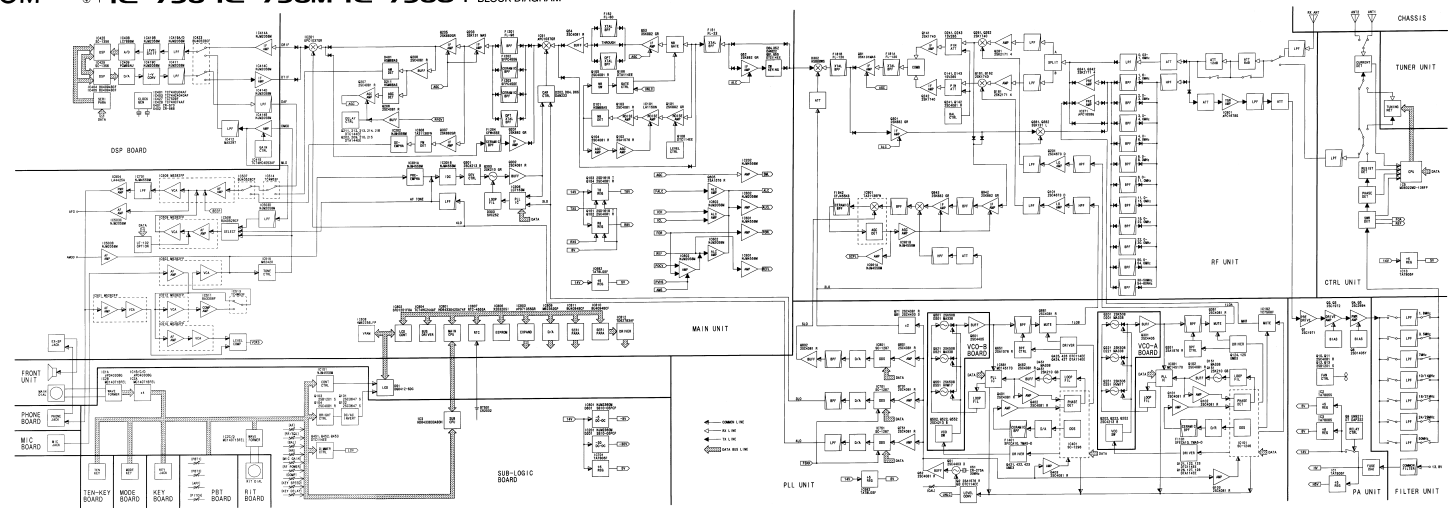
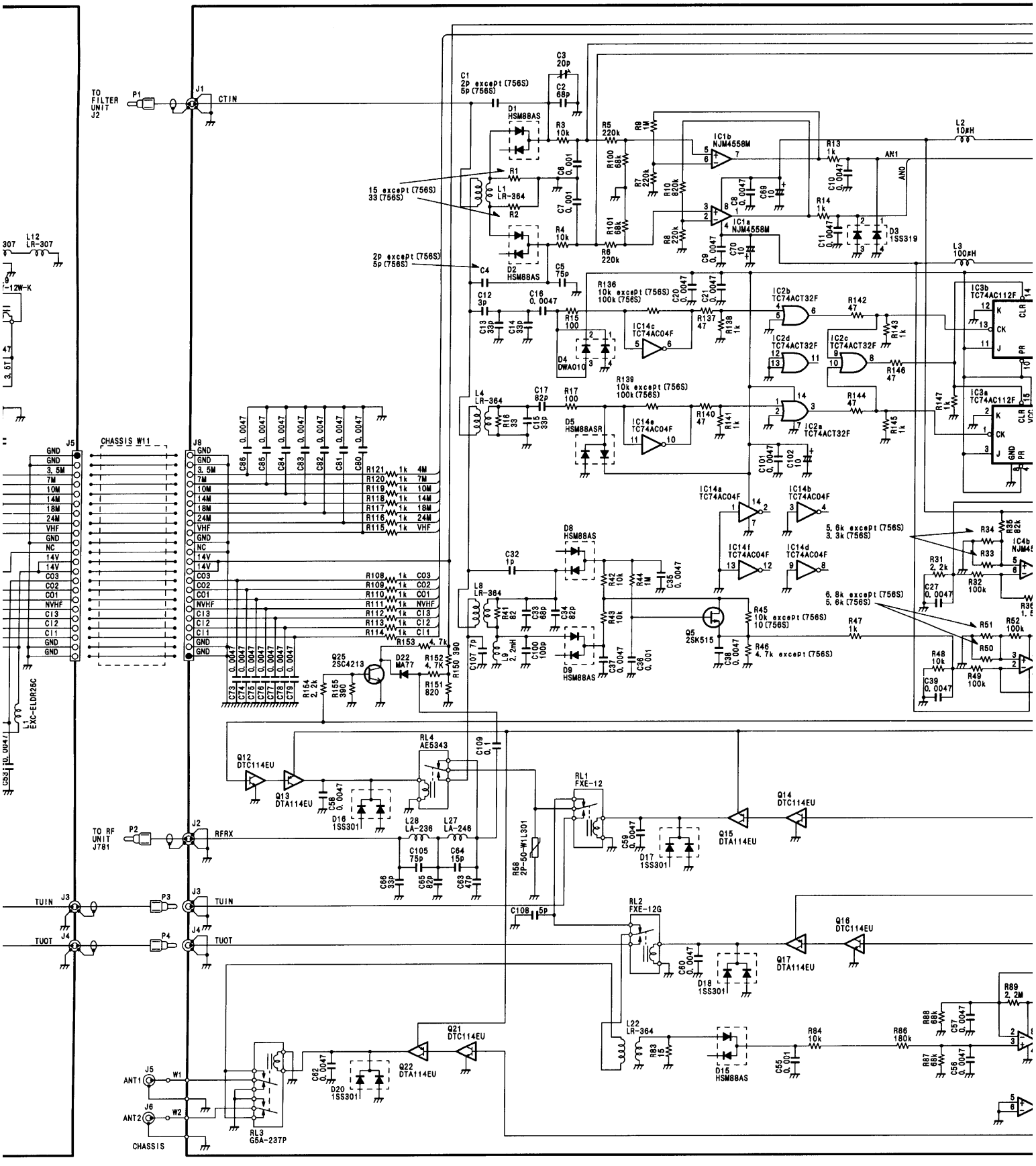
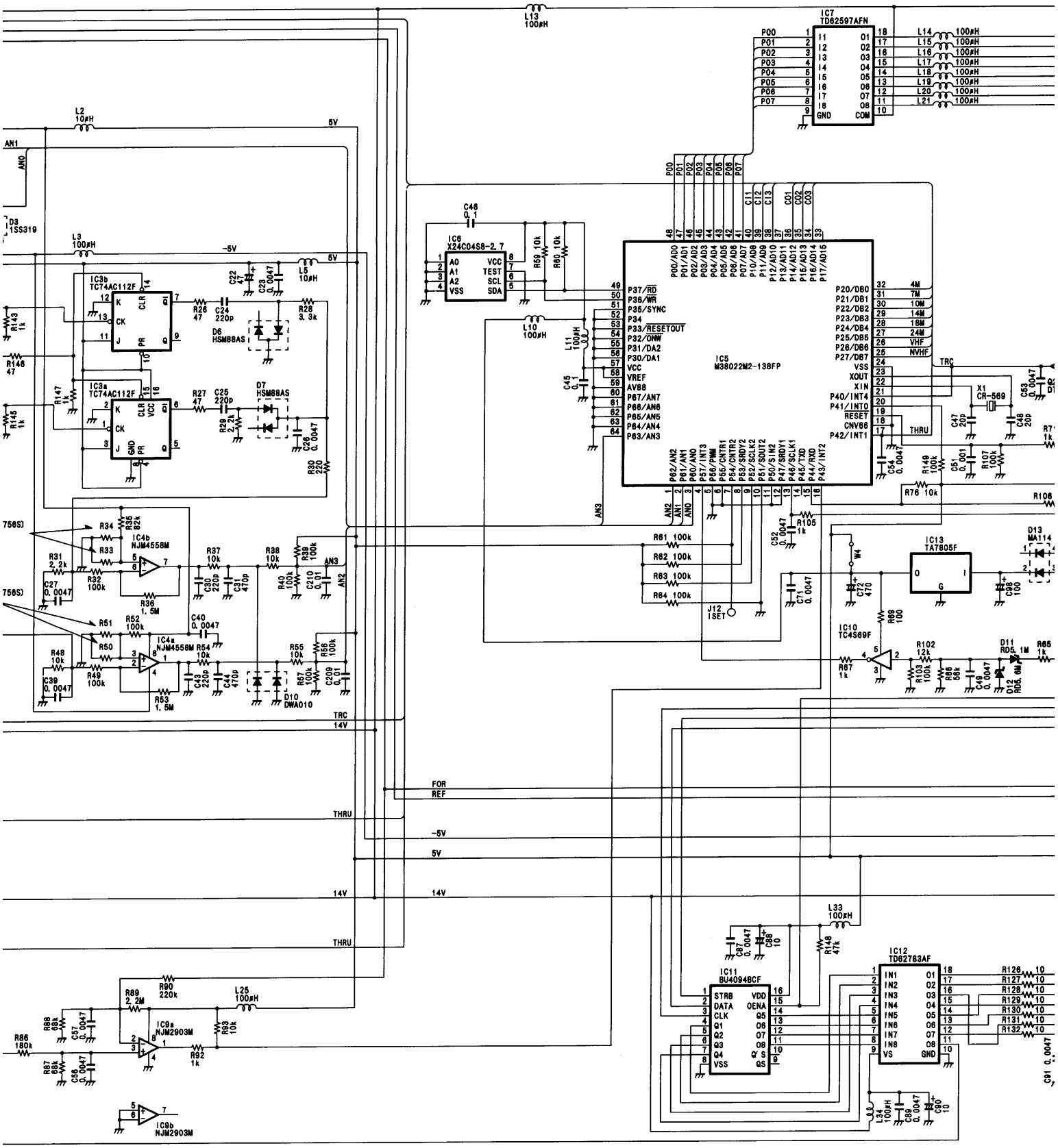
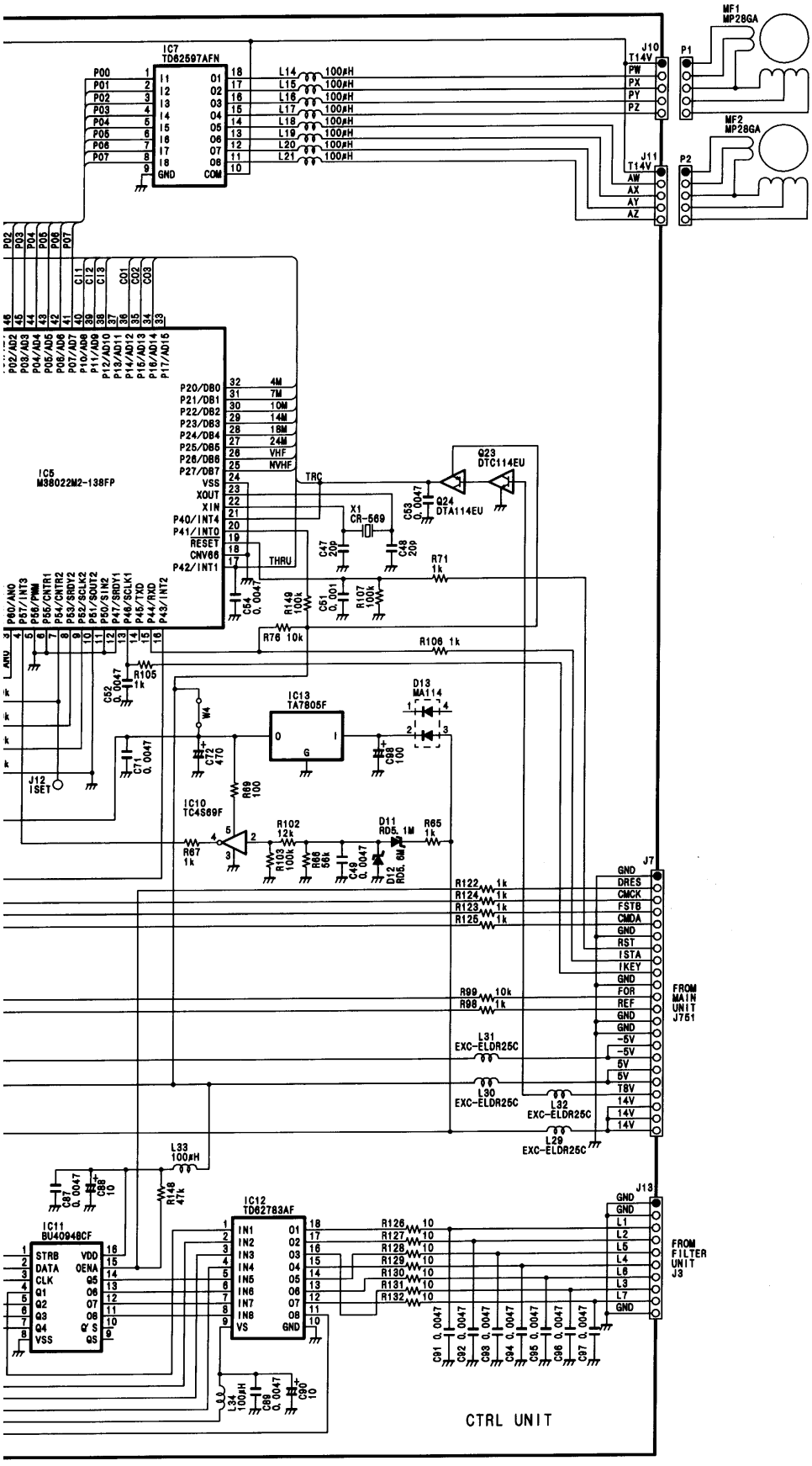
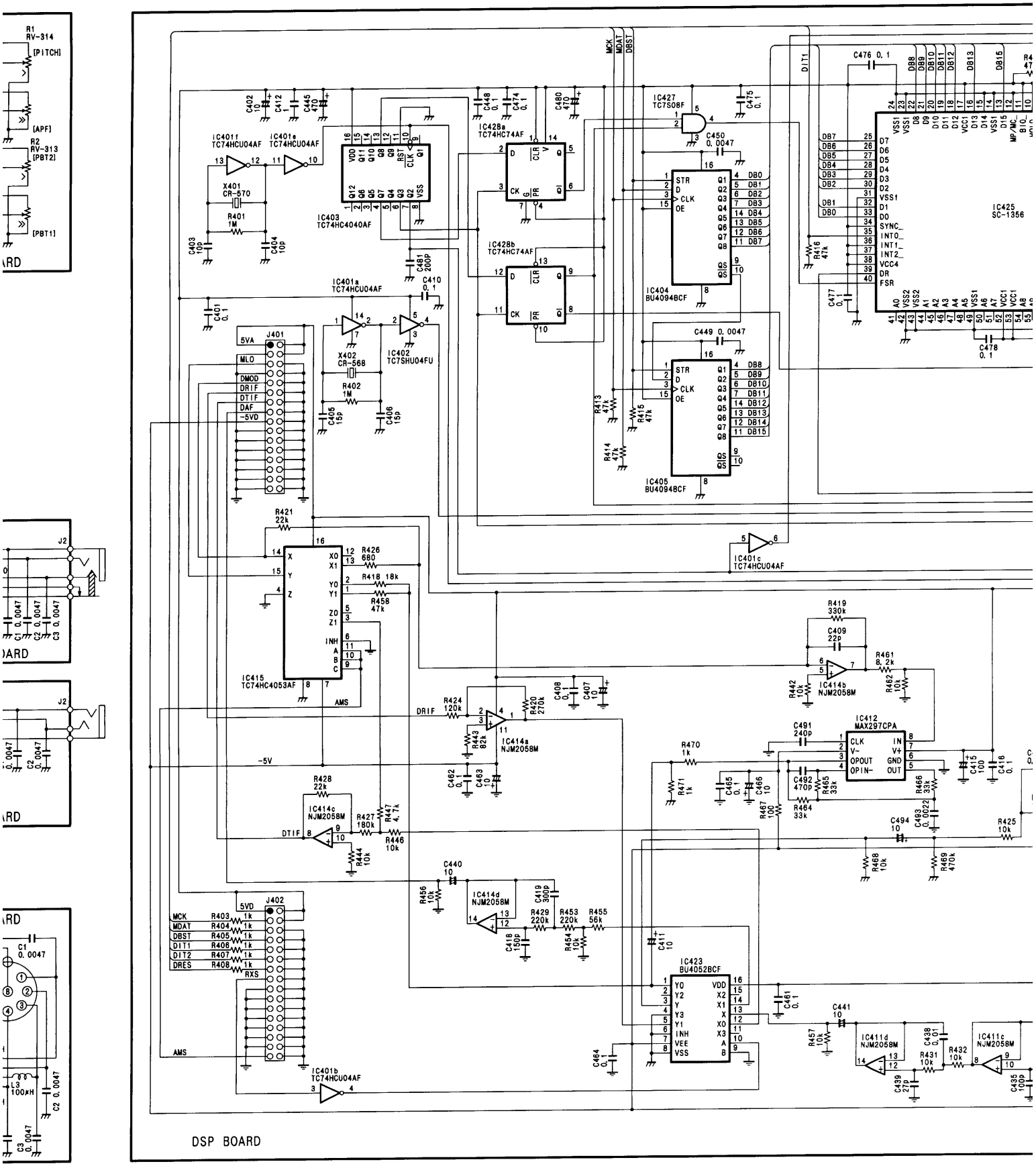
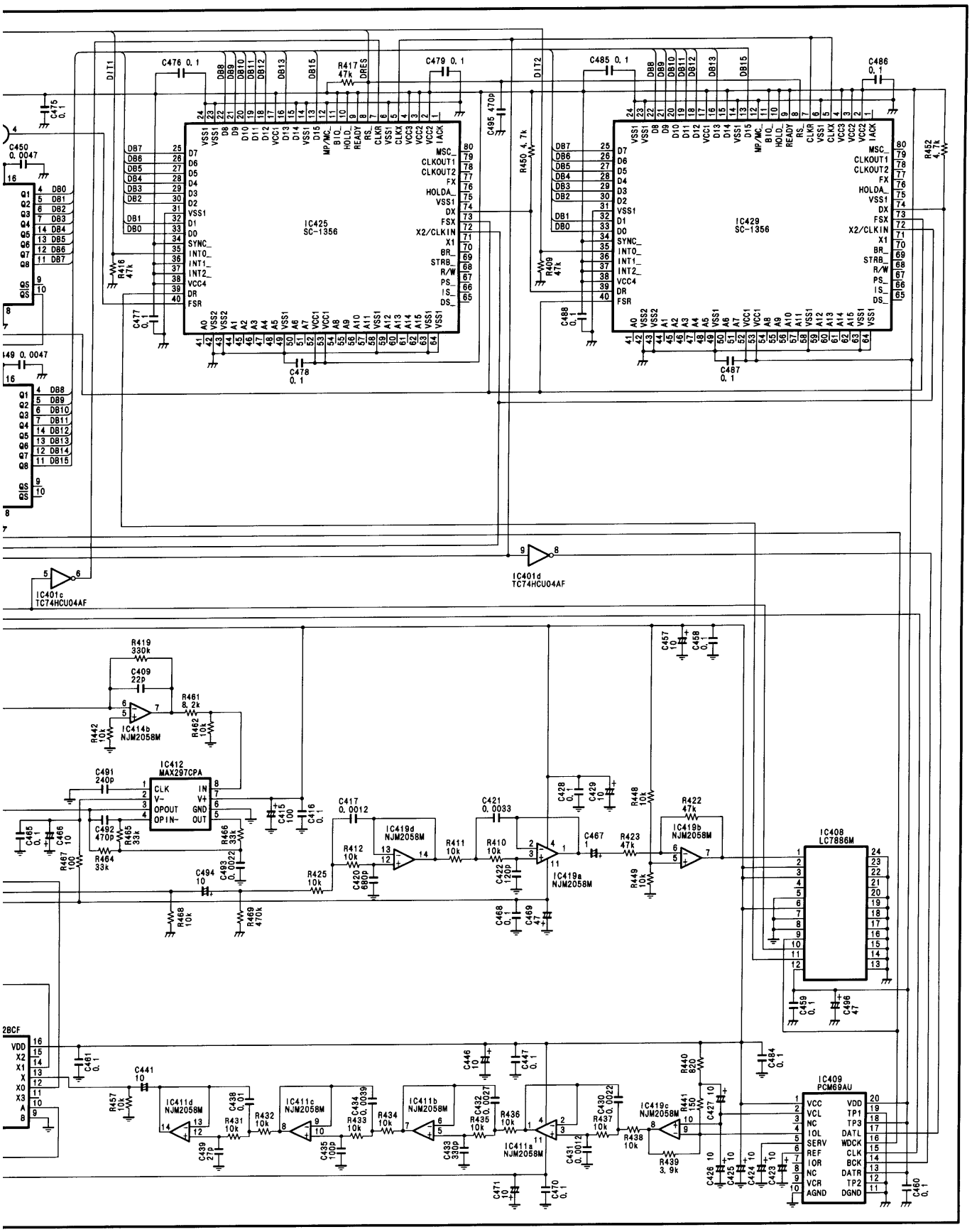

