00-6328	EA	SCREW #6 x 3/8 PLASTITE	2	R/P - FOOT

5-01-0029	EA	WASHER FLAT #4 ZINC 0.25"OD	2	U1 U2
5-01-0035	EA	WASHER #4 SHOULDER NYLON .140 OD X .116 ID X .090 L	2	U1 U2
5-02-0012	EA	NUT KEP M4	9	(6)P/S SHIELD - R/P (3)HEATSINK - R/P
5-02-6328	EA	NUT KEP M3 STEEL/ZINC	1	IEC - P/S
5-03-0002	EA	STANDOFF M3 x 24mm F-F BRASS 8M	1	JACK PCB-REAR PCB
5-04-0007	EA	WASHER #4 SPLITLOCK	2	U1 U2
5-10-0006	EA	TIE WRAP 6" LOCKING WHITE	1	AROUND XLR FOAM
7-13-0021	EA	HEATSINK ALUMINUM 45 x 45 x 180mm 8M	1	U1 U2
7-53-0018	EA	STICKER QC W/ MFR DATE (UL APPROVED)	1	BOTTOM P/S SHIELD
9-01-0019-C	EA	PANEL REAR ALUMINUM 8M - REV C	1	
9-07-0009-A	EA	SHIELD POWER SUPPLY 8M - REV A	1	P/S-BACK PANEL
9-15-0173	EA	INSULATOR THERMAL PAD .8"x.7"x.006" ADH BACK	2	U1 U2-HEATSINK
9-15-0175-B	EA	KNOB VOLUME 8M - REV B	1	VOLUME POT
9-23-0013-C	EA	FOOT REAR-PANEL 3D - REV C	2	R/P
9-32-0008	EA	O-RING KNOB VOLUME 8M	1	VOLUME KNOB
9-34-0014	EA	FOAM STRIP XLR 129 x 25mm 8M	1	XLR
9-34-0016	EA	FOAM GASKET POWER CONNECTOR 51 x 35mm 8M	1	IEC
9-34-0024-B	EA	FOAM MONOGASKET PORON 238 x 147mm 8M - REV B	1	R/P
9-96-0031	EA	ASSY CABLE POWER SWITCH 8M	1	SWT - P/S
9-96-0032	EA	ASSY CABLE 6-PIN 132mm 3.96mm-PITCH 8M	1	P/S - AMP
9-96-0036	EA	ASSY LED CABLE W/LED 8M	1	AMP PCB
<b>9-79-B601</b>	<b>EA</b>	<b>ASSY PCB POWER SUPPLY 8M</b>	<b>1</b>	
10.00	CON	Alesis Consigned Materi		
20.00	VF	Vendor Furnished Materi		
0-00-0100	EA	RES 10 OHM 1/8W 5%	1	R5
0-00-0102	EA	RES 1K OHM 1/8W 5%	1	R11
0-00-0103	EA	RES 10K OHM 1/8W 5%	1	R16
0-00-0153	EA	RES 15K OHM 1/8W 5%	3	R10 R17 R24
0-00-0154	EA	RES 150K OHM 1/8W 5%	2	R1-2
0-00-0202	EA	RES 2K OHM 1/8W 5%	1	R14
0-00-0470	EA	RES 47 OHM 1/8W 5%	2	R12 R26
0-01-1002	EA	RES 10.0K OHM 1/8W 1%	1	R7
0-01-1003	EA	RES 100K OHM 1/8 1%	1	R30
0-01-1211	EA	RES 1.21K OHM 1/8W 1%	1	R6
0-01-1691	EA	RES 1.69K OHM 1/8W 1%	2	R20 R23
0-01-2372	EA	RES 23.7K OHM 1/8W 1%	1	R8
0-01-6191	EA	RES 6.19K OHM 1/8W 1%	1	R9
0-01-7501	EA	RES 7.50K OHM 1/8W 1%	1	R25
0-01-7502	EA	RES 75.0K OHM 1/8W 1%	1	R22
0-03-0101	EA	RES 100 OHM 1/4W 5%	1	R18

