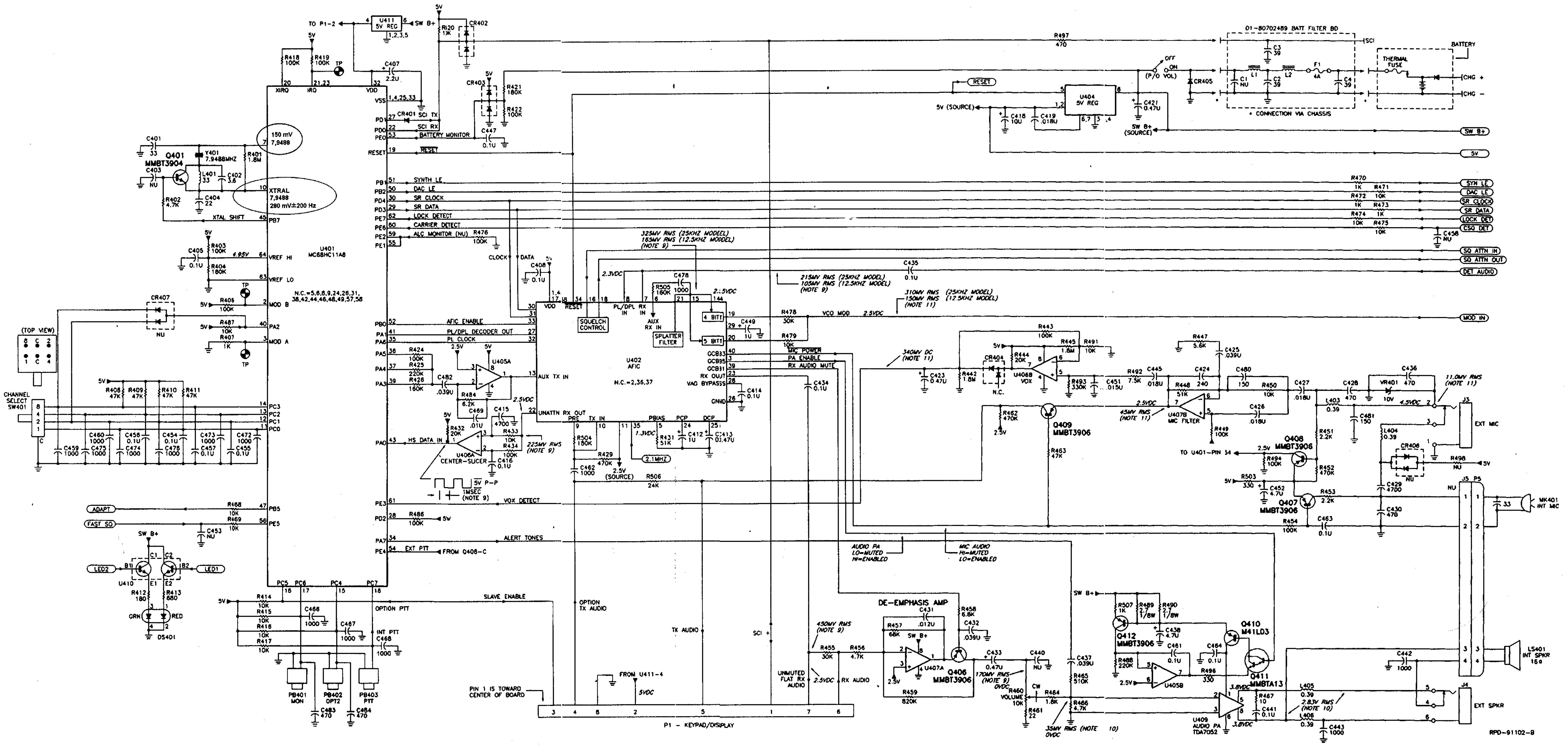
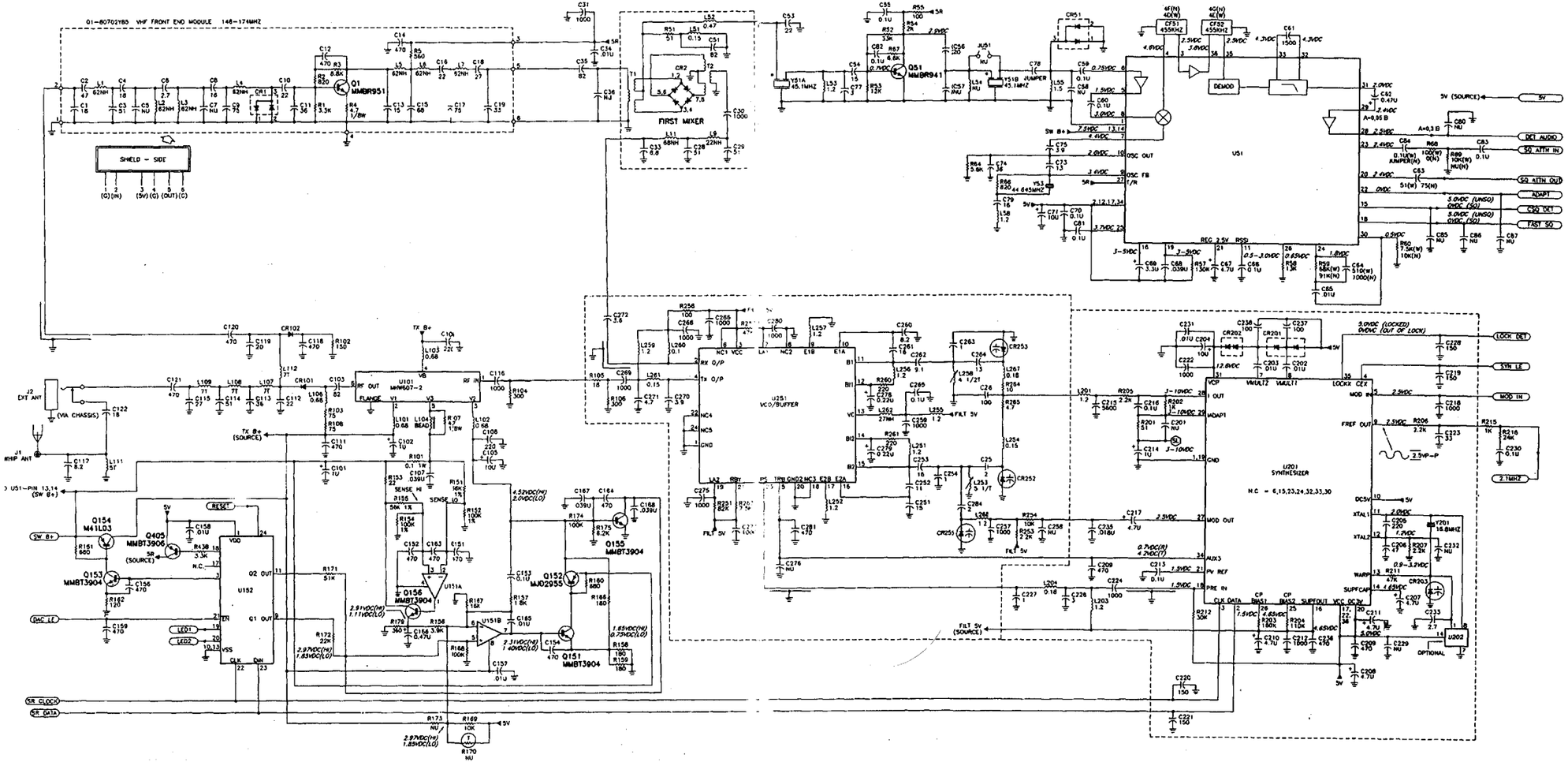