DSP BOARD
MAIN UNIT
SUB-LOGIC BOARD
FRONT UNIT
PHONE BOARD
MIC BOARD
TEN-KEY BOARD
MODE BOARD
KEY BOARD
PBT BOARD
RIT BOARD
PLL UNIT
VCO-B BOARD
VCO-A BOARD
RF UNIT
CHASSIS
TUNER UNIT
CTRL UNIT
PA UNIT
FILTER UNIT


TO FILTER UNIT J2
P1
J1
CTIN
C1 2p except (756S) 5p (756S)
C3 20p
C2 68p
D1 HSM88AS
R3 10k
R5 220k
R9 1M
IC1b NJM4558M
R13 1k
L2 10μH
R1
L1 LR-364
R2
C6 0.001
C7 0.001
15 except (756S) 33 (756S)
R4 10k
R6 220k
R100 68k
R101 68k
R7 220k
R10 820k
R8 220k
IC1a NJM4558M
R14 1k
AN1
AN0
C10 0.0047
C11 0.0047
D3 1SS319
C8 0.0047
C69 10
C9 0.0047
C70 10
2p except (756S) 5p (756S)
C4
D2 HSM88AS
C5 75p
L3 100μH
R136 10k except (756S) 100k (756S)
C20 0.0047
C21 0.0047
C12 3p
C16 0.0047
R15 100
C13 33p
C14 33p
IC14c TC74AC04F
R137 47
R138 1k
IC2b TC74ACT32F
R142 47
IC3b TC74AC112F
D4 DWA010
IC2d TC74ACT32F
IC2c TC74ACT32F
R143 1k
R146 47
R139 10k except (756S) 100k (756S)
L4 LR-364
C17 82p
R17 100
R16 33
C15 33p
IC14a TC74AC04F
R140 47
R141 1k
IC2a TC74ACT32F
R144 47
IC3a TC74AC112F
R147 1k
D5 HSM88ASR
R145 1k
C101 0.0047
C102 10
IC14a TC74AC04F
IC14b TC74AC04F
5.6k except (756S) 3.3k (756S)
R34 82k
R35 82k
D8 HSM88AS
C32 1p
IC14f TC74AC04F
IC14d TC74AC04F
R33
R31 2.2k
R32 100k
C27 0.0047
L8 LR-364
R41 82
C33 68p
C34 82p
R42 10k
R44 1M
C35 0.0047
6.8k except (756S) 5.6k (756S)
R45 10k except (756S) 10 (756S)
Q5 2SK515
R47 1k
R51
R52 100k
R50
R48 10k
R49 100k
C39 0.0047
R46 4.7k except (756S)
C38 0.0047
C107 7p
C100 100p
2.2mH
D9 HSM88AS
C37 0.0047
C36 0.001
J5
CHASSIS W11
J8
GND
3.5M
7M
10M
14M
18M
24M
VHF
NC
14V
CO3
CO2
CO1
NVHF
CI3
CI2
CI1
C86 0.0047
C85 0.0047
C84 0.0047
C83 0.0047
C82 0.0047
C81 0.0047
C80 0.0047
R121 1k 4M
R120 1k 7M
R119 1k 10M
R118 1k 14M
R117 1k 18M
R116 1k 24M
R115 1k VHF
R108 1k CO3
R109 1k CO2
R110 1k CO1
R111 1k NVHF
R112 1k CI3
R113 1k CI2
R114 1k CI1
C73 0.0047
C74 0.0047
C75 0.0047
C76 0.0047
C77 0.0047
C78 0.0047
C79 0.0047
R153 4.7k
R154 2.2k
R155 390
Q25 2SC4213
D22 MA77
R152 4.7k
R150 390
R151 820
L11 EXC-ELDR25C
RL4 AE5343
C109 0.1
Q12 DTC114EU
Q13 DTA114EU
C58 0.0047
D16 1SS301
L28 LA-236
L27 LA-246
C105 75p
C64 15p
C66 33p
C65 82p
C63 47p
RL1 FXE-12
R58 2P-50-W1L301
Q14 DTC114EU
Q15 DTA114EU
C59 0.0047
D17 1SS301
TO RF UNIT J781
P2
J2
RFRX
TUIN
J3
P3
TUOT
J4
P4
C108 5p
RL2 FXE-12G
Q16 DTC114EU
Q17 DTA114EU
C60 0.0047
D18 1SS301
Q21 DTC114EU
Q22 DTA114EU
C62 0.0047
D20 1SS301
L22 LR-364
R83 15
D15 HSM88AS
R84 10k
C55 0.001
R86 180k
R88 68k
C57 0.0047
R87 68k
C56 0.0047
R89 2.2M
J5
ANT1
W1
J6
ANT2
W2
CHASSIS
RL3 G5A-237P

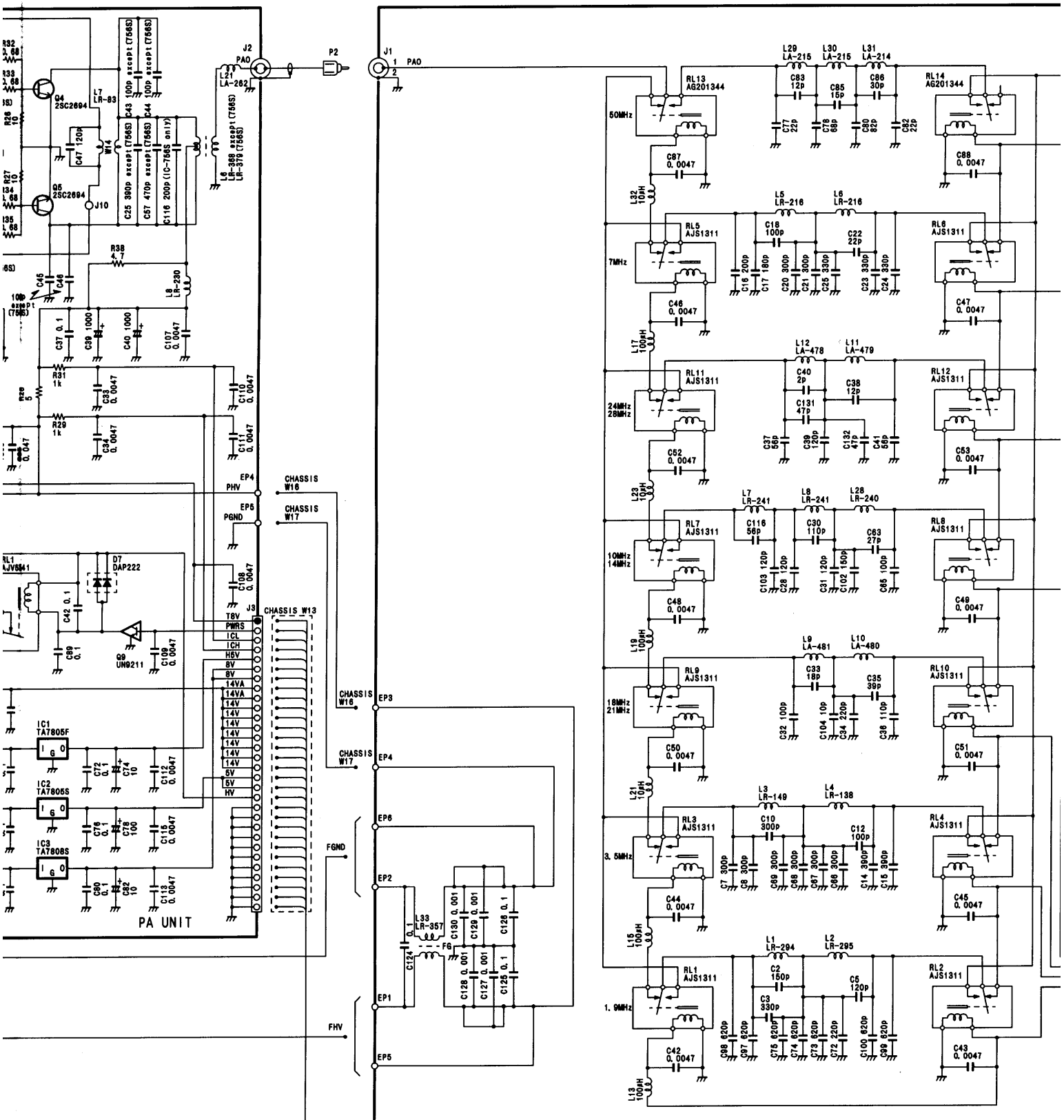

IC7
TD62597AFN
IC5
M38022M2-138FP
IC6
X24C04S8-2.7
IC3b
TC74AC112F
IC3a
TC74AC112F
IC4b
NJM4558M
IC4a
NJM4558M
IC9a
NJM2903M
IC9b
NJM2903M
IC10
TC4S69F
IC11
BU4094BCF
IC12
TD62783AF
IC13
TA7805F
D6
HSM88AS
D7
HSM88AS
D10
DMA010
D11
RD5.1M
D12
RD5.6M
D13
MA114
X1
CR-569
J12
1SET
L2
10μH
L3
100μH
L5
10μH
L10
100μH
L11
100μH
L13
100μH
L14
100μH
L15
100μH
L16
100μH
L17
100μH
L18
100μH
L19
100μH
L20
100μH
L21
100μH
L25
100μH
L33
100μH
L34
100μH
5V
-5V
14V
THRU
TRC
FOR
REF
AN1
AN0
AN2
AN3
P00
P01
P02
P03
P04
P05
P06
P07
P37/RD
P36/WR
P35/SYNC
P34
P33/RESETOUT
P32/ONW
P31/DA2
P30/DA1
VCC
VREF
AV88
P67/AN7
P66/AN6
P65/AN5
P64/AN4
P63/AN3
P62/AN2
P61/AN1
P60/AN0
P57/INT3
P56/PWM
P55/CNTR1
P54/CNTR2
P53/SRDY2
P52/SCLK2
P51/SOUT2
P50/SIN2
P47/SRDY1
P46/SCLK1
P45/TXD
P44/RXD
P43/INT2
P20/DB0
P21/DB1
P22/DB2
P23/DB3
P24/DB4
P25/DB5
P26/DB6
P27/DB7
VSS
XOUT
XIN
P40/INT4
P41/INT0
RESET
CNVSS
P42/INT1
4M
7M
10M
14M
18M
24M
VHF
NVHF
C01
C02
C03
C11
C12
C13
R34
R35 82k
R33
R31 2.2k
R32 100k
R36 1.5M
R37 10k
R38 10k
R39 100k
R40 100k
R51
R52 100k
R50
R48 10k
R49 100k
R53 1.5M
R54 10k
R55 10k
R56 100k
R67 100k
R61 100k
R62 100k
R63 100k
R64 100k
R59 10k
R60 10k
R76 10k
R105 1k
R106
R107 100k
R149 100k
R102 12k
R103 100k
R65 1k
R67 1k
R68 100
R148 47k
R89 2.2M
R90 220k
R92 1k
R83 10k
R86 180k
R87 68k
R88 68k
R126 10
R127 10
R128 10
R129 10
R130 10
R131 10
R132 10
C22 47
C23 0.0047
C24 220p
C25 220p
C26 0.0047
C27 0.0047
C30 220p
C31 470p
C39 0.0047
C40 0.0047
C43 220p
C44 470p
C45 0.1
C46 0.1
C51 0.001
C52 0.0047
C53 0.0047
C54 0.0047
C56 0.0047
C57 0.0047
C71 0.0047
C72 470
C87 0.0047
C88 10
C89 0.0047
C90 10
C210 0.01
C209 0.01
C47 20p
C48 20p
C49 0.0047
R26 47
R27 47
R28 3.3k
R29 2.2k
R30 220
R143 1k
R145 1k
R146 47
R147 1k

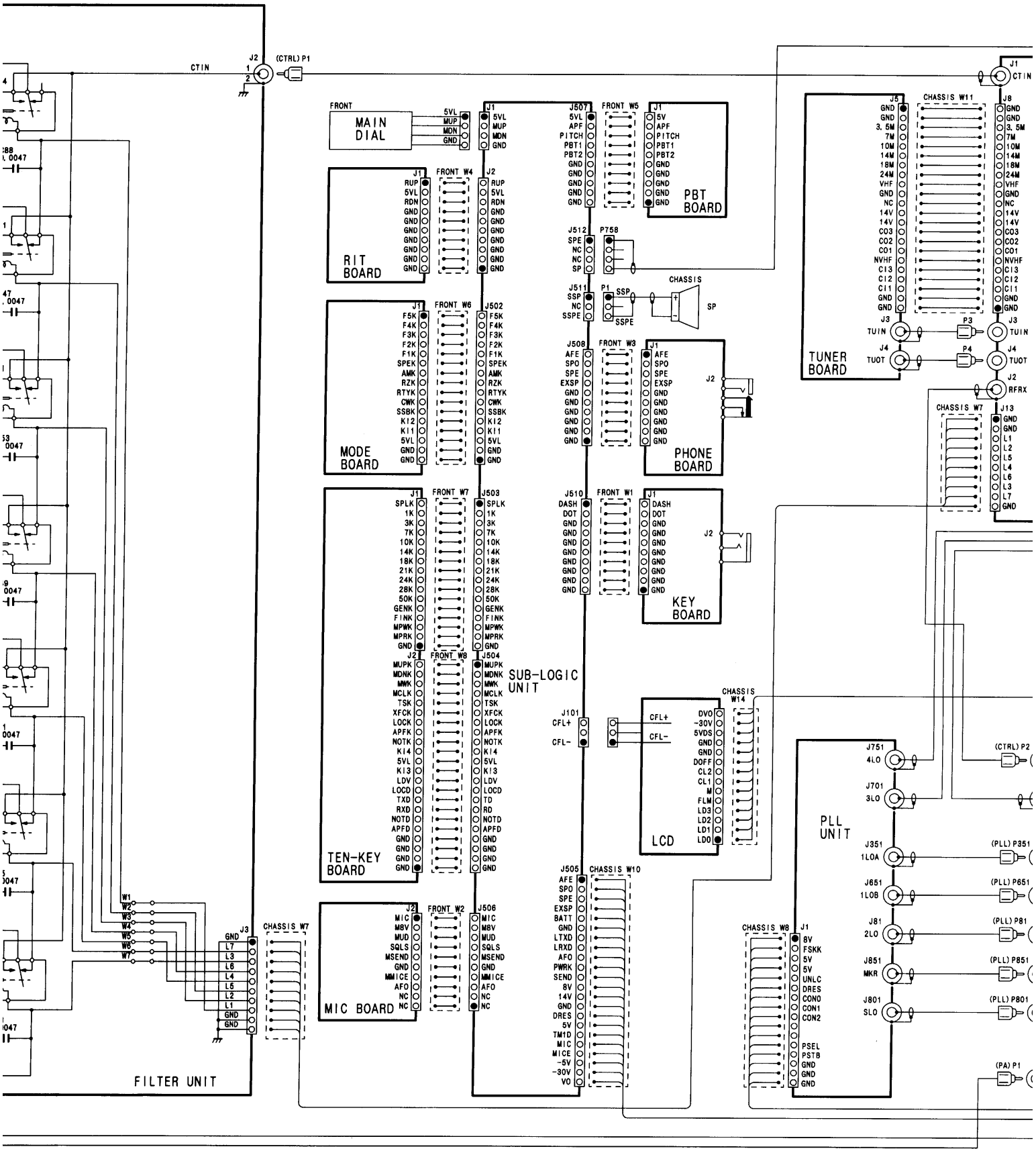

MF1
MP28GA
MF2
MP28GA
P1
P2
J10
T14V
PW
PX
PY
PZ
J11
T14V
AW
AX
AY
AZ
IC7
TD62597AFN
P00
P01
P02
P03
P04
P05
P06
P07
GND
COM
L14 100μH
L15 100μH
L16 100μH
L17 100μH
L18 100μH
L19 100μH
L20 100μH
L21 100μH
IC5
M38022M2-138FP
P20/DB0
P21/DB1
P22/DB2
P23/DB3
P24/DB4
P25/DB5
P26/DB6
P27/DB7
4M
7M
10M
14M
18M
24M
VHF
NVHF
VSS
XOUT
XIN
P40/INT4
P41/INTO
RESET
CNVss
P42/INT1
TRC
THRU
Q23
DTC114EU
Q24
DTA114EU
X1
CR-569
C47 20p
C48 20p
C53 0.0047
C54 0.0047
R149 100k
C51 0.001
R107 100k
R71 1k
R76 10k
R106 1k
R105 1k
C52 0.0047
D13
MA114
IC13
TA78D5F
W4
C72 470
C88 100
C71 0.0047
J12
ISET
IC10
TC4S69F
R102 12k
R103 100k
R66 56k
C49 0.0047
D11
RD5.1M
D12
RD5.6M
R65 1k
R67 1k
R69 100
J7
GND
DRES
CMCK
FSTB
CMDA
GND
RST
!STA
!KEY
GND
FOR
REF
GND
GND
-5V
-5V
5V
5V
T8V
14V
14V
14V
R122 1k
R124 1k
R123 1k
R125 1k
R99 10k
R98 1k
FROM MAIN UNIT J751
L31 EXC-ELDR25C
L30 EXC-ELDR25C
L32 EXC-ELDR25C
L29 EXC-ELDR25C
L33 100μH
C87 0.0047
C89 10
R148 47k
IC11
BU4094BCF
STRB
DATA
CLK
Q1
Q2
Q3
Q4
VSS
VDD
QENA
Q5
Q6
Q7
Q8
Q' S
QS
IC12
TD62783AF
IN1
IN2
IN3
IN4
IN5
IN6
IN7
IN8
VS
O1
O2
O3
O4
O5
O6
O7
O8
GND
R126 10
R127 10
R128 10
R129 10
R130 10
R131 10
R132 10
J13
GND
GND
L1
L2
L5
L4
L6
L3
L7
GND
FROM FILTER UNIT J3
C81 0.0047
C82 0.0047
C93 0.0047
C94 0.0047
C95 0.0047
C96 0.0047
C97 0.0047
L34 100μH
C86 0.0047
C90 10
CTRL UNIT