0-03-0222	EA	RES 2.2K OHM 1/4W 5%	2	R13, R19
0-05-0222	EA	RES 2.2K OHM 1/2W 5%	1	R21
0-05-1228	EA	RES 0.22 OHM 1W 5%	1	R15
0-22-0100	EA	THERMISTOR 10 OHM 2A NTC	1	RT1
0-23-1200	EA	THERMISTOR PTC 100 OHM 120°C	1	RT2
0-99-1101	EA	RES 100 OHM 1W 5% MO CFR-VM	2	R27 R28
0-99-2473	EA	RES 47K OHM 2W 5% MO CFR-VM	2	R3-4
1-02-0102	EA	CAP 1000pF CERDISC 10% 100V	2	C13 C15
1-02-0221	EA	CAP 220pF CERDISC 10%	3	C12 C38-39
1-02-0391	EA	CAP 390pF CERDISC 10% 50V	1	C9
1-02-0473	EA	CAP 0.047uF CERDISC Z5U 10% 50V	1	C34
1-02-5101	EA	CAP 100pF CERDISC 500V 6.35x6x2mm	1	C40
1-11-0105	EA	CAP 1.0uF ELEC 50V 2x5x11mm	1	C35
1-13-2393	EA	CAP 390uF ELEC 200V 10x22x30mm	2	C6-7
1-14-0220	EA	CAP 0.22uF X2-CAP +/-20% 250VAC 15x18.3x10x16mm	2	C1-2
1-15-0101	EA	CAP 1000pF Y-CAP 250VAC 10x13.5x3.75x8.5mm (PAPER)	5	C3-5 C36-37
1-16-0223	EA	CAP 220uF ELEC LOW-ESR 35V 105°C 3.5x8x20mm	5	C8 C21-24
1-16-0393	EA	CAP 390uF ELEC LOW-ESR 50V 105°C 5x12.5x25mm	2	C17 C19
1-16-0822	EA	CAP 82uF ELEC LOW-ESR 63V 105°C 3.5x8x20mm	2	C18 C20
1-20-0102	EA	CAP 1000pF FILM 5% 100V	1	C10
1-20-0224	EA	CAP 0.22uF FILM 5% 50V	1	C32
1-20-1684	EA	CAP 0.68uF FILM 100V 15x9x18x18mm	1	C16
1-21-0104	EA	CAP 0.1uF MONO 20% 50V RADIAL	9	C11 C14 C25-29 C31 C33
1-22-2104	EA	CAP 0.1uF CERDISC 10% 100V X7R .2x.1x.15"	1	C30
2-01-4007	EA	DIODE POWER 1N4007 1000V 1A	4	D1-4
2-01-6220	EA	DIODE POWER ULTRA-FAST MUR860 600V 8A TO-220	4	D10-13
2-02-0600	EA	DIODE POWER ULTRAFast MUR160 600V 1A	2	D14 D16
2-02-4747	EA	DIODE ZENER 1N4747A 20V 1W DO-41	1	D8
2-03-4401	EA	TRANS NPN GEN-PURPOSE-AMP 2N4401 40V 1A TO-92	2	Q3 Q6
2-03-4403	EA	TRANS PNP 2N4403 40V 600mA TO-92	3	Q4-5 Q7
2-05-0003	EA	TRANS POWER FET IRF840 500V 8A TO-220	2	Q1-2
2-10-3844	EA	IC MODULATOR UC3844N	1	U1
2-11-0431	EA	REG ADJ-SHUNT TL431 2.5V-36V 100mA 2% TO-92	1	U3
2-24-8104	EA	IC OPTO-ISOLATOR TCDT1124 6-PIN	1	U2
2-99-0021	EA	DIODE BAV21 SOD-27	5	D5-7 D9 D15
4-09-0010	EA	CON PWR IEC 10A 250V PCB-MOUNT W/TOP GND LUG	1	J1
4-15-0600	EA	HEADER SIL 6-PIN 3.96mm MALE EXT-LOCKING	1	J5
4-15-1102	EA	HEADER SIL 2-PIN 0.2" LOCKING	2	J3-4