TO P1-2
U411 5V REG
SW B+
CR402
R497 470
01-80702489 BATT FILTER BD
SCI
BATTERY
THERMAL FUSE
CHG +
CHG -
* CONNECTION VIA CHASSIS
OFF ON (P/O VOL)
CR405
U404 5V REG
RESET
5V (SOURCE)
SW B+ (SOURCE)
SW B+
5V
R418 100K
R419 100K
TP
C407 2.2U
XIRQ
IRQ
VDD
VSS
CR401 SCI TX
SCI RX
BATTERY MONITOR
CR403
R421 180K
R422 100K
C447 0.1U
150 mV 7.9488
Y401 7.9488MHZ
R401 1.8M
Q401 MMBT3904
XTRAL 7.9488 280 mV±200 Hz
XTAL SHIFT
U401 MC68HC11A8
VREF HI
VREF LO
MOD B
PA2
MOD A
N.C.=5,6,8,9,24,26,31, 38,42,44,46,48,49,57,58
SYNTH LE
DAC LE
SR CLOCK
SR DATA
LOCK DETECT
CARRIER DETECT
ALC MONITOR (NU)
SYN LE
DAC LE
SR CLOCK
SR DATA
LOCK DET
CSQ DET
SQ ATTN IN
SQ ATTN OUT
DET AUDIO
MOD IN
325MV RMS (25KHZ MODEL)
165MV RMS (12.5KHZ MODEL)
(NOTE 9)
215MV RMS (25KHZ MODEL)
105MV RMS (12.5KHZ MODEL)
310MV RMS (25KHZ MODEL)
150MV RMS (12.5KHZ MODEL)
(NOTE 11)
VCO MOD
SQUELCH CONTROL
PL/DPL IN
RX IN
AUX RX IN
SPLATTER FILTER
4 BIT
5 BIT
U402 AFIC
N.C.=2,36,37
MIC POWER
PA ENABLE
RX AUDIO MUTE
RX OUT
VAG BYPASS
GND
AFIC ENABLE
PL/DPL DECODER OUT
PL CLOCK
AUX TX IN
UNATTN RX OUT
PRE
TX IN
PBIAS
PCP
DCP
U405A
U406A CENTER-SLICER
HS DATA IN
225MV RMS (NOTE 9)
1MSEC
5V P-P
(NOTE 9)
2.1MHZ
2.5V (SOURCE)
R506 24K
VOX DETECT
ALERT TONES
EXT PTT
FROM Q408-C
(TOP VIEW)
CHANNEL SELECT SW401
ADAPT
FAST SQ
LED2
LED1
U410
GRN
RED
DS401
SLAVE ENABLE
OPTION PTT
INT PTT
PB401 MON
PB402 OPT2
PB403 PTT
OPTION TX AUDIO
TX AUDIO
SCI
FROM U411-4
5VDC
PIN 1 IS TOWARD CENTER OF BOARD
P1 - KEYPAD/DISPLAY
UNMUTED FLAT RX AUDIO
RX AUDIO
450MV RMS (NOTE 9)
DE-EMPHASIS AMP
U407A
Q406 MMBT3906
170MV RMS (NOTE 9)
VOLUME
CW
35MV RMS (NOTE 10)
AUDIO PA LO=MUTED HI=ENABLED
MIC AUDIO HI=MUTED LO=ENABLED
340MV DC (NOTE 11)
CR404
U406B VOX
U407B MIC FILTER
Q409 MMBT3906
TO U401-PIN 54
Q408 MMBT3906
Q407 MMBT3906
11.0MV RMS (NOTE 11)
45MV RMS (NOTE 11)
J3
EXT MIC
CR406
J5 P5
MK401 INT MIC
Q412 MMBT3906
Q410 M41LD3
Q411 MMBTA13
U405B
U409 AUDIO PA TDA7052
2.83V RMS (NOTE 10)
LS401 INT SPKR 16Ω
J4
EXT SPKR
RPD-91102-B