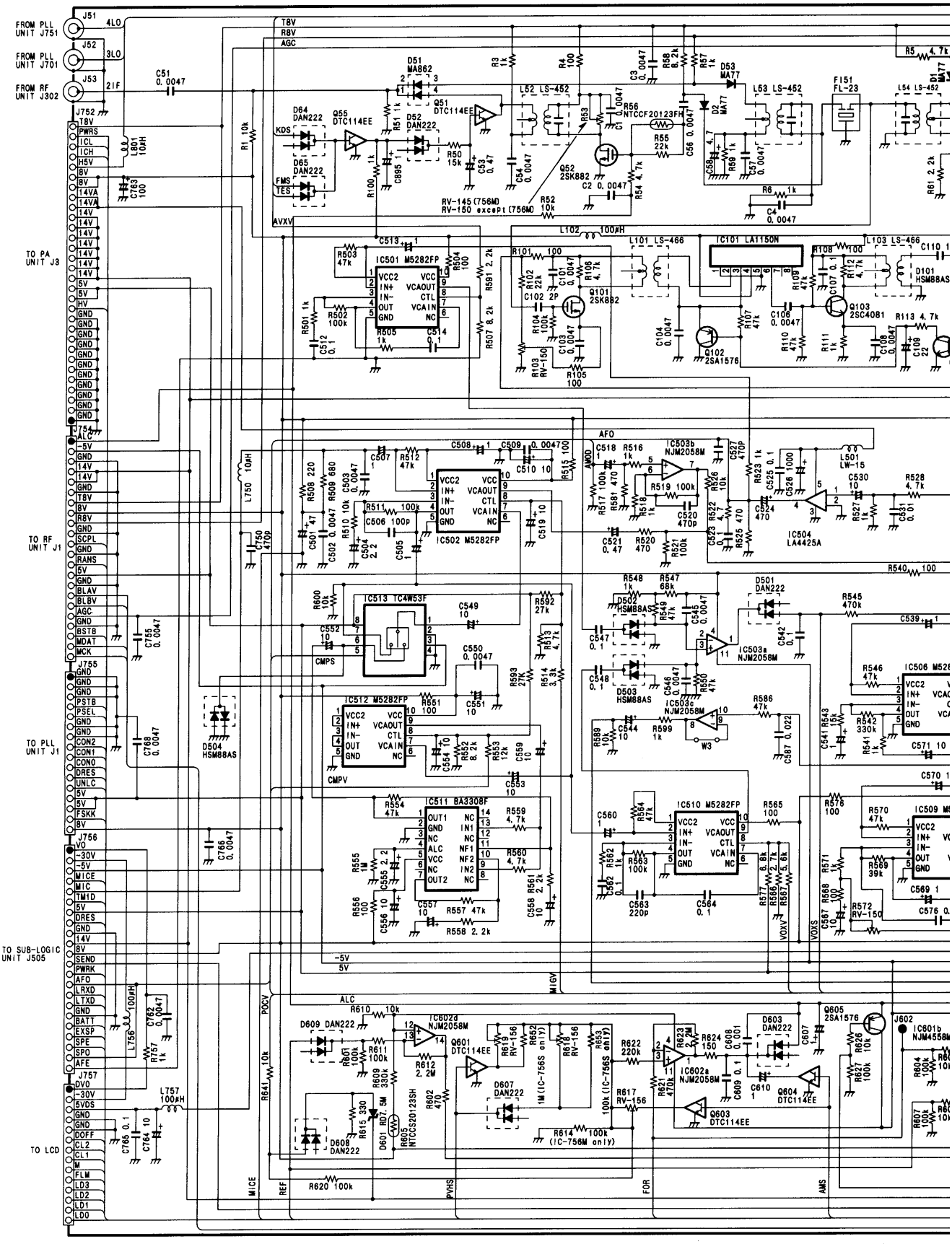

DSP BOARD
IC425 SC-1356
IC427 TC7S08F
IC428a TC74HC74AF
IC428b TC74HC74AF
IC401a TC74HCU04AF
IC401b TC74HCU04AF
IC401c TC74HCU04AF
IC401e TC74HCU04AF
IC401f TC74HCU04AF
IC402 TC7SHU04FU
IC403 TC74HC4040AF
IC404 BU4094BCF
IC405 BU4094BCF
IC412 MAX297CPA
IC414a NJM2058M
IC414b NJM2058M
IC414c NJM2058M
IC414d NJM2058M
IC415 TC74HC4053AF
IC423 BU4052BCF
J401
J402
X401 CR-570
X402 CR-568
MCK
MDAT
DBST
DIT1
DRIF
DTIF
DAF
DMOD
MLO
-5VD
5VA
5VD
AMS
RXS
DRES
DIT2
R1 RV-314 [PITCH]
R2 RV-313 [PBT2]
[APF]
[PBT1]
L3 100μH


IC425
SC-1356
IC429
SC-1356
IC401c
TC74HCU04AF
IC401d
TC74HCU04AF
IC414b
NJM2058M
IC412
MAX297CPA
IC419d
NJM2058M
IC419b
NJM2058M
IC419a
NJM2058M
IC408
LC7886M
IC411d
NJM2058M
IC411c
NJM2058M
IC411b
NJM2058M
IC411a
NJM2058M
IC419c
NJM2058M
IC409
PCM69AU

# IC-756S SCHEMATIC DIAGRAM

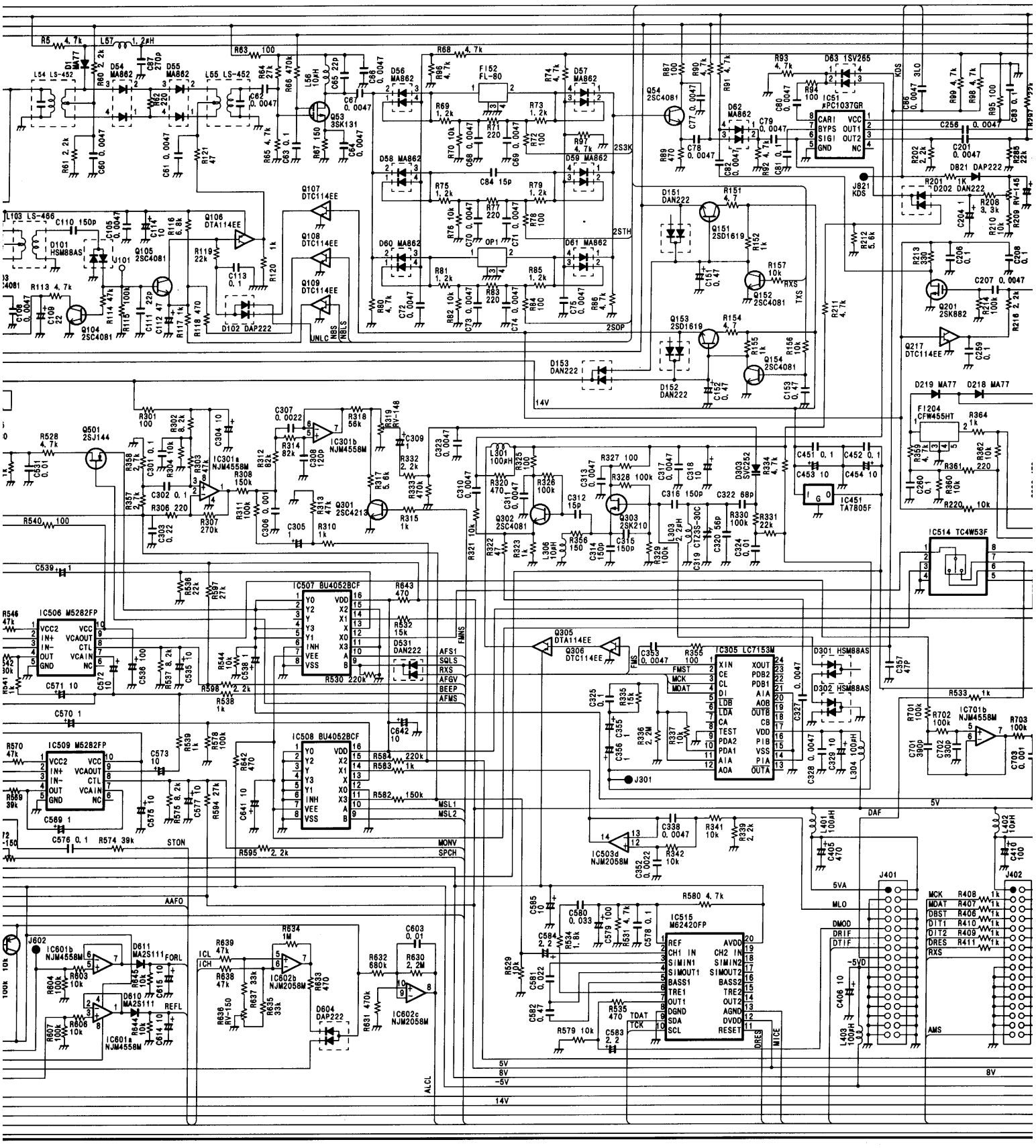


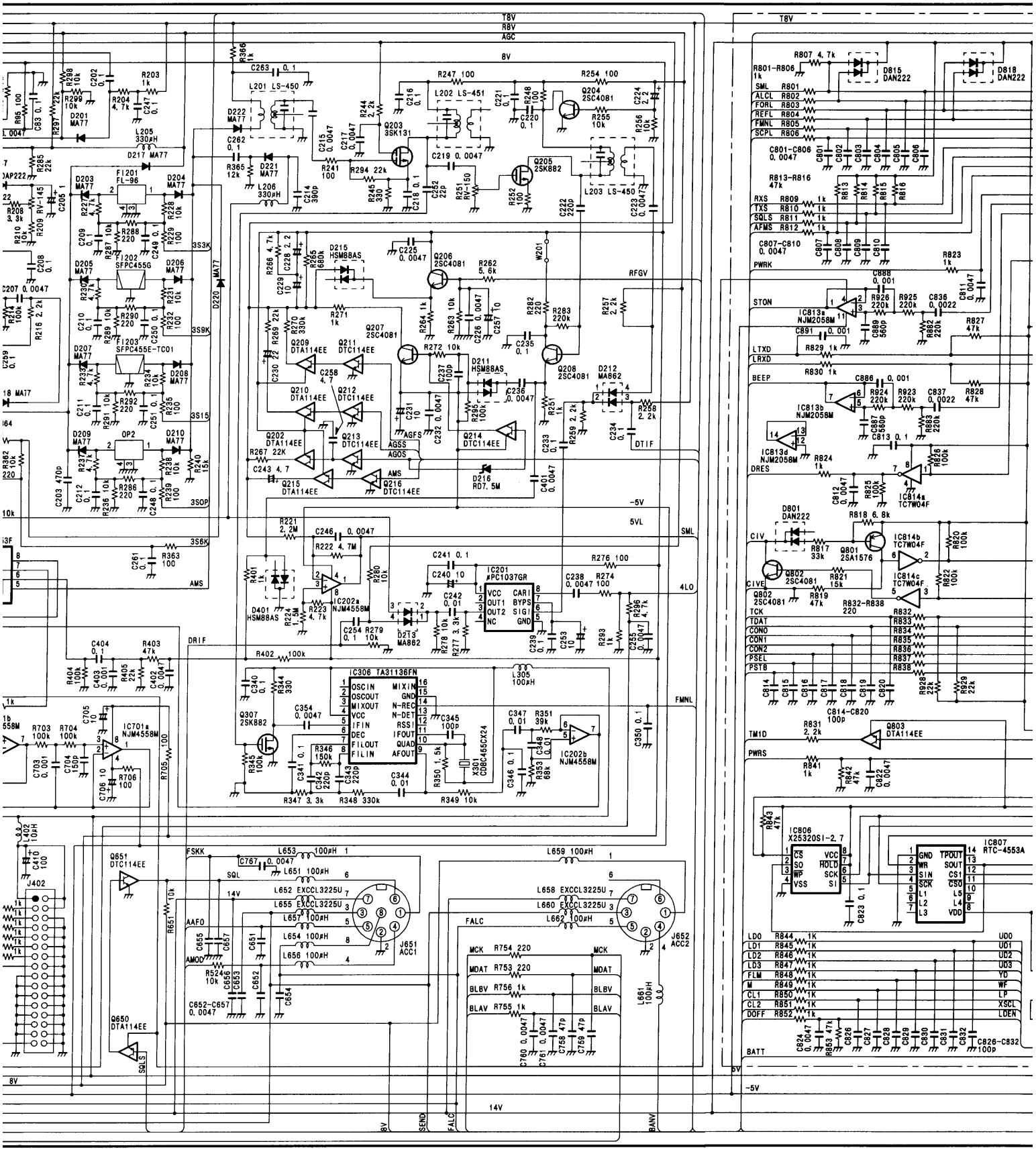

CTIN
J2
(CTRL) P1
FRONT
MAIN DIAL
5VL
MUP
MDN
GND
J1
FRONT W4
J2
RIT BOARD
RUP
5VL
RDN
J507
FRONT W5
PBT BOARD
5V
APF
PITCH
PBT1
PBT2
J512
P758
SPE
NC
SP
J511
P1
SSP
SSPE
CHASSIS
SP
J508
FRONT W3
PHONE BOARD
J2
MODE BOARD
FRONT W6
J502
F5K
F4K
F3K
F2K
F1K
SPEK
AMK
RZK
RTYK
CWK
SSBK
KI2
KI1
J510
FRONT W1
KEY BOARD
J503
FRONT W7
SPLK
1K
3K
7K
10K
14K
18K
21K
24K
28K
50K
GENK
FINK
MPWK
MPRK
TEN-KEY BOARD
J504
FRONT W8
MUPK
MDNK
MWK
MCLK
TSK
XFCK
LOCK
APFK
NOTK
KI4
KI3
LDV
LOCD
TXD
RXD
NOTD
APFD
SUB-LOGIC UNIT
J101
CFL+
CFL-
CHASSIS W14
LCD
DVO
-30V
5VDS
DOFF
CL2
CL1
FLM
LD3
LD2
LD1
LD0
J505
CHASSIS W10
AFE
SPO
SPE
EXSP
BATT
LTXD
LRXD
AFO
PWRK
SEND
8V
14V
TM1D
MICE
-5V
-30V
VO
J506
FRONT W2
MIC BOARD
MIC
M8V
MUD
SQLS
MSEND
MMICE
J5
CHASSIS W11
J8
TUNER BOARD
GND
3.5M
7M
10M
14M
18M
24M
VHF
C03
C02
C01
NVHF
C13
C12
C11
J3
TUIN
P3
J4
TUOT
P4
RFRX
CHASSIS W7
J13
L1
L2
L5
L4
L6
L3
L7
PLL UNIT
J751
4LO
(CTRL) P2
J701
3LO
J351
1LOA
(PLL) P351
J651
1LOB
(PLL) P651
J81
2LO
(PLL) P81
J851
MKR
(PLL) P851
J801
SLO
(PLL) P801
CHASSIS W8
8V
FSKK
5V
UNLC
DRES
CON0
CON1
CON2
PSEL
PSTB
(PA) P1
W1
W2
W3
W4
W5
W6
W7
L7
L3
L6
L4
L5
L2
L1
CHASSIS W7
FILTER UNIT

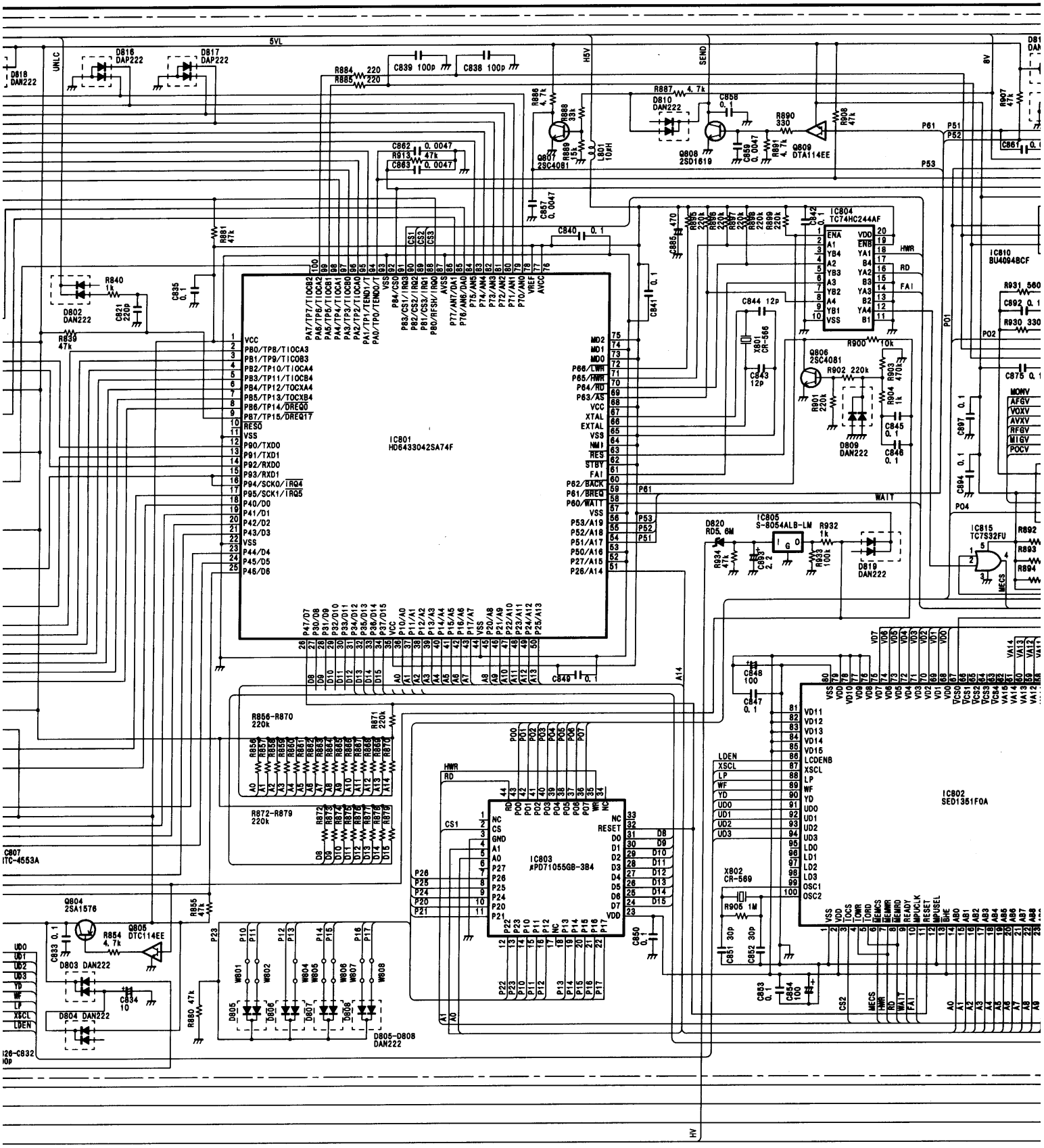

FROM PLL UNIT J751
FROM PLL UNIT J701
FROM RF UNIT J302
TO PA UNIT J3
TO RF UNIT J1
TO PLL UNIT J1
TO SUB-LOGIC UNIT J505
TO LCD
IC501 M5282FP
IC502 M5282FP
IC503a NJM2058M
IC503b NJM2058M
IC503c NJM2058M
IC504 LA4425A
IC510 M5282FP
IC511 BA3308F
IC512 M5282FP
IC513 TC4W53F
IC601a NJM2058M
IC601b NJM4558M
IC602a NJM2058M
IC602d NJM2058M
IC101 LA1150N
Q101 2SK882
Q102 2SA1576
Q103 2SC4081
Q51 DTC114EE
Q52 2SK882
Q55 DTC114EE
Q601 DTC114EE
Q603 DTC114EE
Q604 DTC114EE
Q605 2SA1576
D51 MA862
D52 DAN222
D53 MA77
D64 DAN222
D65 DAN222
D501 DAN222
D502 HSM88AS
D503 HSM88AS
D504 HSM88AS
D603 DAN222
D607 DAN222
D608 DAN222
D609 DAN222
D101 HSM88AS
L52 LS-452
L53 LS-452
L101 LS-466
L102 100µH
L103 LS-466
L501 LW-15
L750 10µH
L756 100µH
L757 100µH
L801 10µH
F151 FL-23
RV-145 (756M0 RV-150 except (756M0
RV-156
RV-150
RV-1
8V
5V
-5V
-30V
AVXV
AFO
ALC
MICE
REF
PCCV
PVHS
FOR
AMS
MGV
VOXS
VOXV
CMPS
CMPV

