

PAA3

SERVICE MANUAL



PHONIC

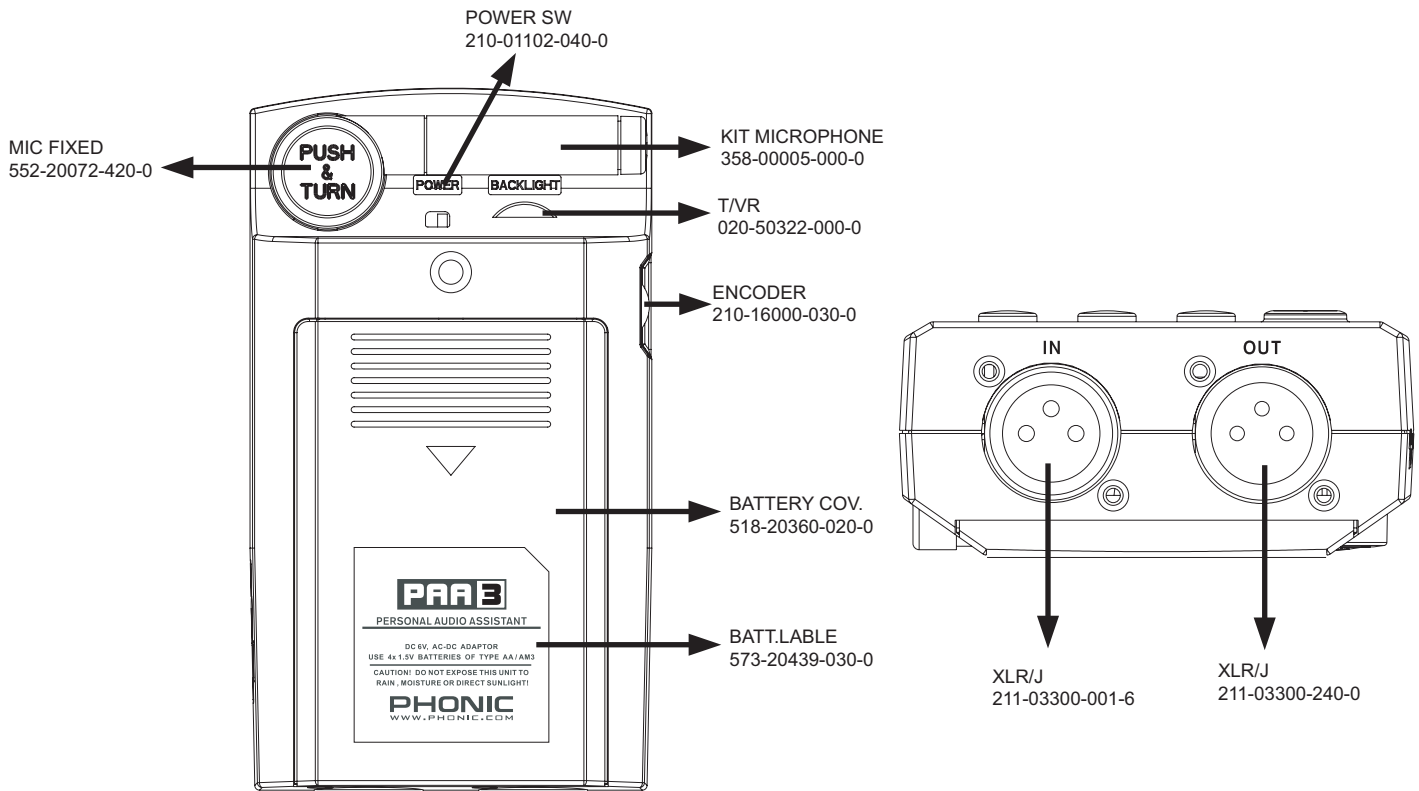
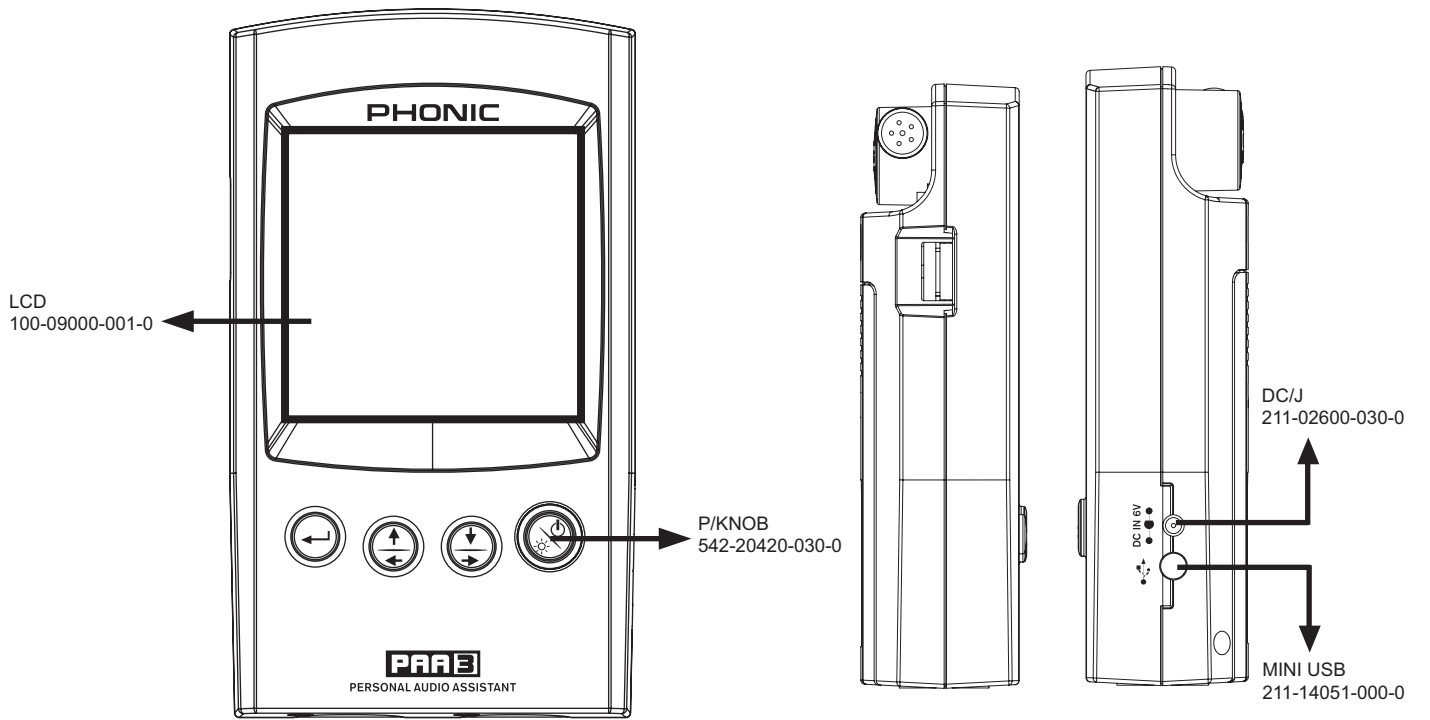
PAA3