4-19-0207	EA	CABLE SIL 2-PIN 3.96mm 12.70mm 120V TRANSFORMER	1	J4
5-00-0021	EA	SCREW 4-40 x 3/8" PPZ	6	Q1 Q2 D10-13
5-00-0036	EA	SCREW M3 x 10mm PPZ	1	IEC (RT SIDE)

5-01-0029	EA	WASHER FLAT #4 ZINC 0.25"OD	6	Q1 Q2 D10-13
5-01-0035	EA	WASHER #4 SHOULDER NYLON .140 OD X .116 ID X .090 L	6	Q1 Q2 D10-13
5-02-4402	EA	NUT HEX 4-40	2	Q1 Q2
5-04-0007	EA	WASHER #4 SPLITLOCK	6	Q1 Q2 D10-13
5-05-1001	EA	CLIP FUSE HOLDER 5 x 12mm	2	F1
7-04-0002	EA	FUSE 5A 250V 5x20mm F UL-LISTED	1	
7-07-0023	EA	INSULATOR POLY-PAD 400 TO-220	6	Q1 Q2 D10-13
7-07-0044	IN	INSULATOR TUBING FRS 18AWG x 7/8" STANDARD WALL	1	R28
7-20-0042	EA	INDUCTOR RESONANT 25uH 3A	1	L4
7-20-0043	EA	CHOKE COMMON-MODE 33mH 1A	2	L1-2
7-20-0044	EA	INDUCTOR COMMON-MODE 5-WINDING	1	L7
7-20-0045	EA	INDUCTOR COUPLED 10uH 6A	2	L5-6
7-20-0046	EA	CHOKE COMMON-MODE 825uH 2A	1	L3
7-40-0015	EA	TRANSFORMER ACTIVE-CLAMP 4-TAP FLYBACK	1	T1
7-40-0016	EA	TRANSFORMER 1:1 GATE DRIVE	1	T2
9-03-0020	EA	HEATSINK 66.5x25.0x25.0	1	HS1
9-03-0068	EA	HEATSINK 4 x TO-220 B6 - REV A	1	HS2
9-40-B601-E	EA	PCB POWER SUPPLY 8M - REV E	1	
<b>9-96-1386</b>	<b>EA</b>	<b>ASSY PCB AMP/JACK 8M</b>	<b>1</b>	
10.00	CON	Alesis Consigned Materi		
20.00	VF	Vendor Furnished Materi		
<b>9-79-0195</b>	<b>EA</b>	<b>ASSY PCB JACK 8M</b>	<b>1</b>	
10.00	CON	Alesis Consigned Materi		
20.00	VF	Vendor Furnished Materi		
0-09-0009	EA	POT 10KA SINGLE	1	
1-55-0470	EA	CAP 47pF NPO 0805 50V	2	C26-27
4-05-0023	EA	JACK XLR 3-PIN FEMALE STEREO-COMBO W/LATCH VERT-PCB M	1	J6
<b>9-79-0255</b>	<b>EA</b>	<b>ASSY PCB AMPLIFIER 8N</b>	<b>1</b>	
20.00	VF	Vendor Furnished Materi		
0-09-0009	EA	POT 10KA SINGLE	1	R1
0-16-1001	EA	RES 1.00K OHM 1/10W 1% 0805	2	R10 R12
0-16-1002	EA	RES 10.0K OHM 1/10W 1% 0805	13	R3-5 R7-8 R11 R20-21 R24 R36-39
0-16-1009	EA	RES 10.0 OHM 1/10W 1% 0805	8	R13-16 R44-47
0-16-1102	EA	RES 11.0K OHM 1/10W 1% 0805	1	R32
0-16-1331	EA	RES 1.33K OHM 1/10W 1% 0805	1	R9
0-16-1433	EA	RES 143K OHM 1/10W 1% 0805	1	R22
0-16-1472	EA	RES 14.7K OHM 1/10W 1% 0805	1	R23
0-16-1823	EA	RES 182K OHM 1/10W 1% 0805	2	R2 R35