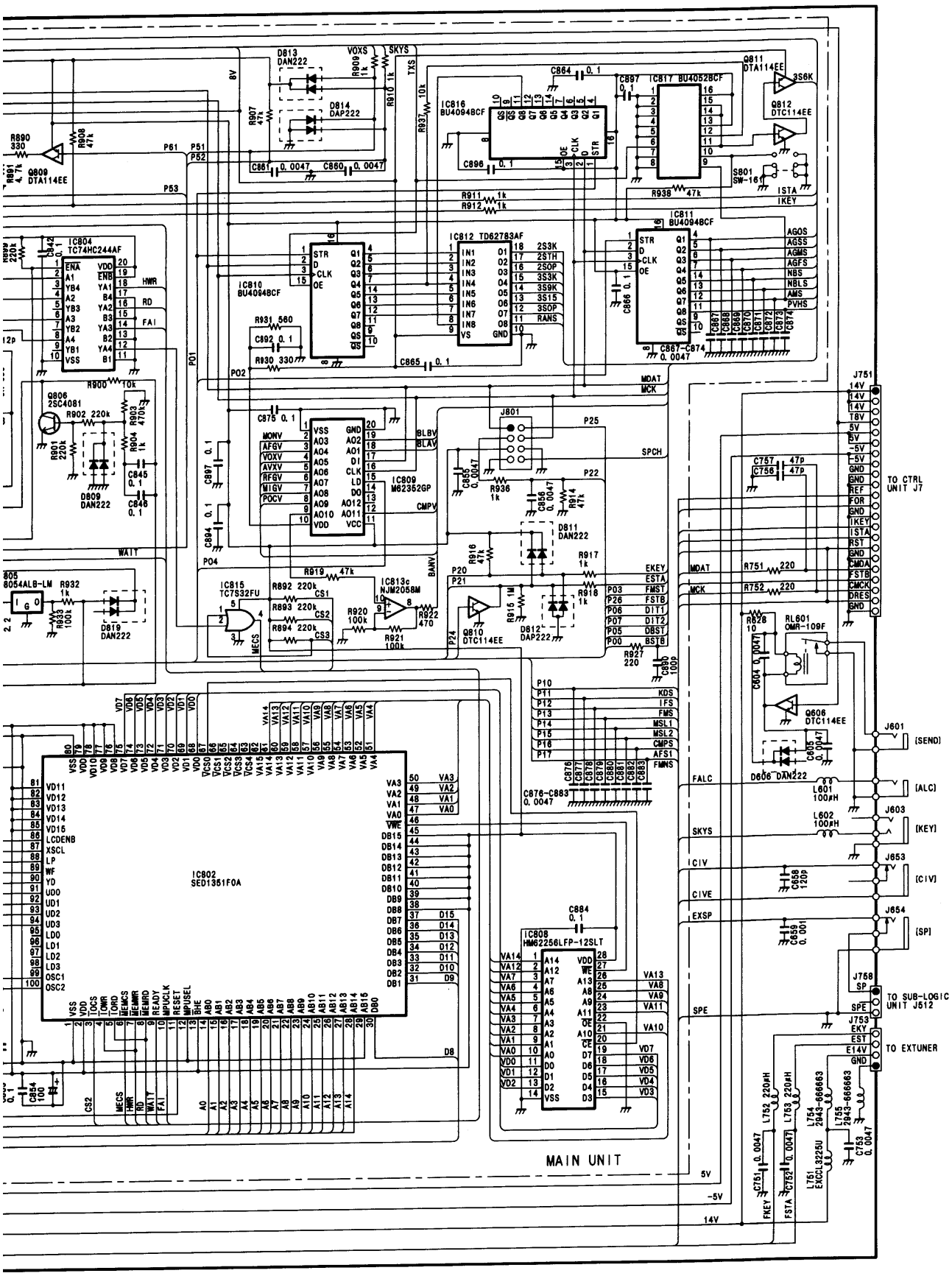
# IC-756S

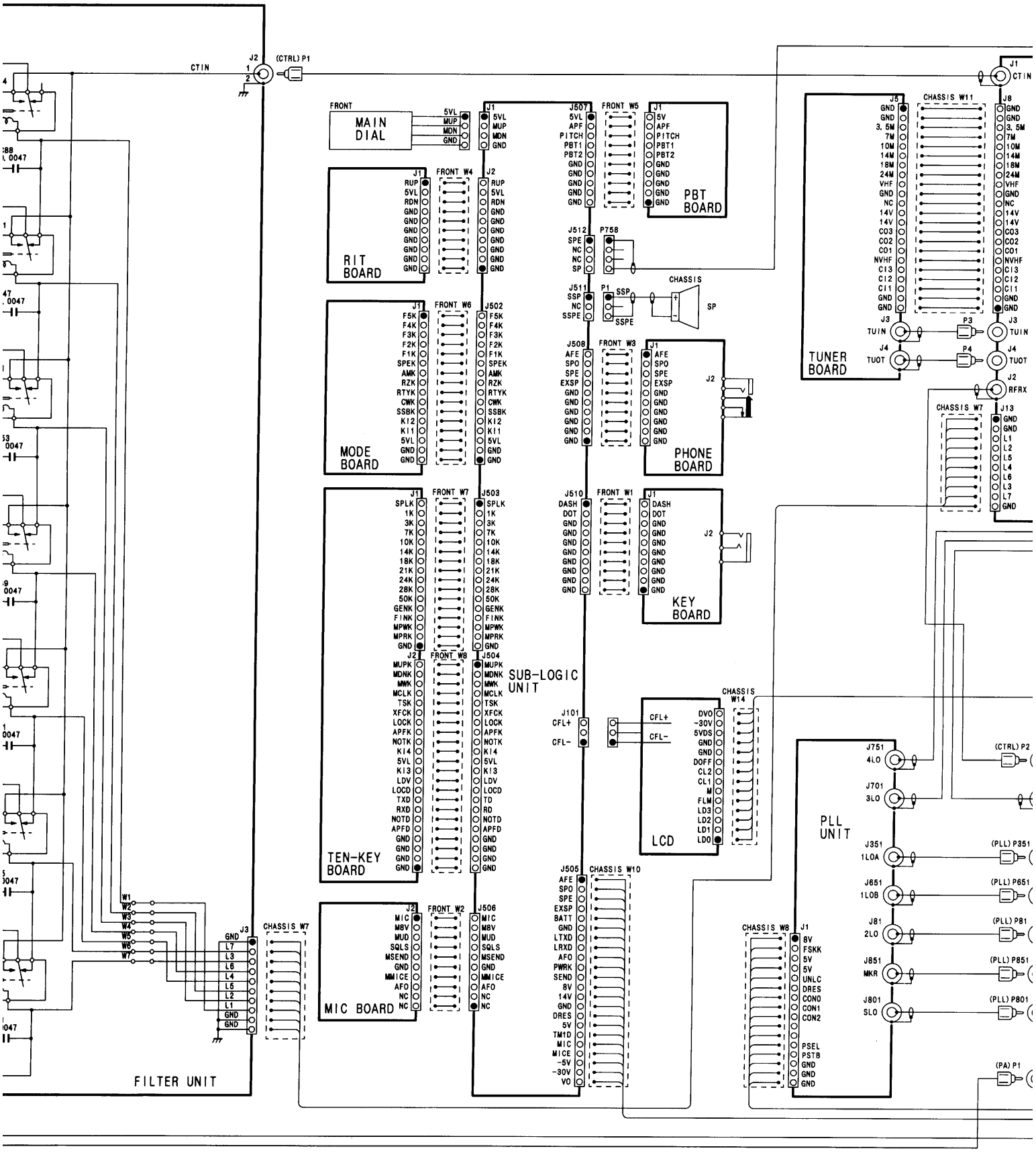
## SCHEMATIC DIAGRAM

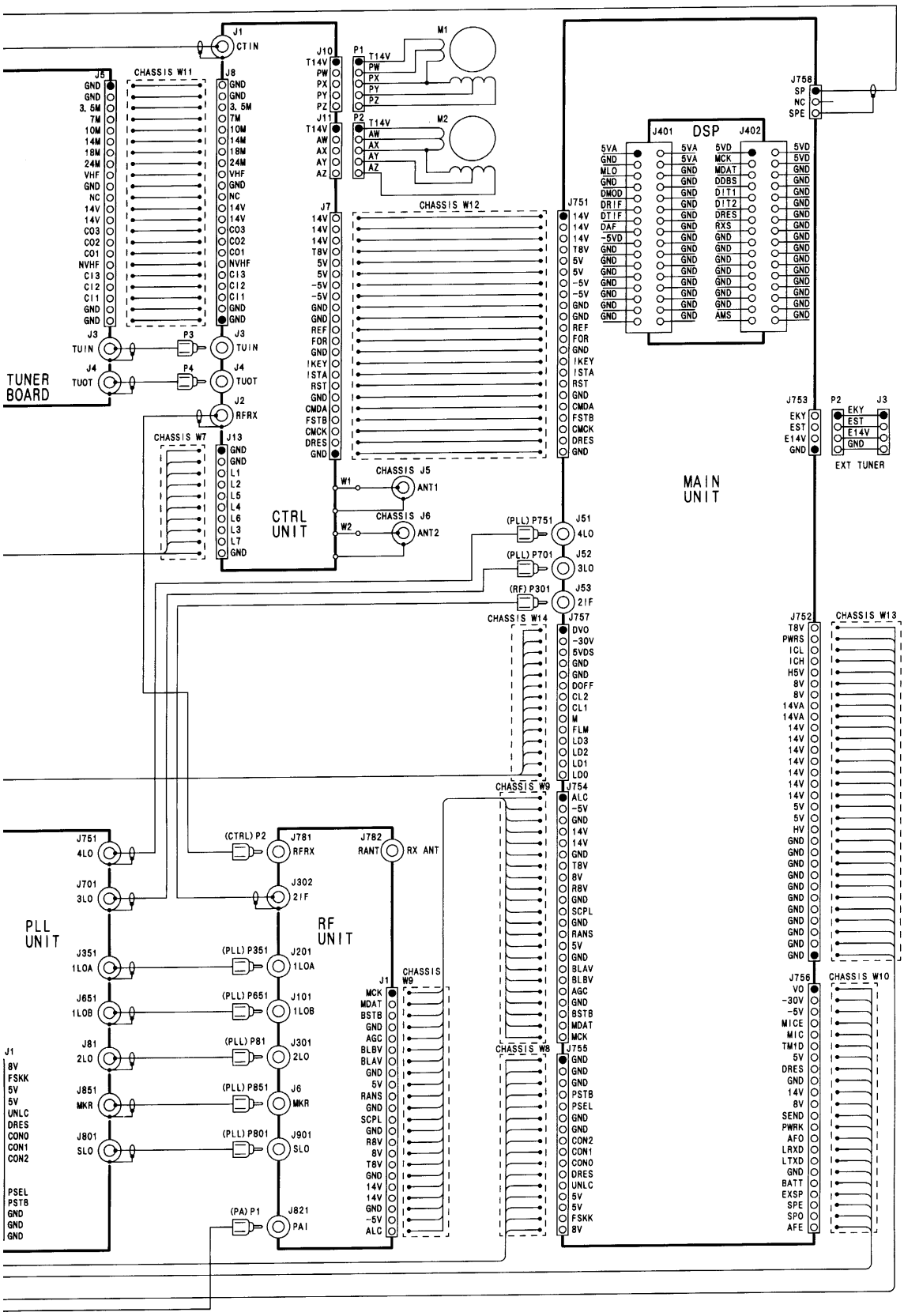



T8V
R8V
AGC
8V
L201 LS-450
L202 LS-451
L203 LS-450
L205 330µH
D217 MA77
L206 330µH
F1201 FL-96
F1202 SFPC455G
F1203 SFPC455E-TC01
OP2
3S3K
3S9K
3S15
3SOP
3S6K
D220 MA77
D215 HSM88AS
D216 RD7.5M
D211 HSM88AS
D212 MA862
D401 HSM88AS
D213 MA862
Q201 2SC4081
Q202 DTA114EE
Q203 3SK131
Q204 2SC4081
Q205 2SK882
Q206 2SC4081
Q207 2SC4081
Q208 2SC4081
Q209 DTA114EE
Q210 DTA114EE
Q211 DTC114EE
Q212 DTC114EE
Q213 DTC114EE
Q214 DTC114EE
Q215 DTA114EE
Q216 DTC114EE
W201
RFGV
AGFS
AGSS
AGOS
AMS
DTIF
-5V
5VL
SML
4LO
FMNL
DRIF
IC201 µPC1037GR
VCC CARI
OUT1 BYPS
OUT2 SIGI
NC GND
IC202a NJM4558M
IC306 TA31136FN
OSCIN MIXIN
OSCOUT GND
MIXOUT N-REC
VCC N-DET
IFIN RSSI
DEC IFOUT
FILOUT QUAD
FILIN AFOUT
Q307 2SK882
X301 C08C455CX24
IC202b NJM4558M
IC701a NJM4558M
L305 100µH
FSKK
SQL
14V
AAFO
AMOD
Q651 DTC114EE
Q650 DTA114EE
J402
J651 ACC1
J652 ACC2
L651 100µH
L652 EXCCL3225U
L653 100µH
L654 100µH
L655 EXCCL3225U
L656 100µH
L657 100µH
L658 EXCCL3225U
L659 100µH
L660 EXCCL3225U
L661 100µH
L662 100µH
FALC
MCK
MDAT
BLBV
BLAV
SEND
BANV
R801-R806 1k
D815 DAN222
D818 DAN222
SML R801
ALCL R802
FGNL R803
REFL R804
FMNL R805
SCPL R806
C801-C806 0.0047
R813-R816 47k
RXS R809 1k
TXS R810 1k
SQLS R811 1k
AFMS R812 1k
C807-C810 0.0047
PWRK
STON
LTXD
LRXD
BEEP
DRES
CIV
CIVE
TCK
TDAT
CONO
CON1
CON2
PSEL
PSTB
C814-C820 100p
TM1D
PWRS
IC806 X25320SI-2.7
CS SO WP VSS VCC HOLD SCK SI
IC807 RTC-4553A
GND WR SIN SCK L1 L2 L3 TPOUT SOUT CS1 CS0 L5 L4 VDD
LD0 LD1 LD2 LD3 FLM M CL1 CL2 DOFF
UD0 UD1 UD2 UD3 YD WF LP XSCL LDEN
C826-C832 100p
BATT
5V
-5V
IC813a NJM2058M
IC813b NJM2058M
IC813d NJM2058M
IC814a TC7W04F
IC814b TC7W04F
IC814c TC7W04F
Q801 2SA1576
Q802 2SC4081
Q803 DTA114EE