SERVICE MANUAL

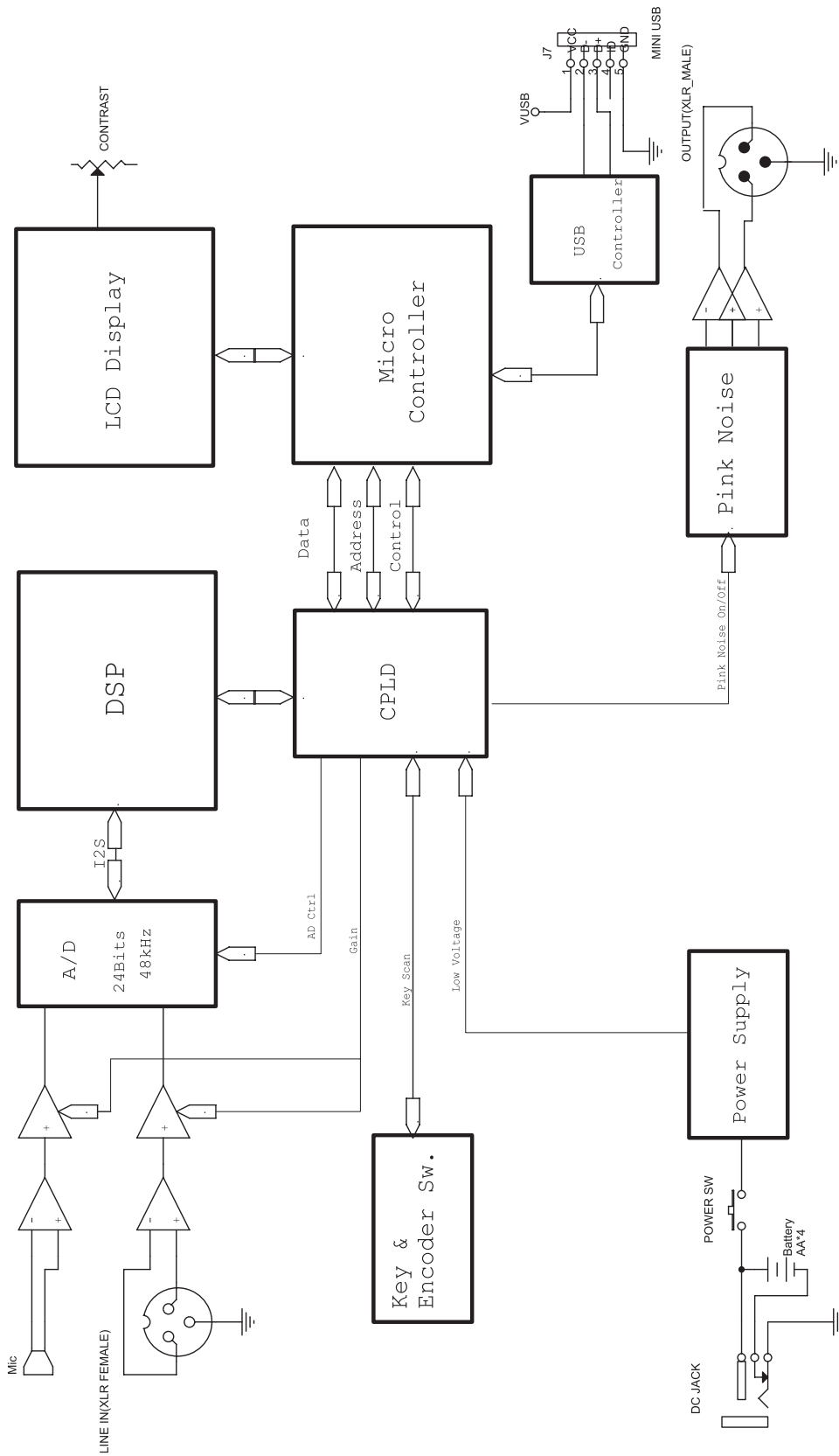
CONTENTS

PANEL LAYOUT	3
BLOCK DIAGRAM	4
USER_CTL.....	5
POWER.....	6
MIC_CTL.....	7
DSP5402.	8
ANALOG_0.....	9
ANALOG_1.....	10
BOM	
POWER REQUIREMENT CLASSIFICATION	12
MISCELLANEOUS ITEMS	13
MASTER PCB-PART LIST	14