NOTES:

1. UNLESS OTHERWISE INDICATED, RESISTOR VALUES ARE IN OHMS, CAPACITOR VALUES ARE IN PICOFARADS, INDUCTOR VALUES ARE IN MICROHENRIES.
2. NON-POLARIZED CAPACITORS ARE CHIP-TYPE UNLESS OTHERWISE INDICATED.
3. POLARIZED CAPACITORS ARE CHIP-TANTALUM TYPE UNLESS OTHERWISE INDICATED.
4. "NU" MEANS COMPONENT IS NOT USED.
5. DC VOLTAGES ARE MEASURED WITH A HIGH IMPEDANCE (10 MEGOHM) DC VOLTMETER.
6. AC VOLTAGES ARE MEASURED WITH A HIGH IMPEDANCE AC RMS VOLTMETER.
7. ALL VOLTAGE MEASUREMENTS ARE IN THE RECEIVE MODE UNLESS INDICATED AS FOLLOWS:

   (R) RECEIVE MODE
   (T) TRANSMIT MODE

8. MEASURED IN THE RECEIVE MODE WITH AN ON-CHANNEL UNMODULATED SIGNAL AT A LEVEL OF -20 DBM.
9. MEASURED IN THE RECEIVE MODE WITH AN ON-CHANNEL SIGNAL AT A LEVEL OF -20 DBM, MODULATED WITH 1 KHZ AT 3 KHZ DEVIATION (FOR 20/25 KHZ MODELS) OR 1.5 KHZ DEVIATION (FOR 12.5 KHZ MODELS), MEASURED WITH AN AC RMS VOLTMETER.
10. SAME AS NOTE 8 EXCEPT WITH VOLUME CONTROL ADJUSTED FOR 500 MILLIWATTS (2.82 VOLTS RMS ACROSS 16-OHM LOAD CONNECTED TO THE EXT SPKR JACK).
11. MEASURED IN THE TRANSMIT MODE WITH A 1 KHZ, 11 MV RMS SIGNAL APPLIED TO THE EXTERNAL MICROPHONE INPUT.