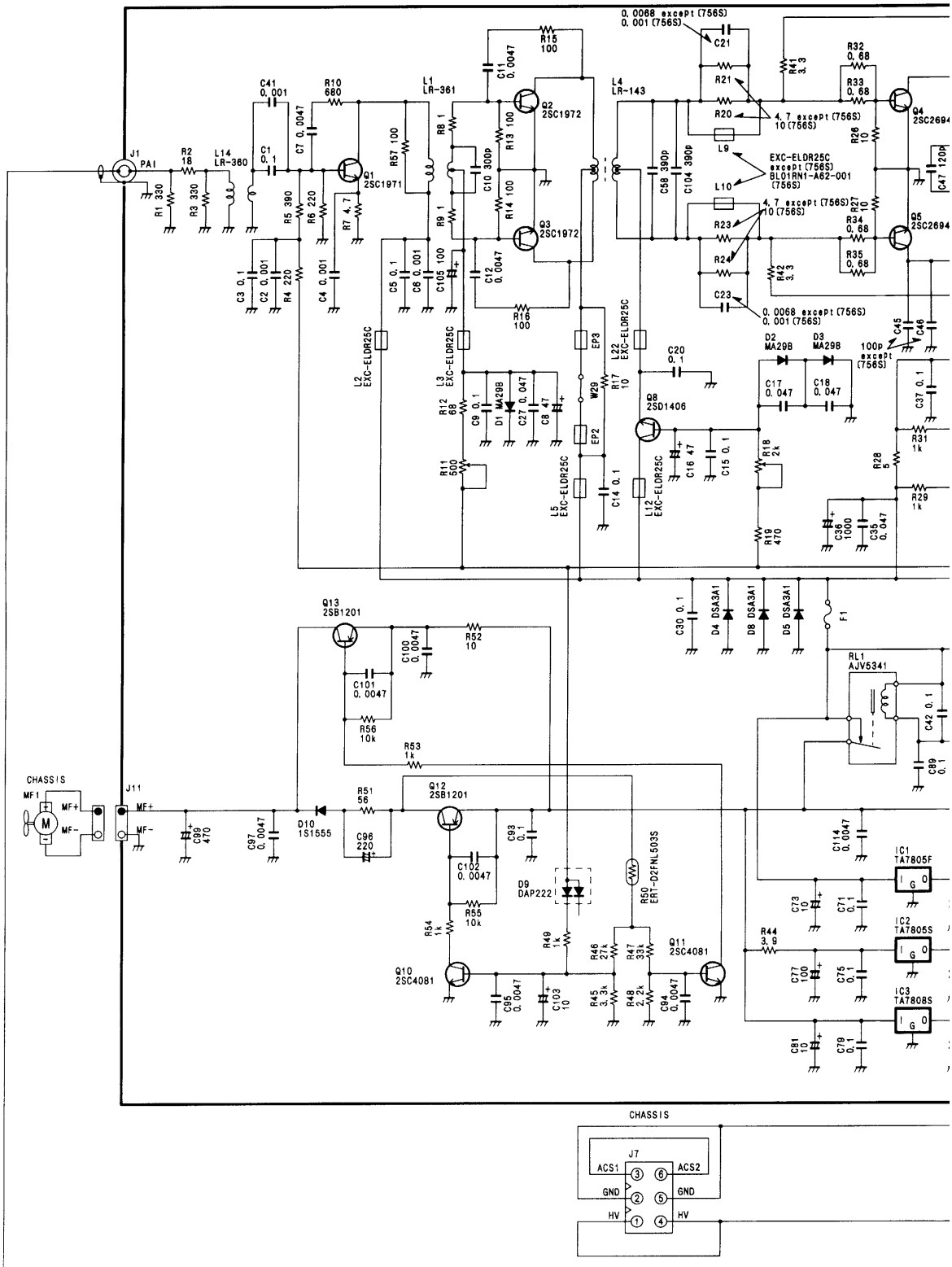

5VL
UNLC
D816 DAP222
D817 DAP222
D818 DAN222
R884 220
R885 220
C839 100p
C838 100p
HSV
SEND
8V
R886 4.7k
R888 33k
Q807 2SC4081
R889 15k
L801 10mH
R887 4.7k
D810 DAN222
C858 0.1
Q808 2SD1619
C859 0.0047
R890 330
R891 4.7k
Q809 DTA114EE
R908 47k
P61
P51
P52
P53
C862 0.0047
R913 47k
C863 0.0047
C857 0.0047
C840 0.1
R881 47k
R840 1k
D802 DAN222
C835 0.1
C821 220p
R839 47k
C841 0.1
C844 12p
X801 CR-566
C843 12p
R885-R896 470
R895-R899 220k
IC804 TC74HC244AF
ENA
YB4
YB3
YB2
YB1
VSS
VDD
ENB
YA1
YA2
YA3
YA4
B1
B2
B3
B4
HWR
RD
FAI
R900 10k
Q806 2SC4081
R902 220k
R903 470k
R904 1k
RB01 220k
D809 DAN222
C845 0.1
C846 0.1
IC810 BU4094BCF
R931 560
C892 0.1
R930 330
PO1
PO2
C875 0.1
MONV
AFGV
VOXV
AVXV
RFGV
MIGV
POCV
C897 0.1
C894 0.1
IC801 HD6433042SA74F
VCC
PB0/TP8/TIOCA3
PB1/TP9/TIOCB3
PB2/TP10/TIOCA4
PB3/TP11/TIOCB4
PB4/TP12/TOCXA4
PB5/TP13/TOCXB4
PB6/TP14/DREQ0
PB7/TP15/DREQ1
RESO
VSS
P90/TXD0
P91/TXD1
P92/RXD0
P93/RXD1
P94/SCK0/IRQ4
P95/SCK1/IRQ5
P40/D0
P41/D1
P42/D2
P43/D3
P44/D4
P45/D5
P46/D6
P66/LWR
P65/HWR
P64/RD
P63/AS
XTAL
EXTAL
NMI
RES
STBY
P62/BACK
P61/BREQ
P60/WAIT
P53/A19
P52/A18
P51/A17
P50/A16
P27/A15
P26/A14
WAIT
D820 RD5.6M
R934 47k
C893 2.2
IC805 S-8054ALB-LM
R932 1k
R933 100k
D819 DAN222
IC815 TC7S32FU
R892
R893
R894
MECS
PO4
R856-R870 220k
R871 220k
R872-R879 220k
C848 100
C847 0.1
C807 ITC-4553A
HWR
RD
CS1
IC803 APD71055GB-384
P26
P25
P24
P20
P21
IC802 SED1351F0A
LDEN
XSCL
LP
WF
YD
UD0
UD1
UD2
UD3
X802 CR-569
R905 1M
C851 30p
C852 30p
C853 0.1
C854 100
Q804 2SA1576
Q805 DTC114EE
R854 4.7k
R855 47k
C833 0.1
D803 DAN222
C834 10
D804 DAN222
R880 47k
D805-D808 DAN222
W801
W802
W804
W805
W806
W807
W808
HV
A14


MAIN UNIT
IC802 SED1351F0A
IC804 TC74HC244AF
IC809 M62352GP
IC810 BU4094BCF
IC811 BU4094BCF
IC812 TD62783AF
IC815 TC7S32FU
IC816 BU4094BCF
IC817 BU4052BCF
IC808 HM62256LFP-12SLT
J751
TO CTRL UNIT J7
TO SUB-LOGIC UNIT J512
TO EXTUNER
[SEND]
[ALC]
[KEY]
[CIV]
[SP]

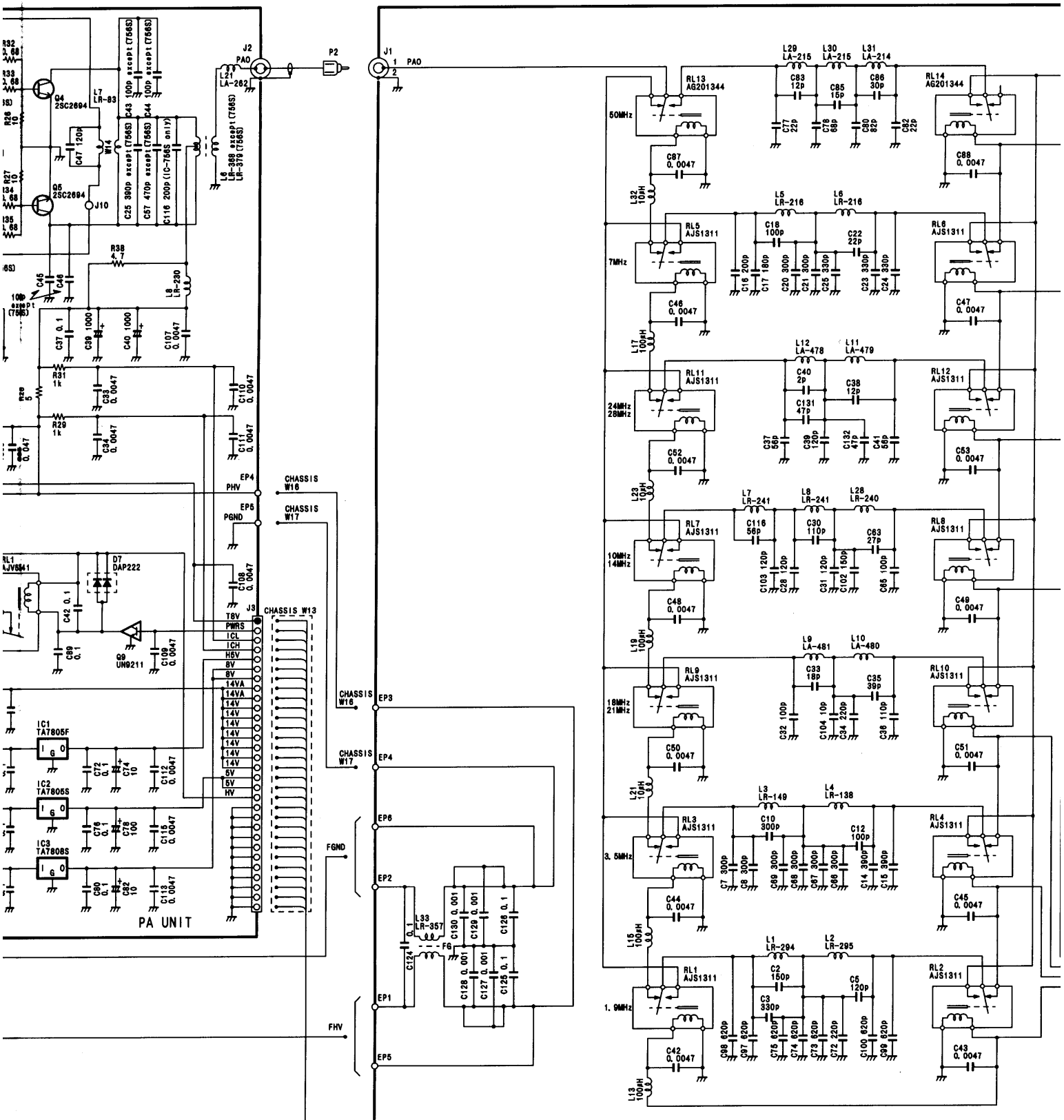

CTIN
J2
(CTRL) P1
FRONT
MAIN DIAL
5VL
MUP
MDN
GND
J1
FRONT W4
J2
RIT BOARD
RUP
5VL
RDN
J507
FRONT W5
PBT BOARD
5V
APF
PITCH
PBT1
PBT2
J512
P758
SPE
NC
SP
J511
P1
SSP
SSPE
CHASSIS
SP
J508
FRONT W3
PHONE BOARD
J2
MODE BOARD
FRONT W6
J502
F5K
F4K
F3K
F2K
F1K
SPEK
AMK
RZK
RTYK
CWK
SSBK
KI2
KI1
J510
FRONT W1
KEY BOARD
J503
FRONT W7
SPLK
1K
3K
7K
10K
14K
18K
21K
24K
28K
50K
GENK
FINK
MPWK
MPRK
TEN-KEY BOARD
J504
FRONT W8
MUPK
MDNK
MWK
MCLK
TSK
XFCK
LOCK
APFK
NOTK
KI4
KI3
LDV
LOCD
TXD
RXD
NOTD
APFD
SUB-LOGIC UNIT
J101
CFL+
CFL-
CHASSIS W14
LCD
DVO
-30V
5VDS
DOFF
CL2
CL1
FLM
LD3
LD2
LD1
LD0
J505
CHASSIS W10
AFE
SPO
SPE
EXSP
BATT
LTXD
LRXD
AFO
PWRK
SEND
8V
14V
TM1D
MICE
-5V
-30V
VO
J506
FRONT W2
MIC BOARD
MIC
M8V
MUD
SQLS
MSEND
MMICE
J5
CHASSIS W11
J8
TUNER BOARD
GND
3.5M
7M
10M
14M
18M
24M
VHF
C03
C02
C01
NVHF
C13
C12
C11
J3
TUIN
P3
J4
TUOT
P4
RFRX
CHASSIS W7
J13
L1
L2
L5
L4
L6
L3
L7
PLL UNIT
J751
4LO
(CTRL) P2
J701
3LO
J351
1LOA
(PLL) P351
J651
1LOB
(PLL) P651
J81
2LO
(PLL) P81
J851
MKR
(PLL) P851
J801
SLO
(PLL) P801
CHASSIS W8
8V
FSKK
5V
UNLC
DRES
CON0
CON1
CON2
PSEL
PSTB
(PA) P1
W1
W2
W3
W4
W5
W6
W7
L7
L3
L6
L4
L5
L2
L1
CHASSIS W7
FILTER UNIT

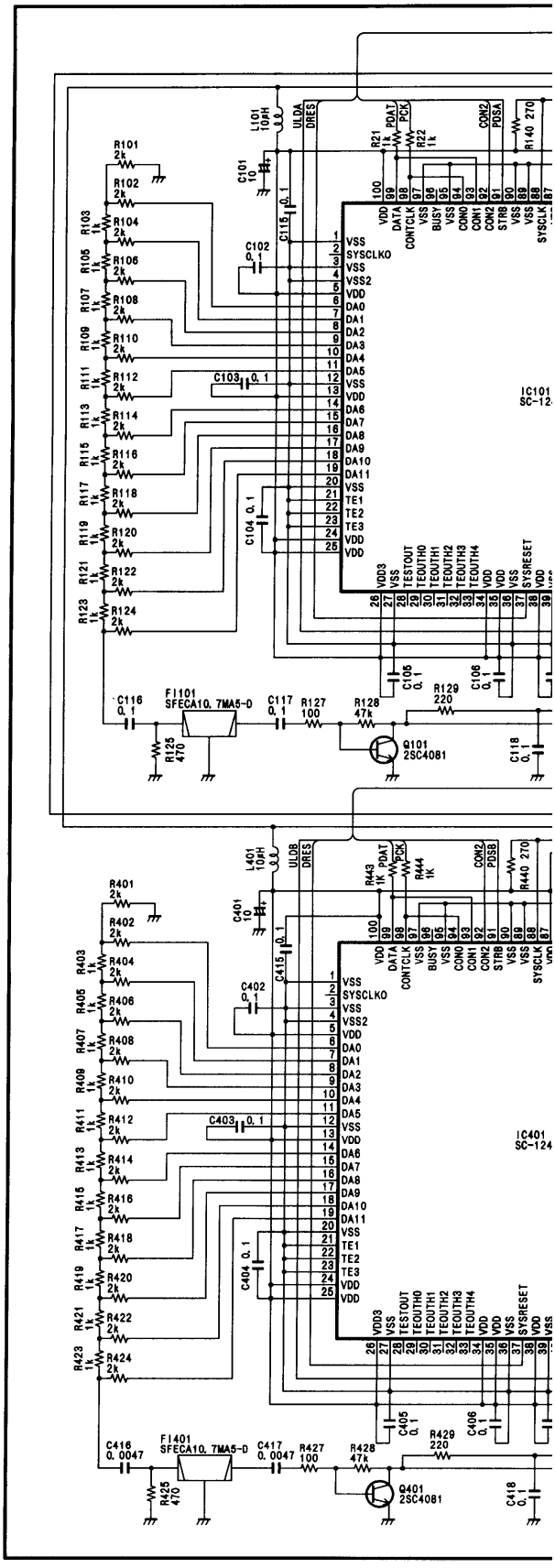

TUNER BOARD
CTRL UNIT
MAIN UNIT
PLL UNIT
RF UNIT
DSP
J401
J402
J751
J758
J753
J752
J756
J757
J754
J755
J1
J2
J3
J4
J5
J6
J7
J8
J10
J11
J13
P1
P2
P3
P4
M1
M2
CHASSIS W7
CHASSIS W8
CHASSIS W9
CHASSIS W10
CHASSIS W11
CHASSIS W12
CHASSIS W13
CHASSIS W14
CTIN
TUIN
TUOT
RFRX
ANT1
ANT2
EXT TUNER
(PLL) P751
(PLL) P701
(RF) P301
(CTRL) P2
(PLL) P351
(PLL) P651
(PLL) P81
(PLL) P851
(PLL) P801
(PA) P1
RX ANT
J51
J52
J53
J781
J782
J302
J201
J101
J301
J6
J901
J821
J351
J651
J81
J851
J801
4LO
3LO
2IF
1LOA
1LOB
2LO
MKR
SLO
PAI