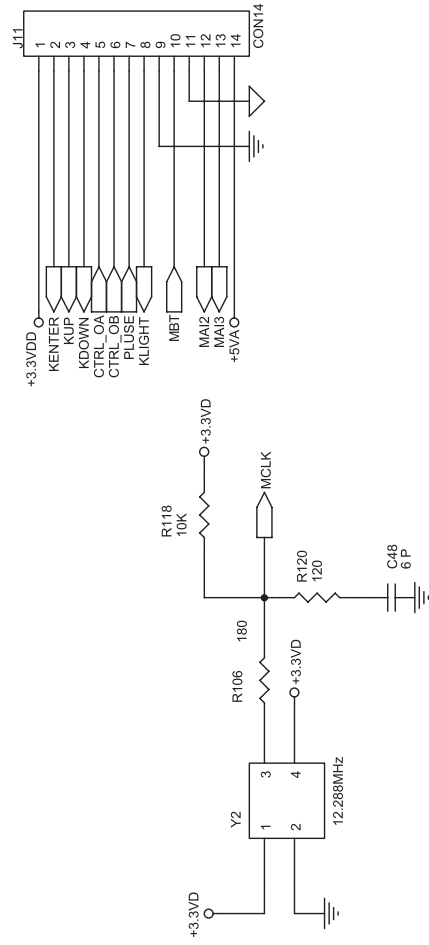
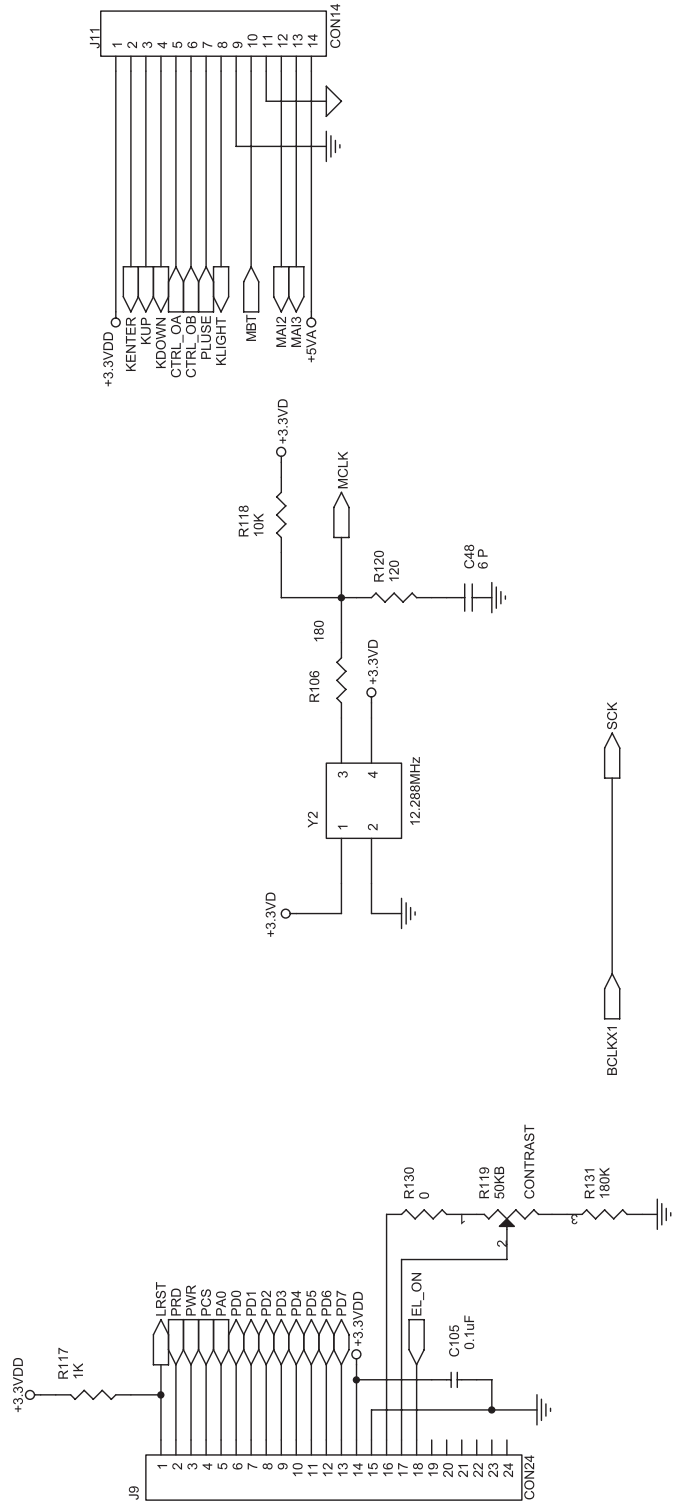
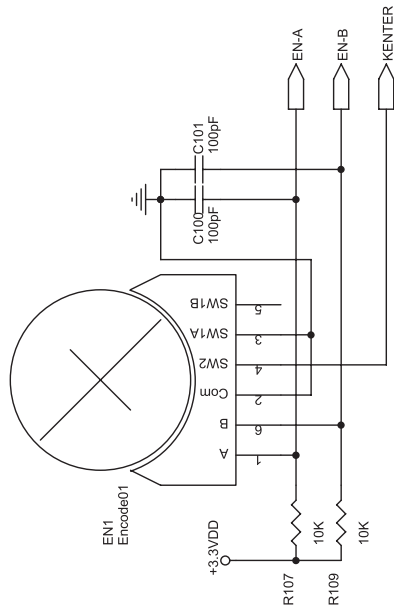
PANEL LAYOUT