0-16-2002	EA	RES 20.0K OHM 1/10W 1% 0805	2	R41-42
0-16-2431	EA	RES 2.43K OHM 1/10W 1% 0805	1	R6
0-16-3011	EA	RES 3.01K OHM 1/10W 1% 0805	2	R28-29
0-16-3092	EA	RES 30.9K OHM 1/10W 1% 0805	3	R26-27 R30
0-16-3571	EA	RES 3.57K OHM 1/10W 1% 0805	1	R17
0-16-3572	EA	RES 35.7K OHM 1/10W 1% 0805	1	R31
0-16-4752	EA	RES 47.5K OHM 1/10W 1% 0805	1	R25
0-16-5491	EA	RES 5.49K OHM 1/10W 1% 0805	1	R34
0-16-7871	EA	RES 7.87K OHM 1/10W 1% 0805	1	R19
0-16-8250	EA	RES 825 OHM 1/10W 1% 0805	2	R40 R43
0-16-8661	EA	RES 8.66K OHM 1/10W 1% 0805	1	R33
0-16-9531	EA	RES 9.53K OHM 1/10W 1% 0805	1	R18
1-11-1003	EA	CAP 100uF ELEC 20% 50V 3.5x8x11.5mm	5	C4-5 C31 C34 C46
1-12-0102	EA	CAP 10UF ELEC 63V 2x5x11mm	8	C6-7 C15 C33 C36 C43 C51 C56
1-20-0102	EA	CAP 1000pF FILM 5% 100V	1	C41
1-20-0103	EA	CAP 0.01uF FILM 5% 100V	5	C20-21 C24-26
1-20-0104	EA	CAP 0.1uF FILM 5% 63V	4	C22-23 C27-28
1-20-0183	EA	CAP 0.018uF FILM 5% 50V	1	C42
1-20-0221	EA	CAP 220pF FILM 10% 50V	1	C11
1-20-0223	EA	CAP 0.022uF FILM 5% 100V	1	C37
1-20-0272	EA	CAP 2700pF FILM 5%	1	C38
1-20-0471	EA	CAP 470pF FILM 5% 50V	1	C10
1-55-0221	EA	CAP 220pF NPO 0805 5% 100V	2	C14 C45
1-55-0470	EA	CAP 47pF NPO 0805 50V	3	C1-2 C48
1-56-0101	EA	CAP 100pF NPO 0805 5% 50V	4	C9 C13 C17 C47
1-56-0104	EA	CAP 0.1uF X7R 0805 10% 50V	20	C3 C8 C12 C16 C18-19 C29-30 C32 C35 C39-40 C44 C49-50 C52-55 C57
2-11-7815	EA	REG VOLTAGE LM7815 +15V TO-220	1	U7
2-11-7915	EA	REG VOLTAGE LM7915 -15V TO-220	1	U6
2-21-2876	EA	IC LM2876 POWER-AMP 40W 11-PIN TO-220	1	U2
2-21-3886	EA	IC LM3886 POWER-AMP W/MUTE 68W 11-PIN TO-220	1	U5
2-51-4401	EA	TRANS NPN 2N4401 40V 1A SOT-23	3	Q1-3
2-52-5242	EA	DIODE ZENER MMBZ5242B 12V SOT-23	1	D2
2-52-5254	EA	DIODE ZENER MMBZ5254B 27V SOT-23	1	D1
2-71-3079	EA	IC MC33079 QUAD-OP-AMP SOP-14	3	U1 U3-4
4-05-0017	EA	JACK XLR-1/4" 3-PIN FEMALE VERT PCB-MNT	1	J3
4-15-0005	EA	HEADER SIL 5-PIN 0.1"	2	J1-2
4-15-0600	EA	HEADER SIL 6-PIN 3.96mm MALE EXT-LOCKING	1	J7
4-15-1002	EA	HEADER SIL 2-PIN 2mm SHRD	1	J5
4-15-1102	EA	HEADER SIL 2-PIN 0.2" LOCKING	2	J4 J6
9-40-0255-B	EA	PCB AMPLIFIER POWERED 8N - REV B	1	