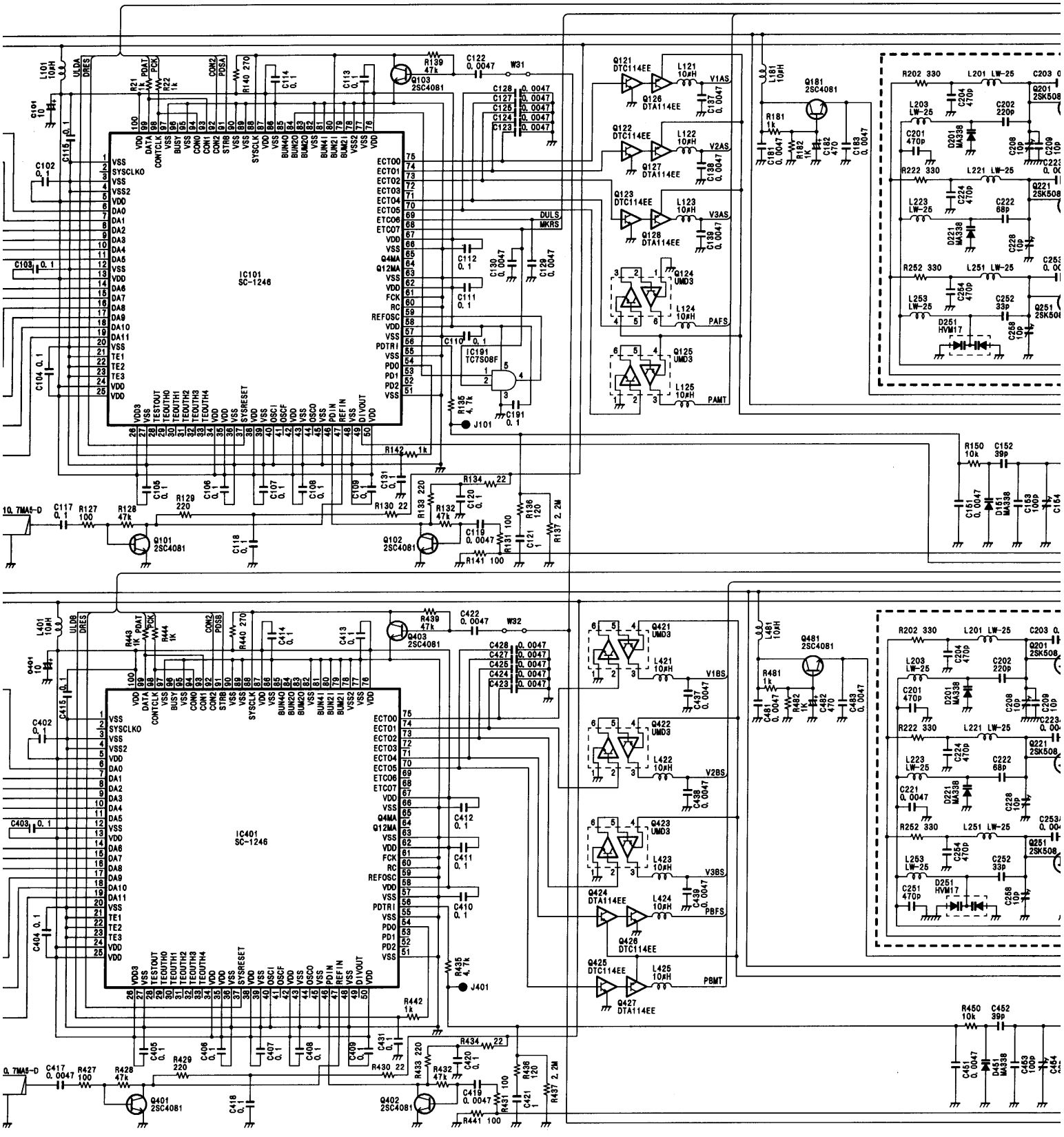
ICOM ③ IC-756 IC-756M IC-

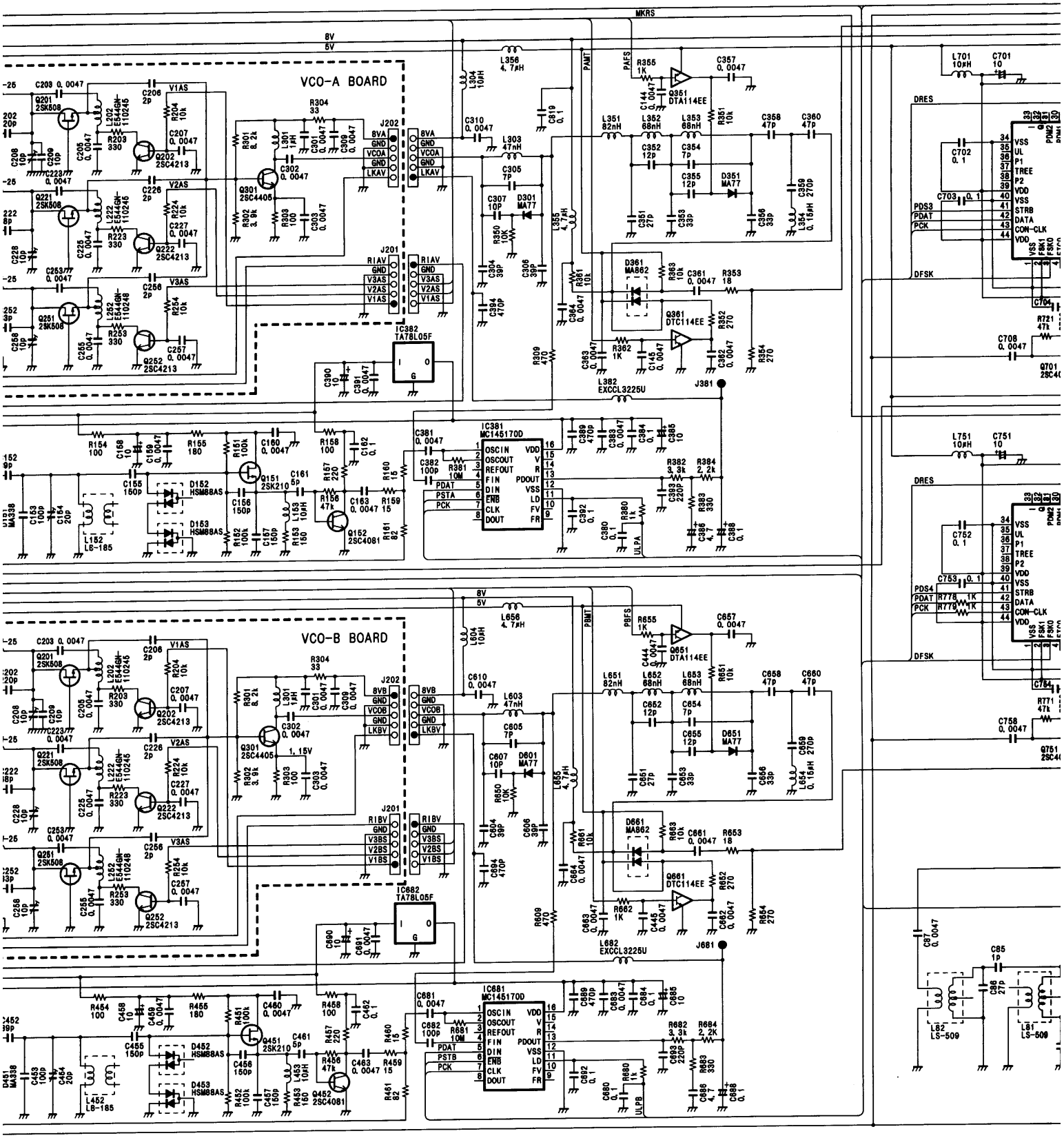


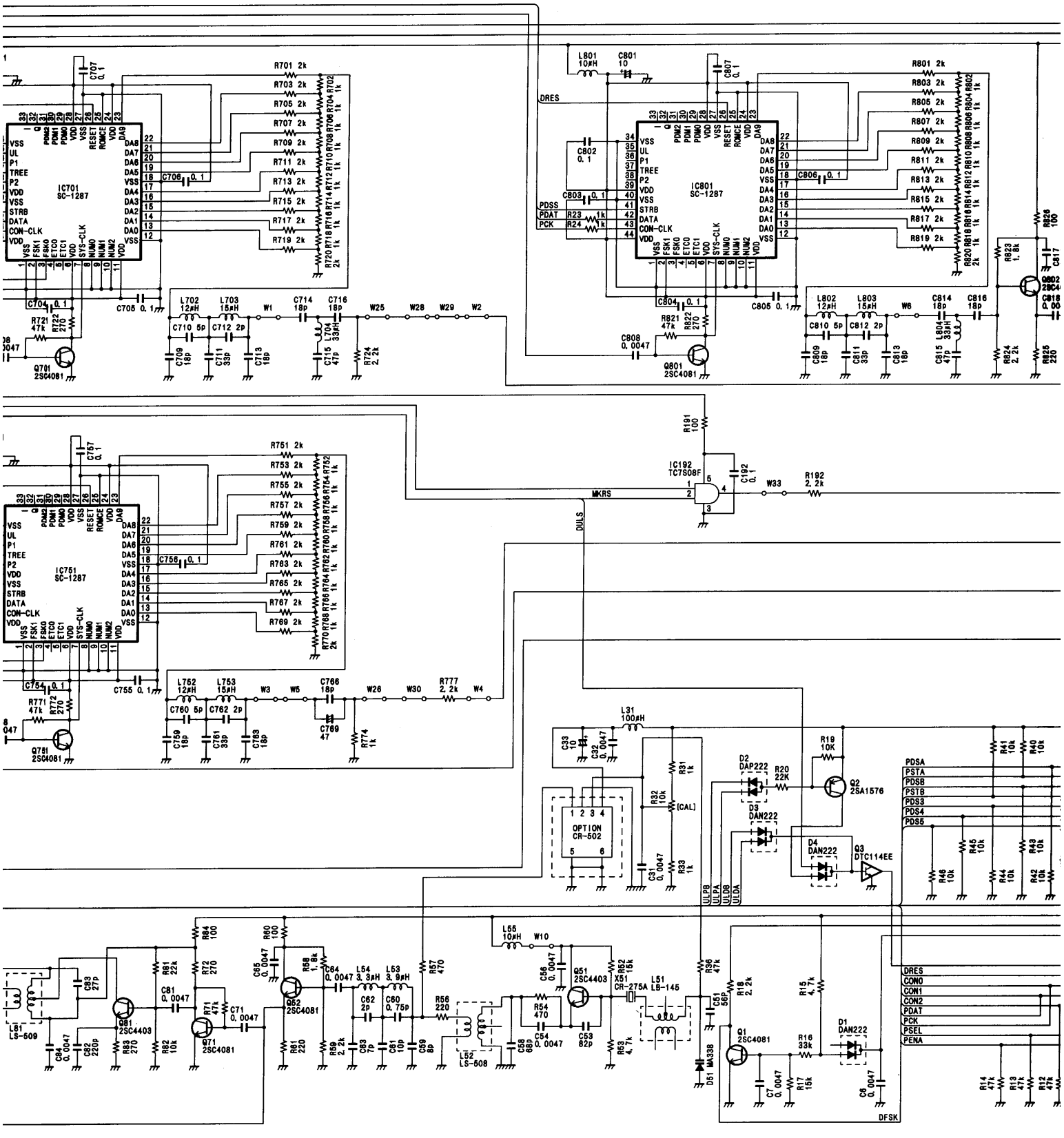
# IC-756S SCHEMATIC DIAGRAM

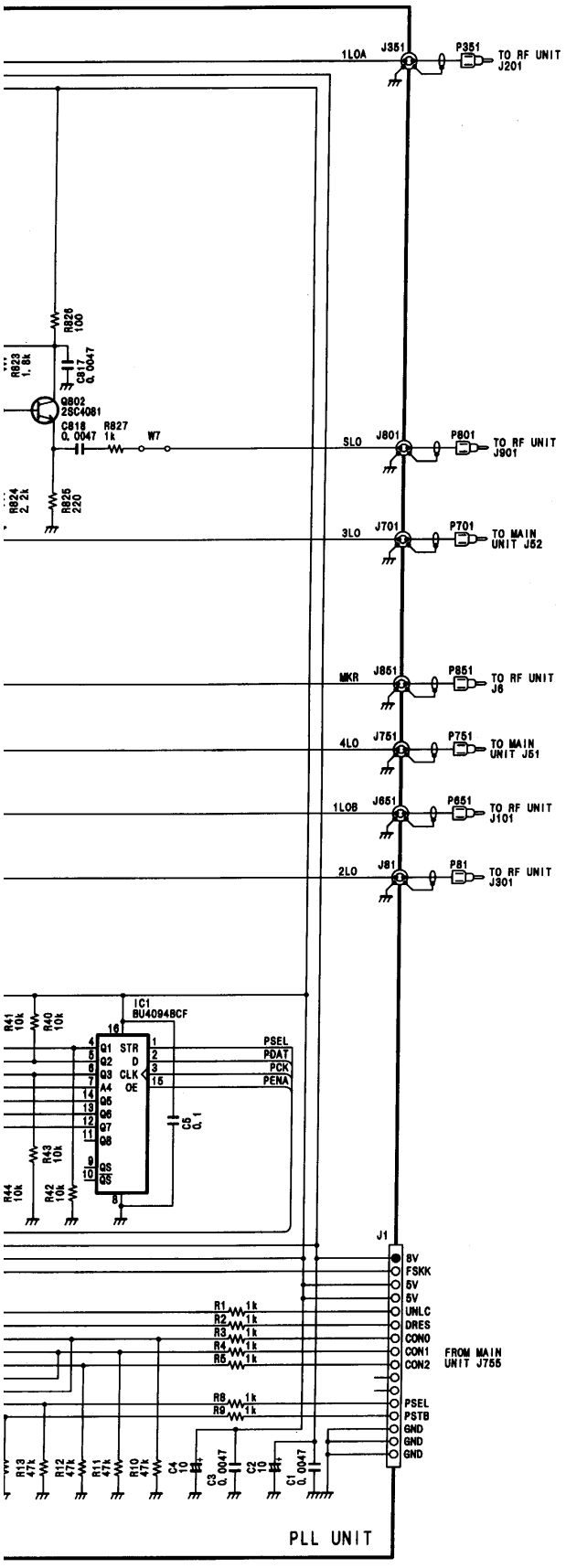


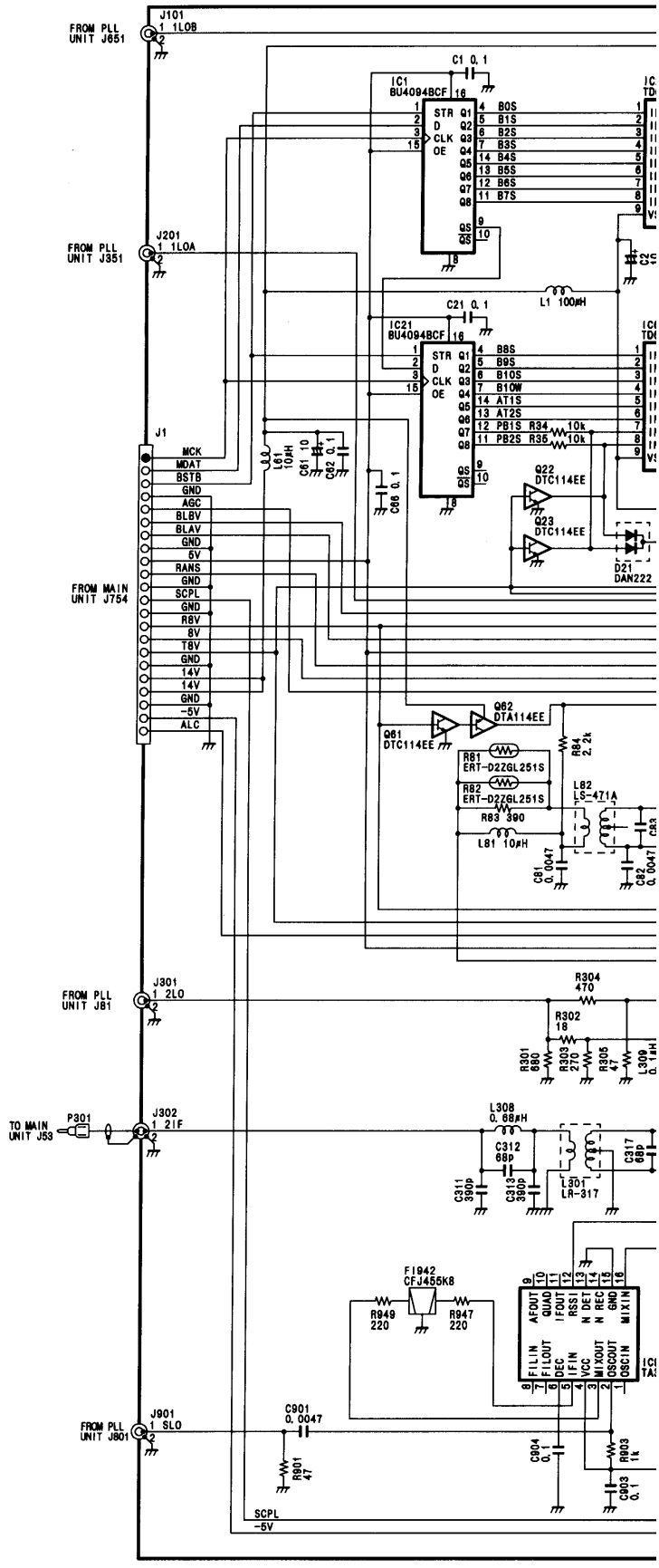

L101 10μH
ULDA
DRES
C101 10
C115 0.1
R101 2k
R102 2k
R103 1k
R104 2k
R105 1k
R106 2k
R107 1k
R108 2k
R109 1k
R110 2k
R111 1k
R112 2k
R113 1k
R114 2k
R115 1k
R116 2k
R117 1k
R118 2k
R119 1k
R120 2k
R121 1k
R122 2k
R123 1k
R124 2k
C102 0.1
C103 0.1
C104 0.1
R21 1k PDAT
R22 1k PCK
CON2
PDSA
R140 270
VDD
DATA
CONTCLK
VSS
BUSY
VSS
CON0
CON1
CON2
STRB
VSS
VSS
SYSCLK
VSS
SYSCLKO
VSS
VSS2
VDD
DA0
DA1
DA2
DA3
DA4
DA5
VSS
VDD
DA6
DA7
DA8
DA9
DA10
DA11
VSS
TE1
TE2
TE3
VDD
VDD
VDD3
VSS
TESTOUT
TEOUTH0
TEOUTH1
TEOUTH2
TEOUTH3
TEOUTH4
VDD
VDD
VSS
SYSRESET
VDD
VSS
IC101
SC-12
C105 0.1
C106 0.1
C116 0.1
F1101 SFECA10.7MA5-D
C117 0.1
R127 100
R128 47k
R129 220
R125 470
Q101 2SC4081
C118 0.1
L401 10μH
ULDB
DRES
C401 10
C415 0.1
R401 2k
R402 2k
R403 1k
R404 2k
R405 1k
R406 2k
R407 1k
R408 2k
R409 1k
R410 2k
R411 1k
R412 2k
R413 1k
R414 2k
R415 1k
R416 2k
R417 1k
R418 2k
R419 1k
R420 2k
R421 1k
R422 2k
R423 1k
R424 2k
C402 0.1
C403 0.1
C404 0.1
R443 1K PDAT
R444 1K PCK
CON2
PDSB
R440 270
IC401
SC-124
C405 0.1
C406 0.1
C416 0.0047
F1401 SFECA10.7MA5-D
C417 0.0047
R427 100
R428 47k
R429 220
R425 470
Q401 2SC4081
C418 0.1

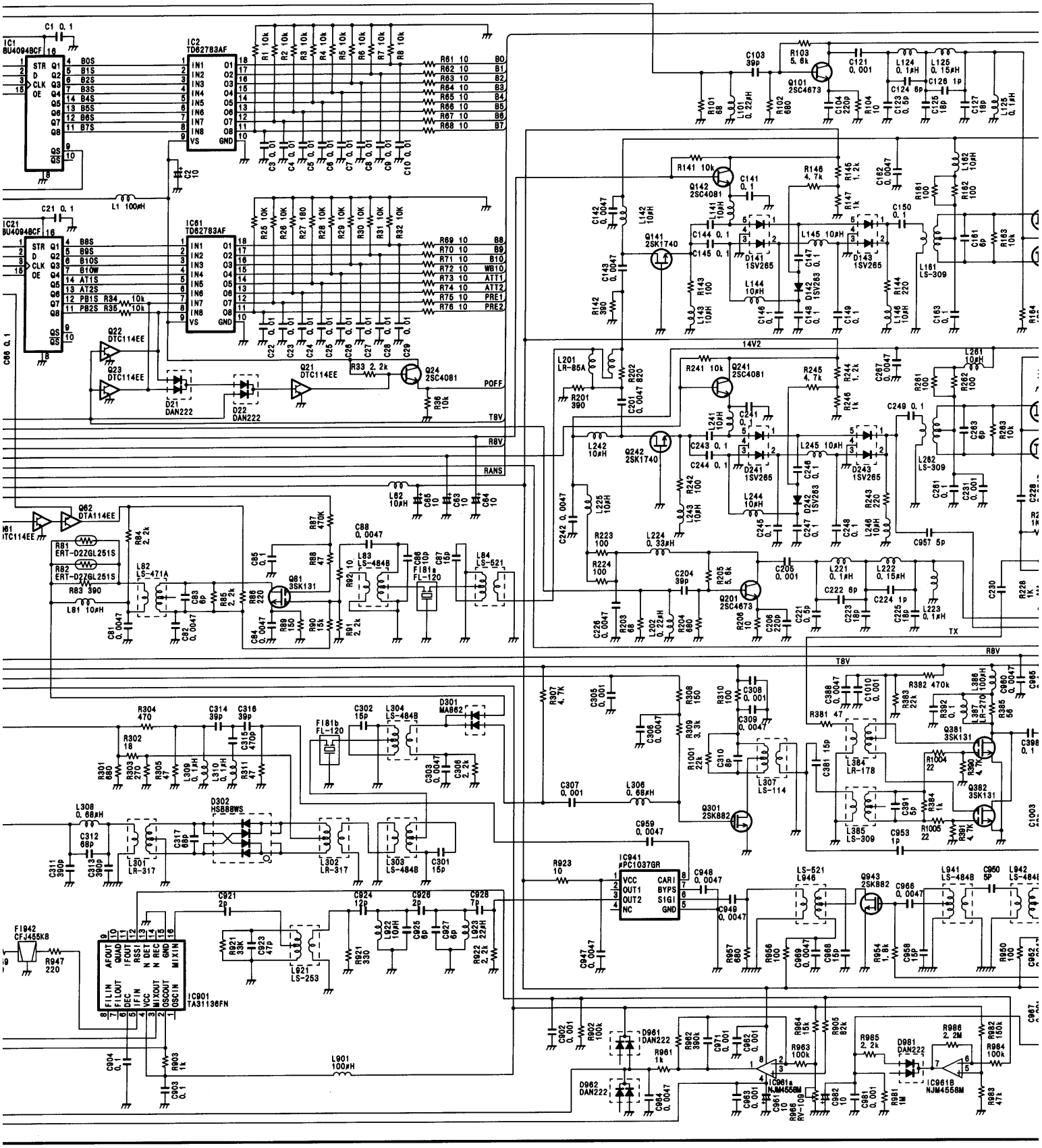

IC101
SC-1246
IC191
TC7S08F
IC401
SC-1246
J101
J401
Q101 2SC4081
Q102 2SC4081
Q103 2SC4081
Q401 2SC4081
Q402 2SC4081
Q403 2SC4081
Q481 2SC4081
Q181 2SC4081
Q121 DTC114EE
Q122 DTC114EE
Q123 DTC114EE
Q126 DTA114EE
Q127 DTA114EE
Q128 DTA114EE
Q421 UMD3
Q422 UMD3
Q423 UMD3
Q424 DTA114EE
Q425 DTC114EE
Q426 DTC114EE
Q427 DTA114EE
Q124 UMD3
Q125 UMD3
V1AS
V2AS
V3AS
PAFS
PAMT
V1BS
V2BS
V3BS
PBFS
PBMT
DULS
MKRS
D201 MA338
D221 MA338
D251 HVM17
D151 MA338
D451 MA338