BLOCK DIAGRAM



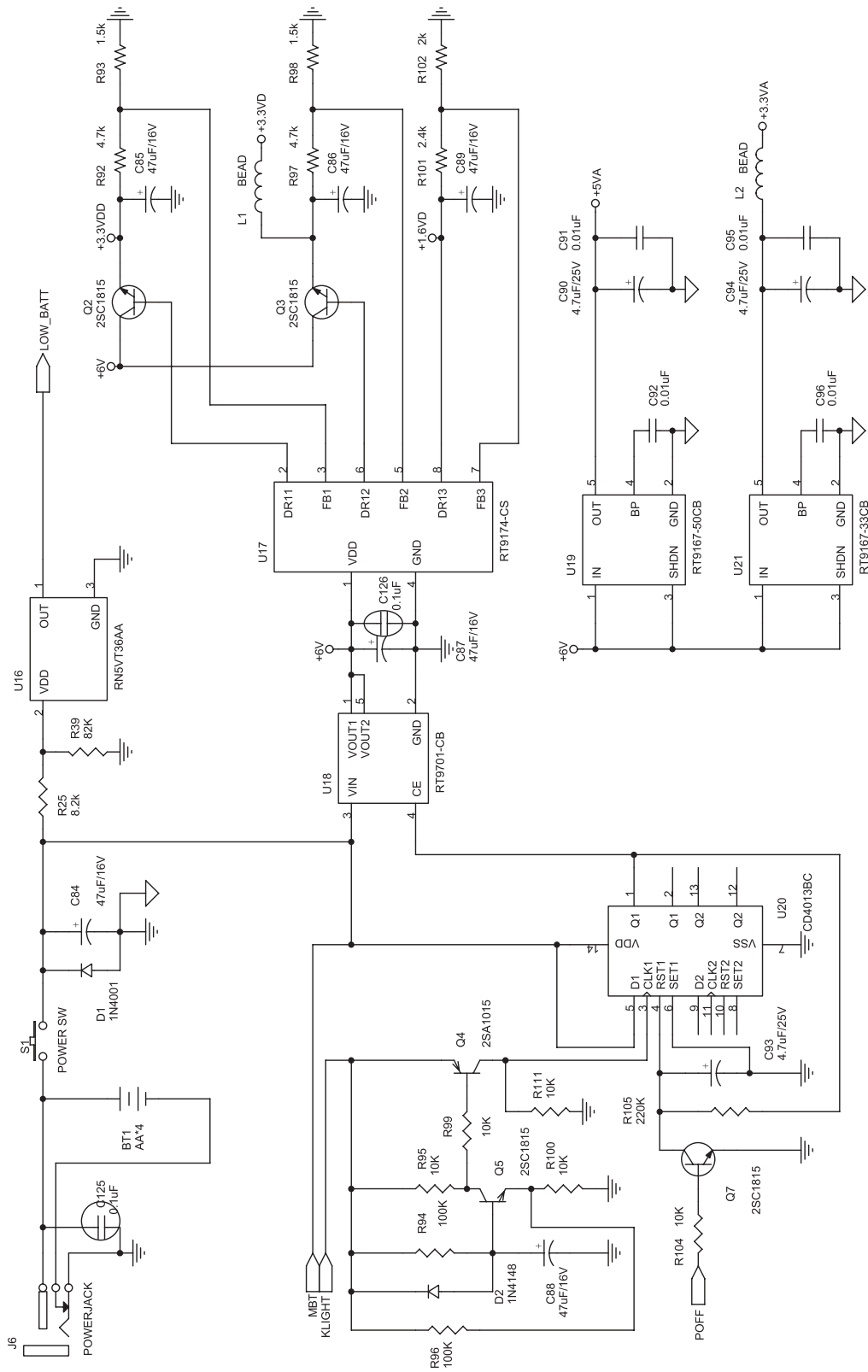
USER_CTL



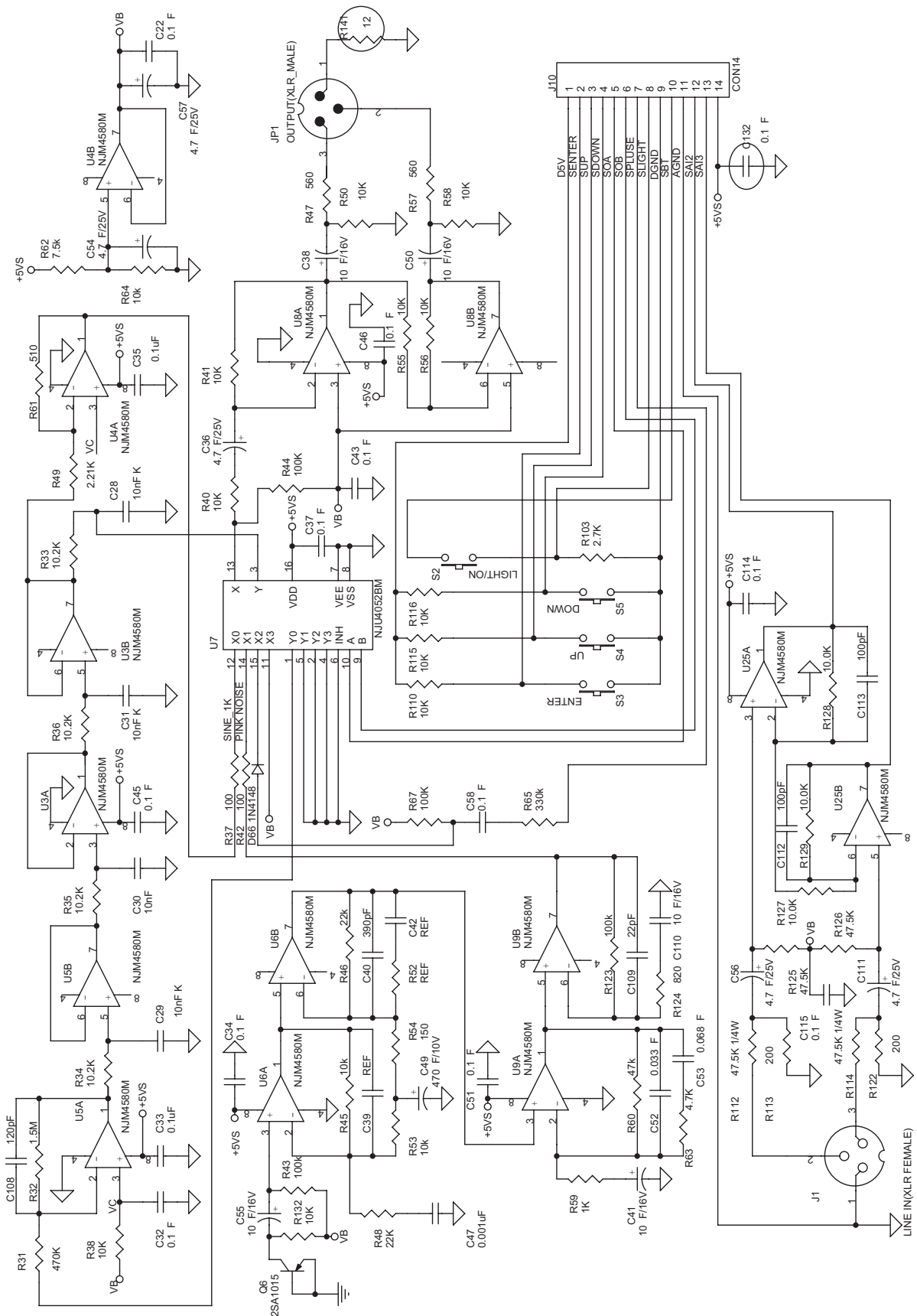
BCLKX1

SCK

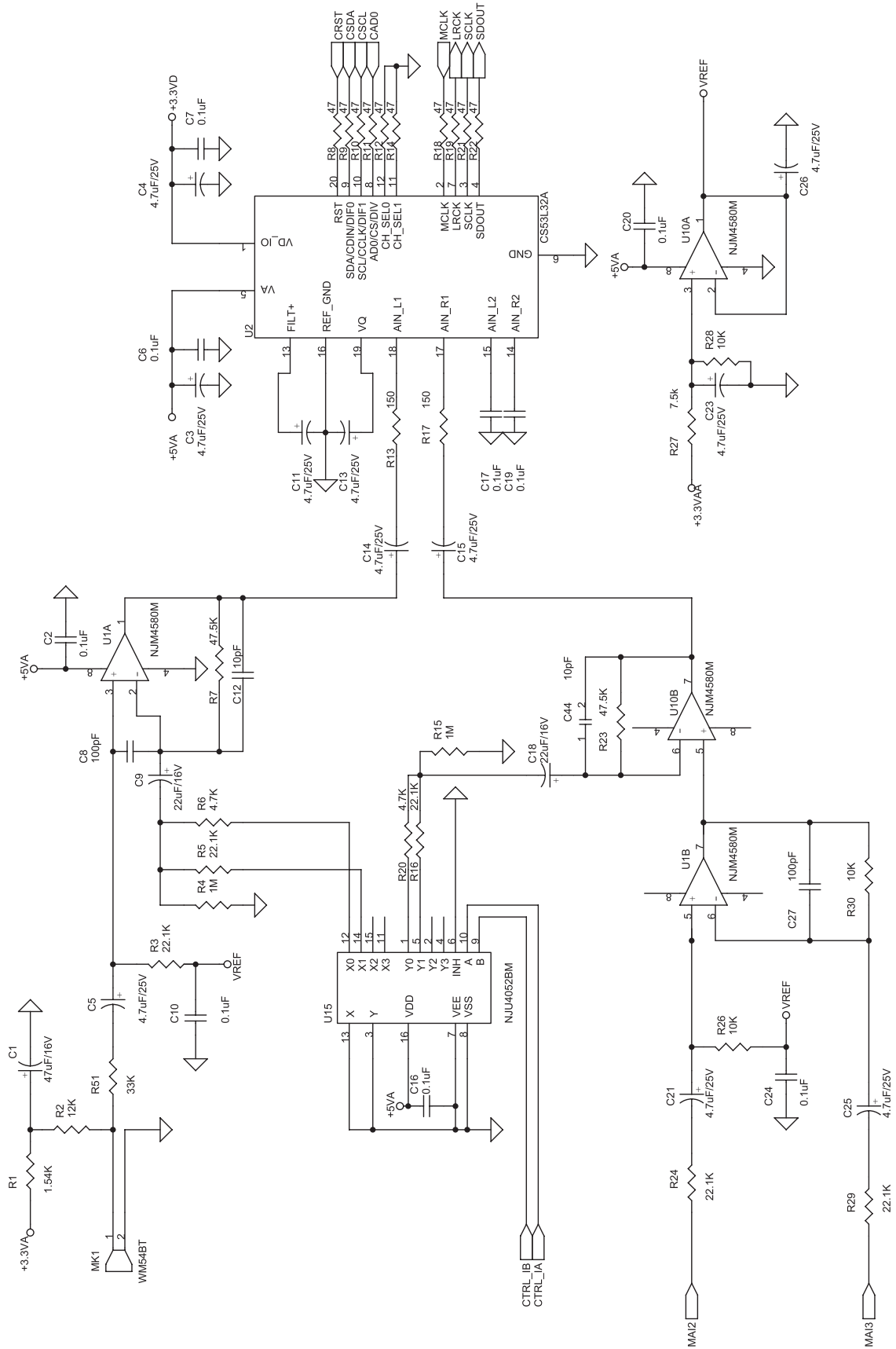
POWER

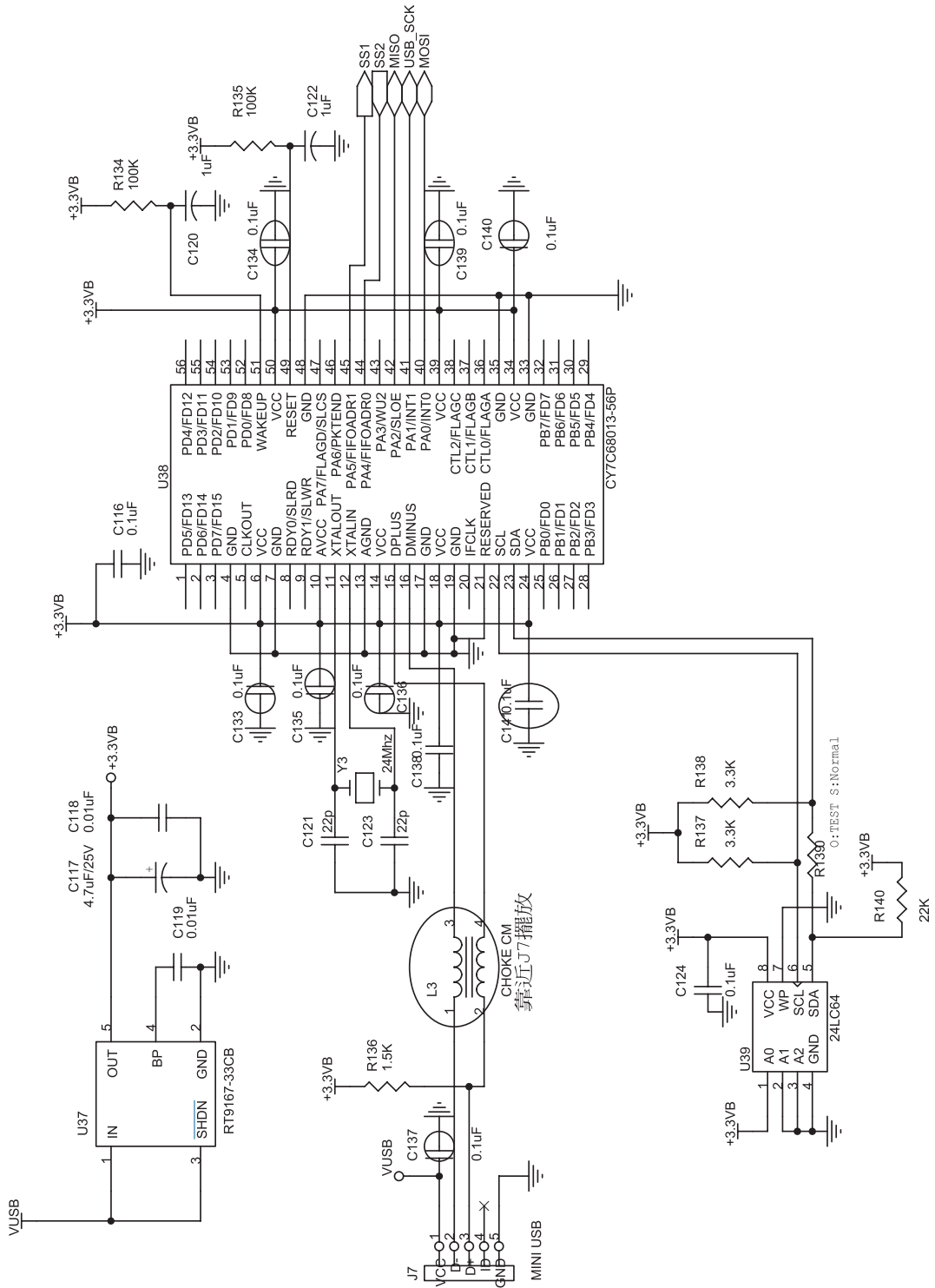


ANALOG_0



ANALOG_1





PHONIC

POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic Part No.	Specifications
SA	353-23207-000-0	ADAPTOR PAA1 AC240V SA
	574-02510-110-0	OWN. MANU. PAA3 PHONIC
JIS	353-23201-100-0	ADAPTOR PAA2 JIS
	574-02510-130-0	OWN. MANU. PAA3 PHONIC JIS
UL	353-23201-000-0	ADAPTOR PAA1 AC120V UL
	574-02510-110-0	OWN. MANU. PAA3 PHONIC
	353-23201-001-0	ADAPTOR PAA2 AC127V
	574-02510-110-0	OWN. MANU. PAA3 PHONIC
IEC	353-23204-000-0	ADAPTOR PAA1 AC230V IEC
	574-02510-110-0	OWN. MANU. PAA3 PHONIC
BS	353-23202-000-0	ADAPTOR PAA2 AC220V
	574-02510-110-0	OWN. MANU. PAA3 PHONIC
SAA	353-23206-000-0	ADAPTOR PAA1 AC240V BS
	574-02510-110-0	OWN. MANU. PAA3 PHONIC
SAA	353-23209-000-0	ADAPTOR PAA1 AC240V SAA
	574-02510-110-0	OWN. MANU. PAA3 PHONIC

MISCELLANEOUS ITEMS

Ref.	Phonic Part No.	Specifications
	000-00116-008-0	#8 171*245MM
	100-09000-001-0	LCD AT-160160A (MD 20P)
	211-16000-000-0	A
	211-16001-000-0	B
	212-05400-090-0	USB CABLE 2000MM BLK
	306-15000-151-0	CD DISK PAA3
	311-00007-000-0	BATTRERY 1.5V AA
	358-00005-000-0	KIT MICROPHONE PAA2
	516-20610-020-0	TOP COV. PAA3 PHONIC
	517-20830-000-0	BOT. COV. PAA3 PHONIC
	518-20360-020-0	BATTERY COV. PAA2
	529-20047-100-0	LCD ACRYLIC LENS PAA3 (78.4*69.24*2.4mm)
	542-20420-030-0	P/KNOB 65*20*5.7MM PAA3
	552-20071-420-0	LCD FIXED PAA2
	552-20072-420-0	MIC FIXED PAA2
	553-20014-400-0	SHEIELD PLATE PAA2
	560-21350-000-0	CARTON PAA3
	561-21490-100-0	G/B 236.5*230*68MM PAA3
	562-80003-000-0	227*223*63.5 PAA3
PAD ON LCD	566-20063-011-0	SPONGE 43.6*8.6*3.0MM
PAD ON LCD	566-20064-011-0	SPONGE 22.6*12.6*3.0MM
	568-20076-030-0	LEATHERN BAG 165*98*52MM BLK
	572-00000-050-0	DRYER 5g
	573-20431-100-0	HINT LABLE 50*38MM PAA3
	573-20439-030-0	BATT. LABLE 38*38*0.1 PAA3
	573-60240-000-0	S/N LABEL PHONIC
	573-60343-000-0	LABEL BLUE D=8mm
	590-02602-100-0	M/E FLT SCR. M2.6*2 NI D=5.0
FIX XLR PCB&BOSS*2	590-32606-100-0	M/E RUD SCR. M2.6*6 NI D=4.3
FIX TOP&BOT COV*4, FIX XLR*4	591-32610-200-0	T/P RUN SCR. M2.6*10 BLK
FIX LED HOUSING*2 FIXED WASHER&MIC	591-33008-100-0	T/P RUD SCR. M3*8 NI
	600-00302-562-0	PLASTIC SCREW NUT M3
	610-01201-010-0	PLA. WAS. D11*D3.2*1.0NI
MIC	611-20009-000-0	SPRING D9*20*0.8 PAA2
	615-20118-630-0	BOSS M3*(5+10.9)
FIX LCD HOUSING	615-20122-630-0	BOSS M3*(5+4.7)
	630-20054-460-0	73*74.4*0.3 PAA2
	630-20071-410-0	MYLAR 24.8*9*0.2MM

PHONIC

MASTER PCB-PART LIST

Ref.	Phonic Part No.	Specifications
R89.130.139	008-00002-600-0	CHIP RES. 0 J 0603
R106	008-01812-600-0	CHIP RES. 180 J 0603
R26.28.30.66.70-75.77- 88.91.95.99.100.104.107- 109.110.111.118.133.	008-10022-400-0	CHIP RES. 10K F 0603
R90.94.96.134.135	008-10032-400-0	CHIP RES. 100K F 0603
R4.15	008-10042-400-0	CHIP RES. 1M F 0603
R120	008-12002-400-0	CHIP RES. 120 F 0603
R2	008-12022-400-0	CHIP RES. 12K F 0603
R13.17	008-15002-400-0	CHIP RES. 150 F 0603
R93.98.136	008-15012-400-0	CHIP RES. 1K5 F 0603
R1	008-15412-400-0	CHIP RES. 1K54 F 0603
R131	008-18032-400-0	CHIP RES. 180K F 0603
R140	008-22022-400-0	CHIP RES. 22K F 0603
R105	008-22032-400-0	CHIP RES. 220K F 0603
R3.24.29.5.16	008-22122-400-0	CHIP RES. 22K1 F 0603
R101.102	008-24012-400-0	CHIP RES. 2K4 F 0603
R137.138	008-33012-400-0	CHIP RES. 3K3 F 0603
R51	008-33022-400-0	CHIP RES. 33K F 0603
R6.20.68.69.92.97.117	008-47012-400-0	CHIP RES. 4K7 F 0603
R8.9.10.11.12.14.18.19.2 1.22.76	008-47072-400-0	CHIP RES. 47 F 0603
R7.23	008-47522-400-0	CHIP RES. 47K5 F 0603
R27	008-75012-400-0	CHIP RES. 7K5 F 0603
R25	008-82012-400-0	CHIP RES. 8K2 F 0603
R39	008-82022-400-0	CHIP RES. 82K F 0603
VR119	020-50322-000-0	T/VR. 50KB*2 0.25W D16 5M RK10F12U013
C48	039-06025-200-0	CHIP C/C 6PF K 50V 0603
C12.44	039-10024-220-0	CHIP C/C 10PF J 50V 0603
C8.27.100.101	039-10124-220-0	CHIP C/C 100PF J 50V 0603
C91.92.95.96.118.119	039-10324-221-0	CHIP C/C 0.01MF J 50V 0603 TDK
C2.6.7.10.16.17.19.20.24. 60-73.77-83.105.116.124. CA	039-10405-220-0	CHIP C/C 0.1MF K 16V 0603
C120.122	039-10506-900-0	CHIP E/C 1uF K 16V 4*5.5
C121.123	039-22024-220-0	CHIP C/C 22PF J 50V 0603 X7R
C9.18	039-22604-900-0	CHIP E/C 22MF M6.3V 4*5.5
C74.76	039-30024-220-0	CHIP C/C 30PF J 50V 0603
C3.4.5.11.13.14.15.21.25. 59.75.90.93.94.117	039-47556-900-0	CHIP E/C 4.7MF M 35V 4*5.4
C1.84.85.86.87.88.89	039-47606-900-0	CHIP E/C 47MF M 16V 6.3*5.4
C23.26	039-47666-900-0	CHIP E/C 47UF M 4V 4*5.5
L1.2	075-22073-400-0	INDUCTANCE 22uH M 0805