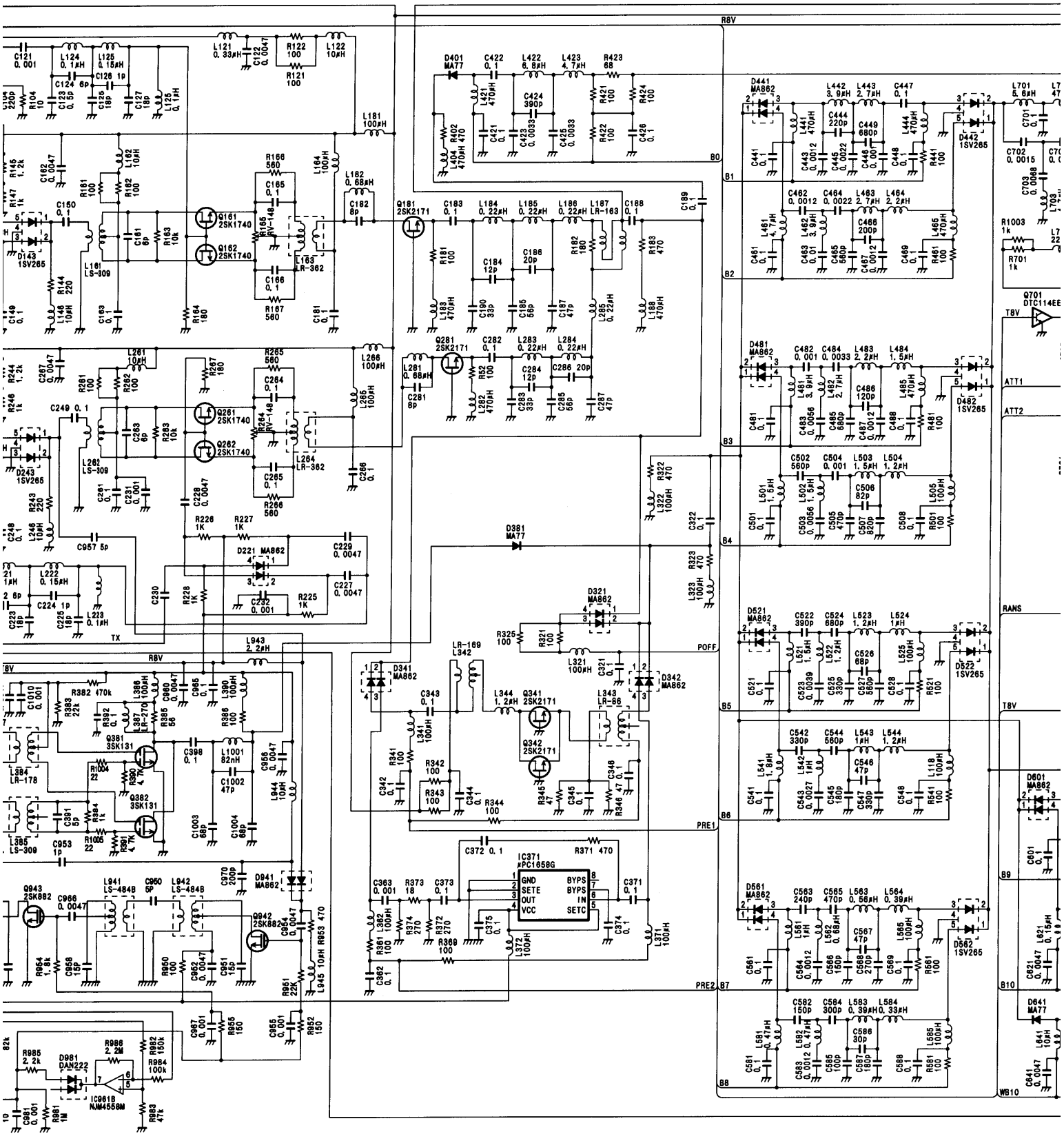

VCO-A BOARD
VCO-B BOARD
MKRS
8V
5V
PAMT
PAFS
DRES
DFSK
PDS3
PDS4
PDAT
PCK
VSS
UL
P1
TREE
P2
VDD
STRB
DATA
CON-CLK
J202
J201
J381
J681
8VA
VCOA
LKAV
R1AV
V3AS
V2AS
V1AS
8VB
VCOB
LKBV
R1BV
V3BS
V2BS
V1BS
IC382
TA78L05F
IC381
MC145170D
IC681
OSCIN
OSCOUT
REFOUT
FIN
DIN
ENB
CLK
DOUT
PDOUT
PSTA
PSTB
L382
EXCCL3225U
L682
EXCCL3225U
Q151
2SK210
Q451
2SK210
Q152
2SC4081
Q452
2SC4081
D152
HSM88AS
D153
HSM88AS
D452
HSM88AS
D453
HSM88AS
Q301
2SC4405
Q201
2SK508
Q202
2SC4213
Q221
2SK508
Q222
2SC4213
Q251
2SK508
Q252
2SC4213
Q351
DTA114EE
Q361
DTC114EE
Q651
DTA114EE
Q661
DTC114EE
D301
MA77
D351
MA77
D601
MA77
D651
MA77
D361
MA862
D661
MA862
L152
LB-185
L452
LB-185
L82
LS-509
L81
LS-509
L701
10μH
L751
10μH
C701
10
C751
10
C702
0.1
C752
0.1
C703
0.1
C753
0.1
C704
C754
R721
47k
R771
47k
C708
0.0047
C758
0.0047
Q701
2SC4
Q751
2SC4
C87
0.0047
C85
1p
C86
27p

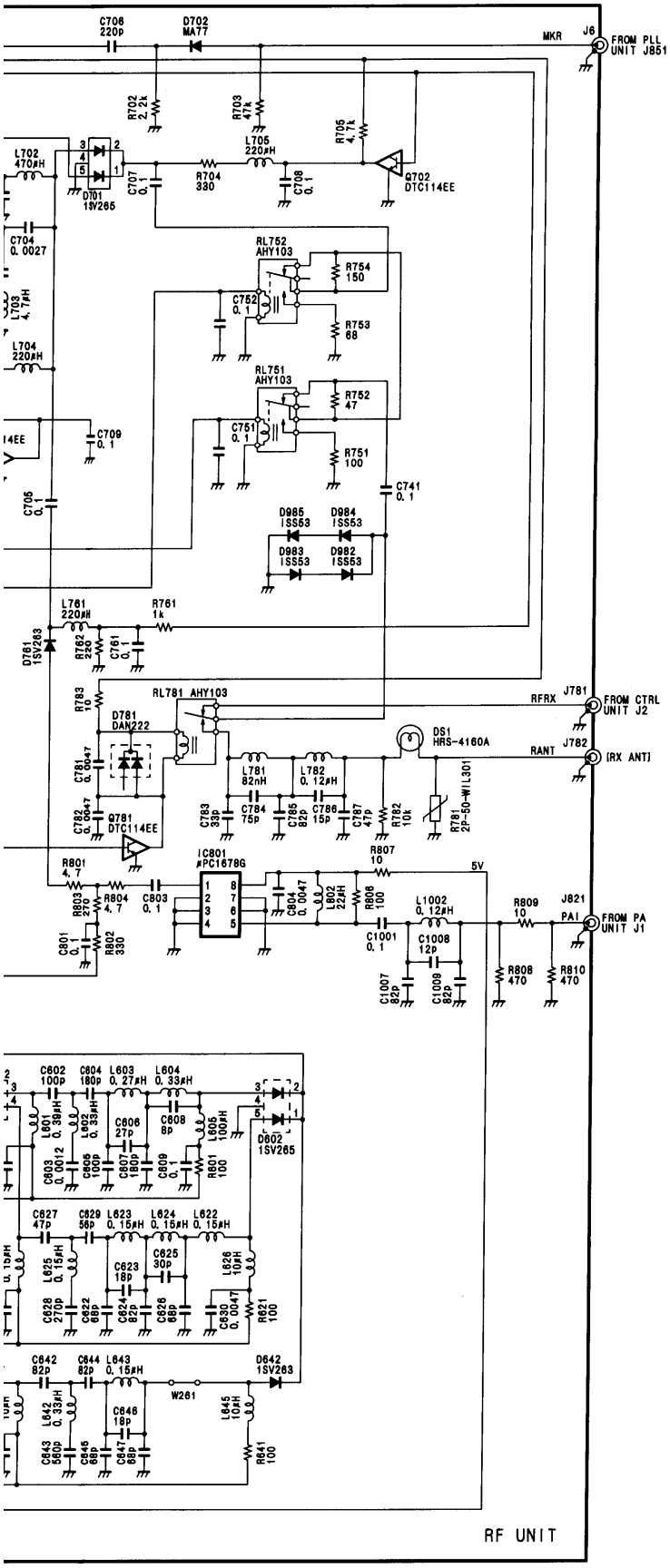

IC701 SC-1287
IC801 SC-1287
IC751 SC-1287
IC192 TC7S08F
Q701 2SC4081
Q801 2SC4081
Q751 2SC4081
Q81 2SC4403
Q71 2SC4081
Q52 2SC4081
Q51 2SC4403
Q1 2SC4081
Q2 2SA1576
Q3 DTC114EE
D1 DAN222
D2 DAP222
D3 DAN222
D4 DAN222
D51 MA338
L81 LS-509
L52 LS-508
L51 LB-145
OPTION CR-502
CR-275A
MKRS
DULS
DRES
PDSS
PDAT
PCK
[CAL]
PDSA
PSTA
PDSB
PSTB
PDS3
PDS4
PDS5
ULPB
ULPA
ULDB
ULDA
DRES
CON0
CON1
CON2
PDAT
PCK
PSEL
PENA
DFSK

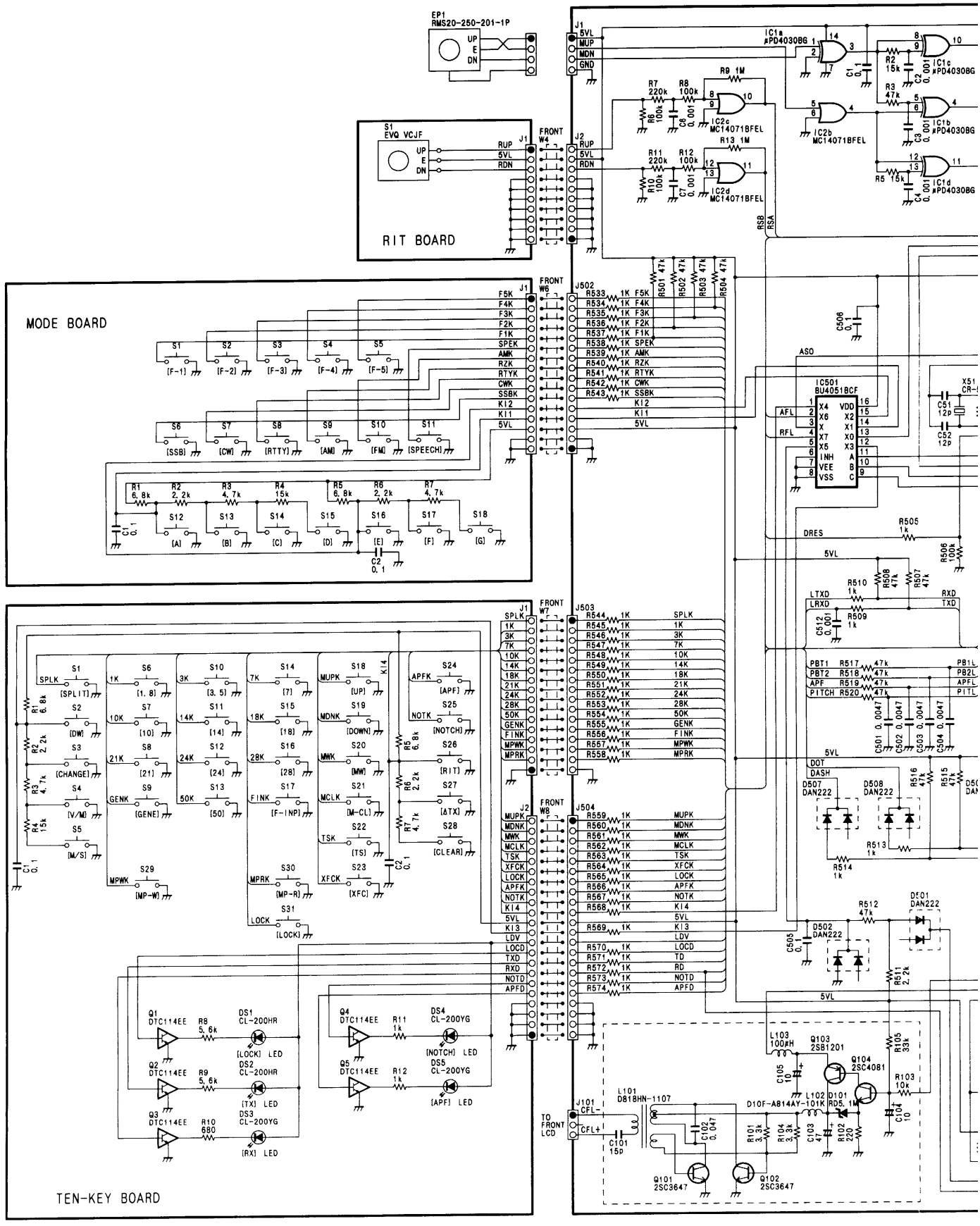

1LOA
J351
P351
TO RF UNIT J201
R826 100
C817 0.0047
R823 1.8k
Q802 2SC4081
C818 0.0047
R827 1k
W7
SLO
J801
P801
TO RF UNIT J901
R824 2.2k
R825 220
3LO
J701
P701
TO MAIN UNIT J52
MKR
J851
P851
TO RF UNIT J6
4LO
J751
P751
TO MAIN UNIT J51
1LOB
J651
P651
TO RF UNIT J101
2LO
J81
P81
TO RF UNIT J301
IC1 BU4094BCF
STR
D
CLK
OE
Q1
Q2
Q3
A4
Q5
Q6
Q7
Q8
QS
QS
PSEL
PDAT
PCK
PENA
C5 0.1
R41 10k
R40 10k
R43 10k
R44 10k
R42 10k
J1
8V
FSKK
5V
5V
UNLC
DRES
CON0
CON1
CON2
FROM MAIN UNIT J755
R1 1k
R2 1k
R3 1k
R4 1k
R5 1k
R8 1k
R9 1k
PSEL
PSTB
GND
GND
GND
R13 47k
R12 47k
R11 47k
R10 47k
C4 10
C3 0.0047
C2 10
C1 0.0047
PLL UNIT


FROM PLL UNIT J651
J101
1 1LOB
2
C1 0.1
IC1
BU4094BCF
STR Q1
D Q2
CLK Q3
OE Q4
Q5
Q6
Q7
Q8
QS
QS
B0S
B1S
B2S
B3S
B4S
B5S
B6S
B7S
FROM PLL UNIT J351
J201
1 1LOA
2
C21 0.1
IC21
BU4094BCF
B8S
B9S
B10S
B10W
AT1S
AT2S
PB1S R34 10k
PB2S R35 10k
L1 100μH
J1
MCK
MDAT
BSTB
GND
AGC
BLBV
BLAV
GND
5V
RANS
GND
SCPL
GND
R8V
8V
T8V
GND
14V
14V
GND
-5V
ALC
FROM MAIN UNIT J754
L80
10μH
C81 10
C82 0.1
C86 0.1
Q22
DTC114EE
Q23
DTC114EE
D21
DAN222
Q62
DTA114EE
Q61
DTC114EE
R84
2.2k
RB1
ERT-D2ZGL251S
RB2
ERT-D2ZGL251S
R83 390
L81 10μH
L82
LS-471A
C81
0.0047
C82
0.0047
FROM PLL UNIT J81
J301
1 2LO
2
R304
470
R302
18
R301
680
R303
270
R305
47
L309
0.1μH
TO MAIN UNIT J53
P301
J302
1 2IF
2
L308
0.68μH
C312
68p
C311
390p
C313
390p
L301
LR-317
C317
68p
F1942
CFJ455K8
R949
220
R947
220
AFOUT
QUAD
IFOUT
RSSI
N DET
N REC
GND
MIXIN
FILIN
FILOUT
DEC
IFIN
VCC
MIXOUT
OSCOUT
OSCIN
FROM PLL UNIT J801
J901
1 SLO
2
C901
0.0047
R901
47
C904
0.1
R903
1k
C903
0.1
SCPL
-5V


IC1 BU4094BCF
IC2 TD62783AF
IC21 BU4094BCF
IC61 TD62783AF
Q22 DTC114EE
Q23 DTC114EE
Q21 DTC114EE
Q24 2SC4081
D21 DAN222
D22 DAN222
POFF
T8V
R8V
RANS
14V2
TX
Q62 DTA114EE
Q81 3SK131
Q101 2SC4673
Q141 2SK1740
Q142 2SC4081
Q201 2SC4673
Q241 2SC4081
Q242 2SK1740
Q301 2SK882
Q381 3SK131
Q382 3SK131
Q943 2SK882
IC901 TA31136FN
IC941 μPC1037GR
IC961a NJM4558M
IC961b NJM4558M
D301 MA862
D302 HSB88WS
D961 DAN222
D962 DAN222
D981 DAN222
F181a FL-120
F181b FL-120
F1942 CFJ455K8
L82 LS-471A
L83 LS-484B
L84 LS-521
L181 LS-309
L201 LR-85A
L262 LS-309
L301 LR-317
L302 LR-317
L303 LS-484B
L307 LS-114
L384 LR-178
L385 LS-309
L386 LR-270
L901 100μH
L921 LS-253
L946 LS-521
L941 LS-484B
L942 LS-484B