MASTER PCB-PART LIST

Ref.	Phonic Part No.	Specifications
D1	090-00000-020-0	DIODE 1N4001 SILITEK T
D2	090-02000-020-0	DIODE 1N4148 T
Q2.3.5.7	120-00010-100-0	TRN 2SC2712-GR TO-236-M REEL(TO)
Q4	121-00007-800-0	TRP 2SA1162 TO-236-M(TO)(2SA1015 SMD)
U18	160-00023-700-0	IC RT9701-CB SOT-25-M (RI)
U19	160-00023-800-0	IC RT9167-50CB SOT-25-M (RI)
U21.37	160-00023-900-0	IC RT9167-33CB SOT-25-M (RI)
U17	160-00024-000-0	IC RT9174-CS SOP-8-M(RI)
U1.10	160-00024-100-0	IC NJM4580M DMP (JRC)
U15	160-00025-200-0	IC NJU4052BM DMP-16 (JRC)
U16	160-00027-100-0	IC R3111N361A-TR/TL SMD(RIC)
U20	172-00000-103-0	MOS CD4013BE SMD (FAI/TI)
U13	177-00002-421-P	MCU AT89C51RD2 PLCC-M(ATM)(V02_4F39)
U11	177-00002-900-0	DSP TMS320VC5402APGE-160 PQFP-M(TI)
U39	177-01002-314-F	IC AT24C64A TSSOP-M(ATM)PAA3
U24	177-01004-811-P	IC MX29LV040TC-90 TSOP-M(MX) PHONIC
U12	177-01302-200-P	IC AT25256 SOIC-M(ATM)
U14	177-02000-801-P	GAL M4A3 128/64-10VC CPLD-M(LAT)
U2	177-04019-000-0	CSI CS53L32A TSSOP-M(CS)
U38	177-04504-000-0	CSI CY7C68013-56P SOP-M
S1(POWER SW)	210-01102-040-0	SLD/SW SV71010-0102-6T-NPN
EN1	210-16000-030-0	ENCODER EVQWK4001 PANASONIC
J6	211-02600-030-0	3D5 DC/J SCD-410ACS000000
J9	211-10249-000-0	24P WAFER/S SCC103-241A02SMD PH=1.0
J7	211-14051-000-0	MINI USB
	290-02510-101-0	PCB PAA3 A UL
Y2	300-12284-030-0	CRYSTAL 12.285MHz
Y1	300-20004-000-0	CRYSTAL 20Mhz SMD
Y3	300-24004-020-0	CRYSTAL 24MHz SMD
	310-00004-000-0	BATTERY BOX BH341-2P
	313-00010-080-0	WASHER H=0.2MM
FIX BATTERY BOX*2	590-72606-100-0	M/E FLT SCR. M2.6*6 NI D=4.0
BATTERY BOX*2	600-00262-462-0	HEX. NUT M2.6*2.4 S-2M

PHONIC

MASTER PCB-PART LIST

Ref.	Phonic Part No.	Specifications
MASTER PCB-PART LIST		
Ref.	Phonic Part No.	Specifications
R112.114	006-47522-440-0	MF RES. 47K5 F 0.25W T
R37.42	008-10002-400-0	CHIP RES. 100 F 0603
R59	008-10012-400-0	CHIP RES. 1K F 0603
R38.40.41.45.50.53.55.56.58.64.115.116.127.128.129	008-10022-400-0	CHIP RES. 10K F 0603
R43.44.67.123.132	008-10032-400-0	CHIP RES. 100K F 0603
R33.34	008-10222-400-0	CHIP RES. 10K2 F 0603
R35.36	008-12022-400-0	CHIP RES. 12K F 0603
R141	008-12072-400-0	CHIP RES. 12 F 0603
R54	008-15002-400-0	CHIP RES. 150 F 0603
R32	008-15042-400-0	CHIP RES. 1M5 F 0603
R113.122	008-20002-400-0	CHIP RES. 200 F 0603
R46.48.65	008-22022-400-0	CHIP RES. 22K F 0603
R49	008-22112-400-0	CHIP RES. 2K21 F 0603
R103	008-27012-400-0	CHIP RES. 2K7 F 0603
R63	008-47012-400-0	CHIP RES. 4K7 F 0603
R60	008-47022-400-0	CHIP RES. 47K F 0603
R31	008-47032-400-0	CHIP RES. 470K F 0603
R125.126	008-47522-400-0	CHIP RES. 47K5 F 0603
R47.57.61	008-56002-400-0	CHIP RES. 560 F 0603
R62	008-75012-400-0	CHIP RES. 7K5 F 0603
R124	008-82004-400-0	CHIP RES. 820 F 0603
C112.113	039-10124-220-0	CHIP C/C 100PF J 50V 0603
C47	039-10224-220-0	CHIP C/C 0.001MF J 50V 0603
C28.29.30.31	039-10324-221-0	CHIP C/C 0.01MF J 50V 0603 TDK
C22.32.33.34.35.37.43.45.46.51.58.114.115	039-10405-220-0	CHIP C/C 0.1MF K 16V 0603
C53	039-10424-220-0	CHIP C/C 0.1MF J 50V 0603
C38.50.55	039-10606-900-0	CHIP E/C 10MF M 16V 4*4.5
C108	039-12124-220-0	CHIP C/C 120PF J 50V 0603
C108A	039-15224-220-0	CHIP C/C 0.0015MF J 50V 0603
C109	039-22024-220-0	CHIP C/C 22PF J 50V 0603 X7R
C41	039-22606-900-0	CHIP E/C 22MF M 16V 4*5.4
C52	039-33324-220-0	CHIP C/C 0.033MF J 50V 0603
C40	039-39125-220-0	CHIP C/C 390PF K 50V 0603
C36.56.57.110.111	039-47556-900-0	CHIP E/C 4.7MF M 35V 4*5.4
C54	039-47666-900-0	CHIP E/C 47UF M 4V 4*5.5
C49	039-47735-900-0	CHIP E/C 470MF K 10V 8*10.5

MASTER PCB-PART LIST

Ref.	Phonic Part No.	Specifications
D66	090-02000-010-0	DIODE 1N4148 SMD
Q6	121-00007-800-0	TRP 2SA1162 TO-236-M(TO)(2SA1015 SMD)
U3.4.5.6.8.9.25	160-00024-100-0	IC NJM4580M DMP (JRC)
U7	160-00025-200-0	IC NJU4052BM DMP-16 (JRC)
J1	211-03300-001-6	XLR/J 99M-108SP1 (VP555PN-R)
JP1	211-03300-240-0	XLR/J 99M-107SP1L(SVP561PN-OR-A)
	212-10140-210-0	14P WAFER/P PHO1126A 50MM
	290-02230-203-0	PCB PAA3 B ANALOG UL

PHONIC
WWW.PHONIC.COM