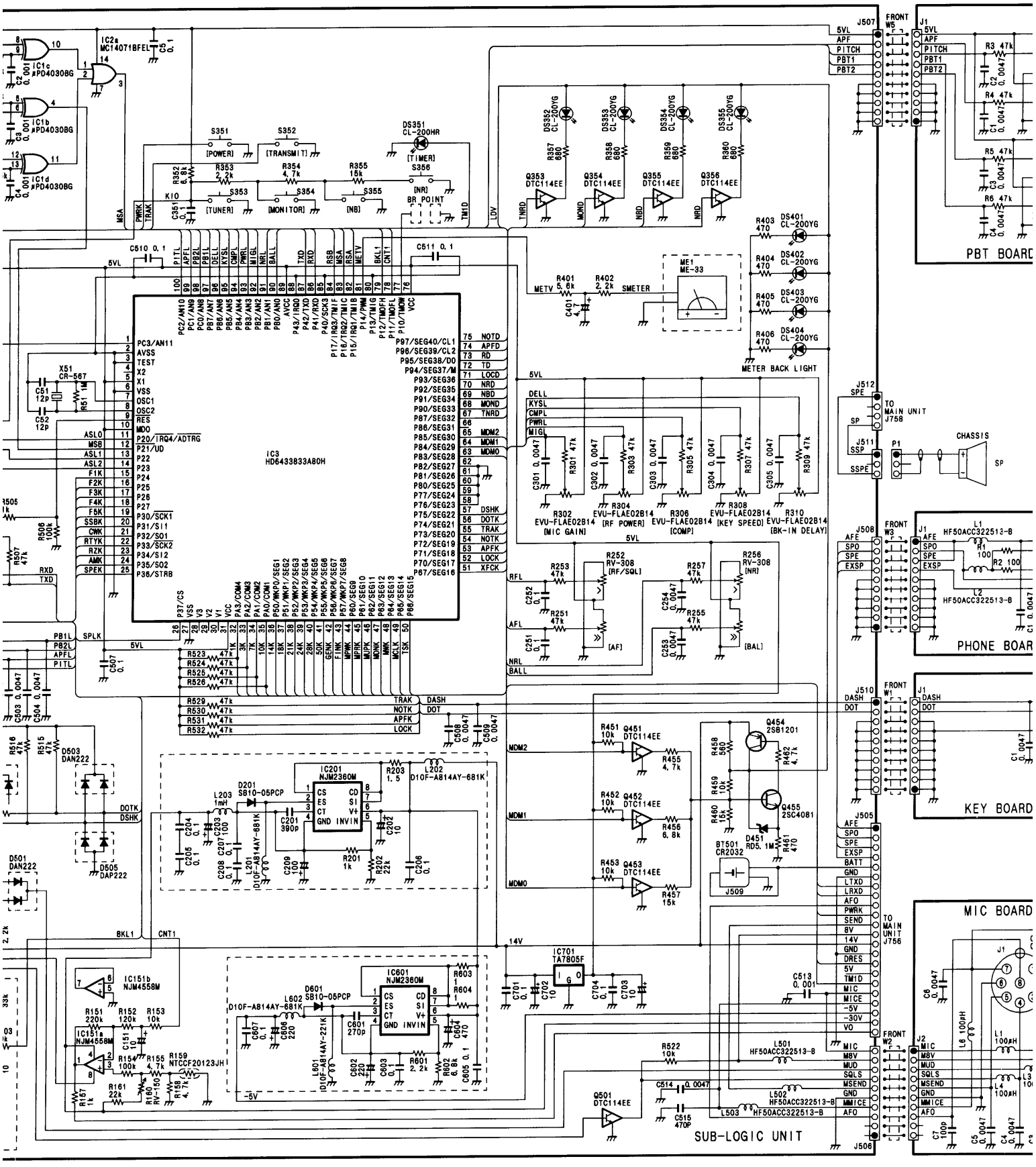

R8V
B0
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
WB10
T8V
ATT1
ATT2
RANS
POFF
PRE1
PRE2
TX
IC371 μPC1658G
GND
SETE
OUT
VCC
BYPS
BYPS
IN
SETC
IC961B NJM4558M


C706 220p
D702 MA77
MKR
J6
FROM PLL UNIT J851
R702 2.2k
R703 47k
R705 4.7k
L705 220nH
L702 470nH
D701 1SV265
C707 0.1
R704 330
C708 0.1
Q702 DTC114EE
C704 0.0027
L703 4.7nH
L704 220nH
RL752 AHY103
R754 150
C752 0.1
R753 68
RL751 AHY103
R752 47
C751 0.1
R751 100
C709 0.1
C741 0.1
C705 0.1
D985 1SS53
D984 1SS53
D983 1SS53
D982 1SS53
L761 220nH
R761 1k
D761 1SV263
R762 220
C761 0.1
R783 10
RL781 AHY103
J781
RFRX
FROM CTRL UNIT J2
D781 DAN222
DS1 HRS-4160A
J782
RANT
[RX ANT]
C781 0.0047
L781 82nH
L782 0.12nH
C782 0.0047
C783 33p
C784 75p
C785 82p
C786 15p
C787 47p
R782 10k
R781 2P-50-WIL301
Q781 DTC114EE
R801 4.7
IC801 μPC1678G
R807 10
5V
R803 2.2k
R804 4.7
C803 0.1
C804 0.0047
L802 22nH
R806 100
L1002 0.12nH
R809 10
J821
PAI
FROM PA UNIT J1
C801 0.1
R802 330
C1001 0.1
C1008 12p
C1007 82p
C1009 82p
R808 470
R810 470
C602 100p
C604 180p
L603 0.27nH
L604 0.33nH
L601 0.39nH
L602 0.33nH
C606 27p
C608 8p
L605 100nH
D602 1SV265
C603 0.0012
C605 100p
C607 180p
C609 0.1
R601 100
C627 47p
C629 56p
L623 0.15nH
L624 0.15nH
L622 0.15nH
L625 0.15nH
C623 18p
C625 30p
L626 10nH
C628 270p
C622 68p
C624 82p
C626 68p
C630 0.0047
R621 100
C642 82p
C644 82p
L643 0.15nH
D642 1SV263
W261
L642 0.33nH
C646 18p
L645 10nH
C643 560p
C645 68p
C647 68p
R641 100
RF UNIT

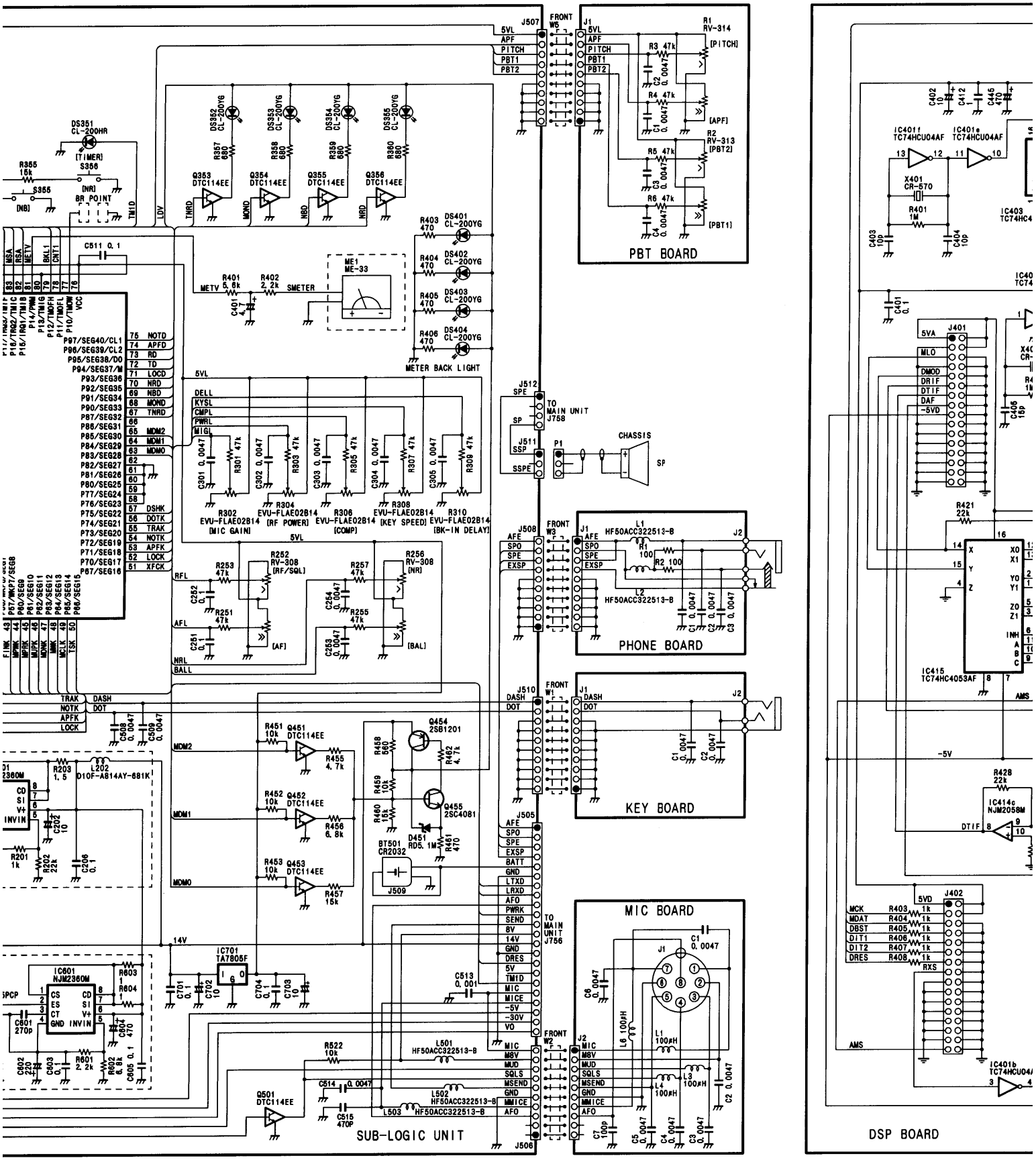

RIT BOARD
MODE BOARD
TEN-KEY BOARD
EP1 RMS20-250-201-1P
S1 EVQ VCJF
IC1a μPD4030BG
IC1b μPD4030BG
IC1c μPD4030BG
IC1d μPD4030BG
IC2a MC14071BFEL
IC2b MC14071BFEL
IC2c MC14071BFEL
IC2d MC14071BFEL
IC501 BU4051BCF
J1
J2
J101
J502
J503
J504
FRONT W4
FRONT W6
FRONT W7
FRONT W8
TO FRONT LCD
[F-1]
[F-2]
[F-3]
[F-4]
[F-5]
[SSB]
[CW]
[RTTY]
[AM]
[FM]
[SPEECH]
[A]
[B]
[C]
[D]
[E]
[F]
[G]
[SPLIT]
[DW]
[CHANGE]
[V/M]
[M/S]
[1. 8]
[3. 5]
[7]
[10]
[14]
[18]
[21]
[24]
[28]
[50]
[GENE]
[F-INP]
[MP-W]
[MP-R]
[LOCK]
[UP]
[DOWN]
[MW]
[M-CL]
[TS]
[XFC]
[APF]
[NOTCH]
[RIT]
[ΔTX]
[CLEAR]
[LOCK] LED
[TX] LED
[RX] LED
[NOTCH] LED
[APF] LED
DS1 CL-200HR
DS2 CL-200HR
DS3 CL-200YG
DS4 CL-200YG
DS5 CL-200YG
Q1 DTC114EE
Q2 DTC114EE
Q3 DTC114EE
Q4 DTC114EE
Q5 DTC114EE
Q101 2SC3647
Q102 2SC3647
Q103 2SB1201
Q104 2SC4081
D101 D10F-A814AY-101K
L101 D818HN-1107
L102
L103 100μH
D501 DAN222
D502 DAN222
D507 DAN222
D508 DAN222
5VL
GND
RUP
RDN
MUP
MDN
RIT 1M
ASO
AFL
RFL
DRES
LTXD
LRXD
RXD
TXD
DOT
DASH
PBT1
PBT2
APF
PITCH
CFL+
CFL-

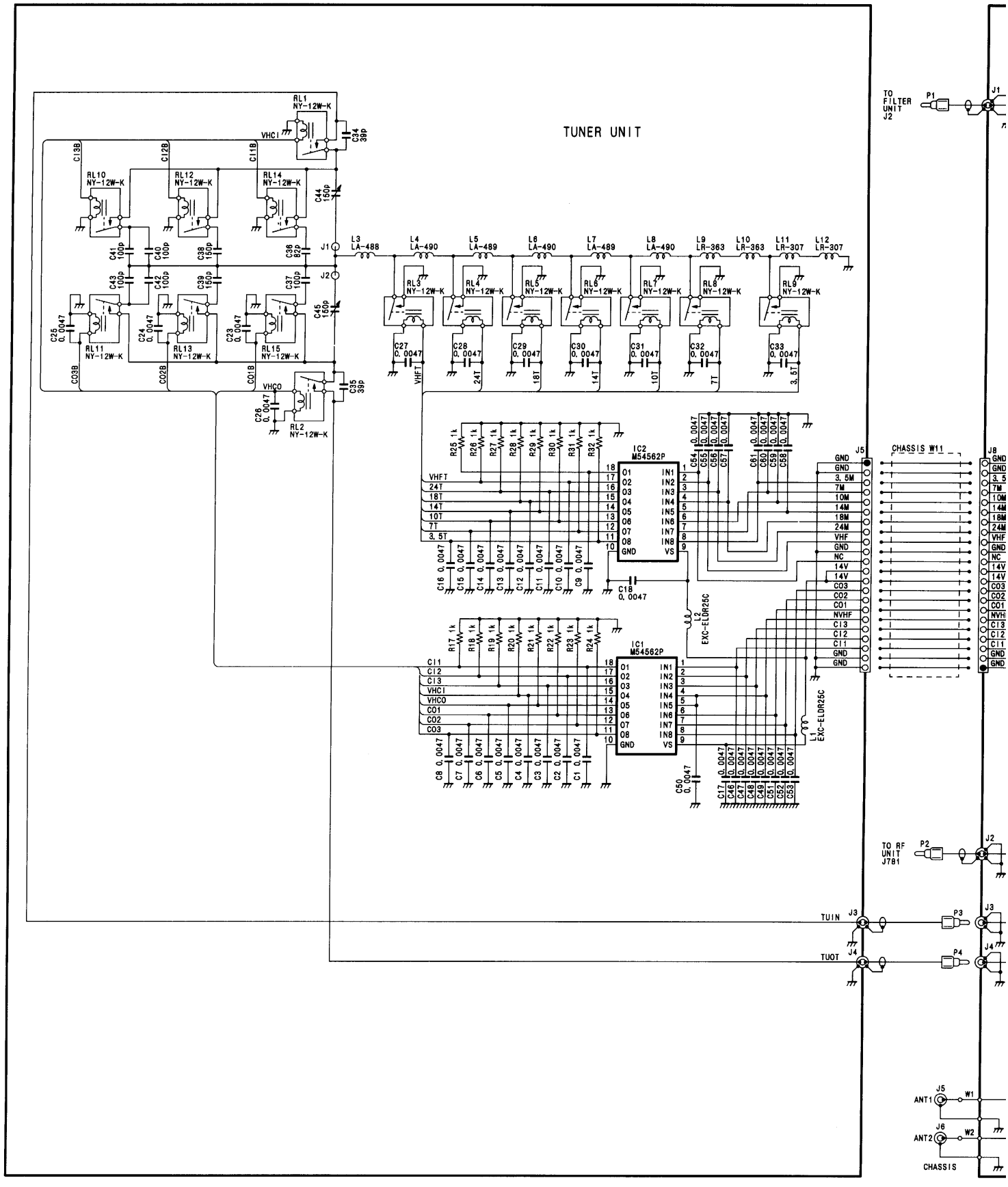
# IC-756S

## SCHEMATIC DIAGRAM



# CHEMATIC DIAGRAM




TUNER UNIT
TO FILTER UNIT J2
P1
J1
RL1 NY-12W-K
VHC1
C34 39p
C13B
C12B
C11B
RL10 NY-12W-K
RL12 NY-12W-K
RL14 NY-12W-K
C44 150p
C41 100p
C40 100p
C38 82p
C43 100p
C42 100p
C39 150p
C37 100p
C45 150p
C25 0.0047
C24 0.0047
C23 0.0047
RL11 NY-12W-K
RL13 NY-12W-K
RL15 NY-12W-K
C03B
C02B
C01B
VHC0
C26 0.0047
C35 39p
RL2 NY-12W-K
J1
J2
L3 LA-488
L4 LA-490
L5 LA-489
L6 LA-490
L7 LA-489
L8 LA-490
L9 LR-363
L10 LR-363
L11 LR-307
L12 LR-307
RL3 NY-12W-K
RL4 NY-12W-K
RL5 NY-12W-K
RL6 NY-12W-K
RL7 NY-12W-K
RL8 NY-12W-K
RL9 NY-12W-K
C27 0.0047
C28 0.0047
C29 0.0047
C30 0.0047
C31 0.0047
C32 0.0047
C33 0.0047
VHFT
24T
18T
14T
10T
7T
3.5T
R25 1k
R26 1k
R27 1k
R28 1k
R29 1k
R30 1k
R31 1k
R32 1k
IC2 M54562P
O1 O2 O3 O4 O5 O6 O7 O8 GND
IN1 IN2 IN3 IN4 IN5 IN6 IN7 IN8 VS
C16 0.0047
C15 0.0047
C14 0.0047
C13 0.0047
C12 0.0047
C11 0.0047
C10 0.0047
C9 0.0047
C18 0.0047
C54 0.0047
C55 0.0047
C56 0.0047
C57 0.0047
C61 0.0047
C60 0.0047
C59 0.0047
C58 0.0047
J5
CHASSIS W11
J8
GND
GND
3.5M
7M
10M
14M
18M
24M
VHF
GND
NC
14V
14V
C03
C02
C01
NVHF
C13
C12
C11
GND
GND
L2 EXC-ELDR25C
L1 EXC-ELDR25C
R17 1k
R18 1k
R19 1k
R20 1k
R21 1k
R22 1k
R23 1k
R24 1k
IC1 M54562P
C11
C12
C13
VHC1
VHC0
C01
C02
C03
C8 0.0047
C7 0.0047
C6 0.0047
C5 0.0047
C4 0.0047
C3 0.0047
C2 0.0047
C1 0.0047
C50 0.0047
C17 0.0047
C46 0.0047
C47 0.0047
C48 0.0047
C49 0.0047
C51 0.0047
C52 0.0047
C53 0.0047
TO RF UNIT J781
P2
J2
TUIN
J3
P3
J3
TUOT
J4
P4
J4
J5
ANT1
W1
J6
ANT2
W2
CHASSIS