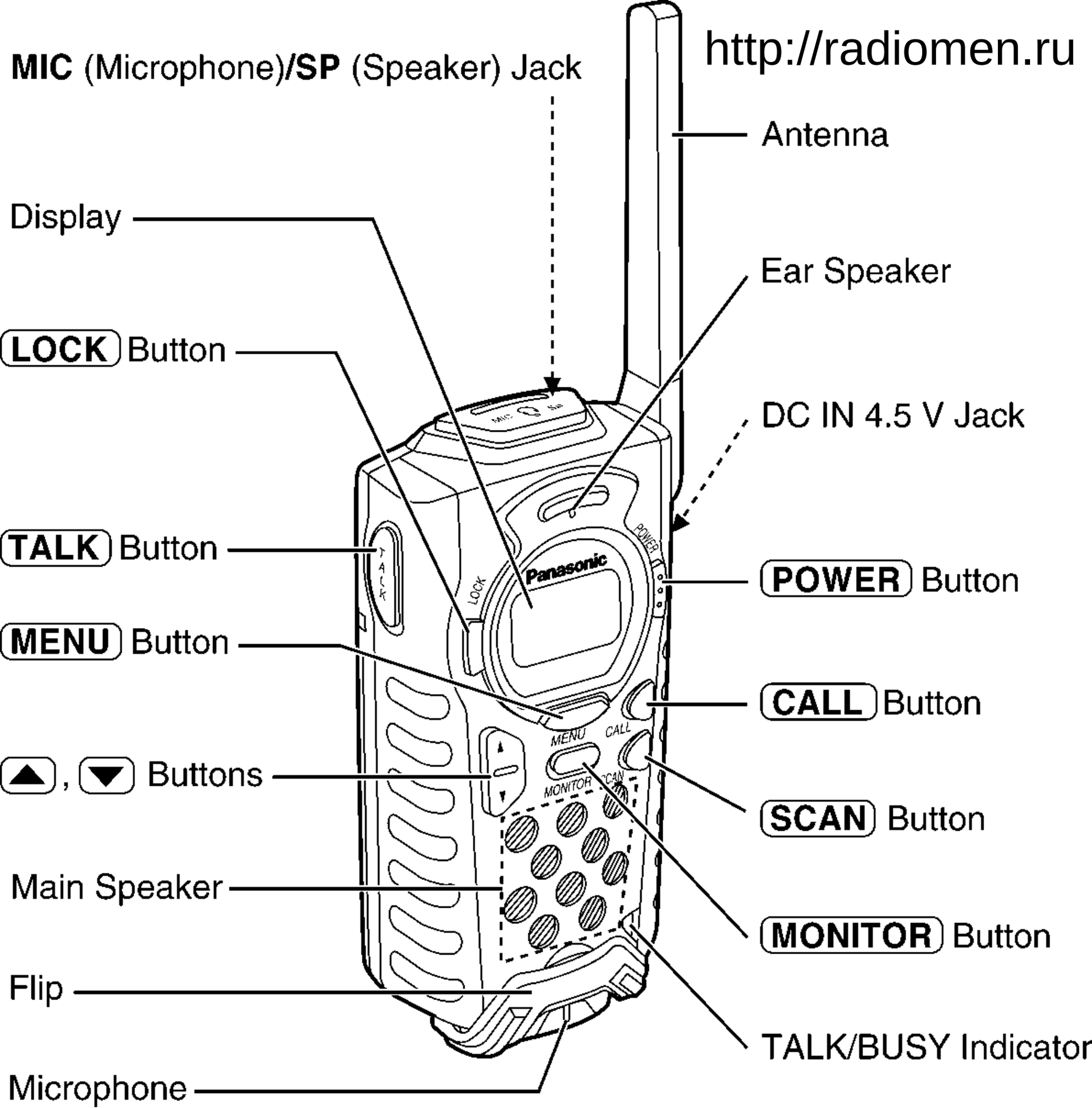
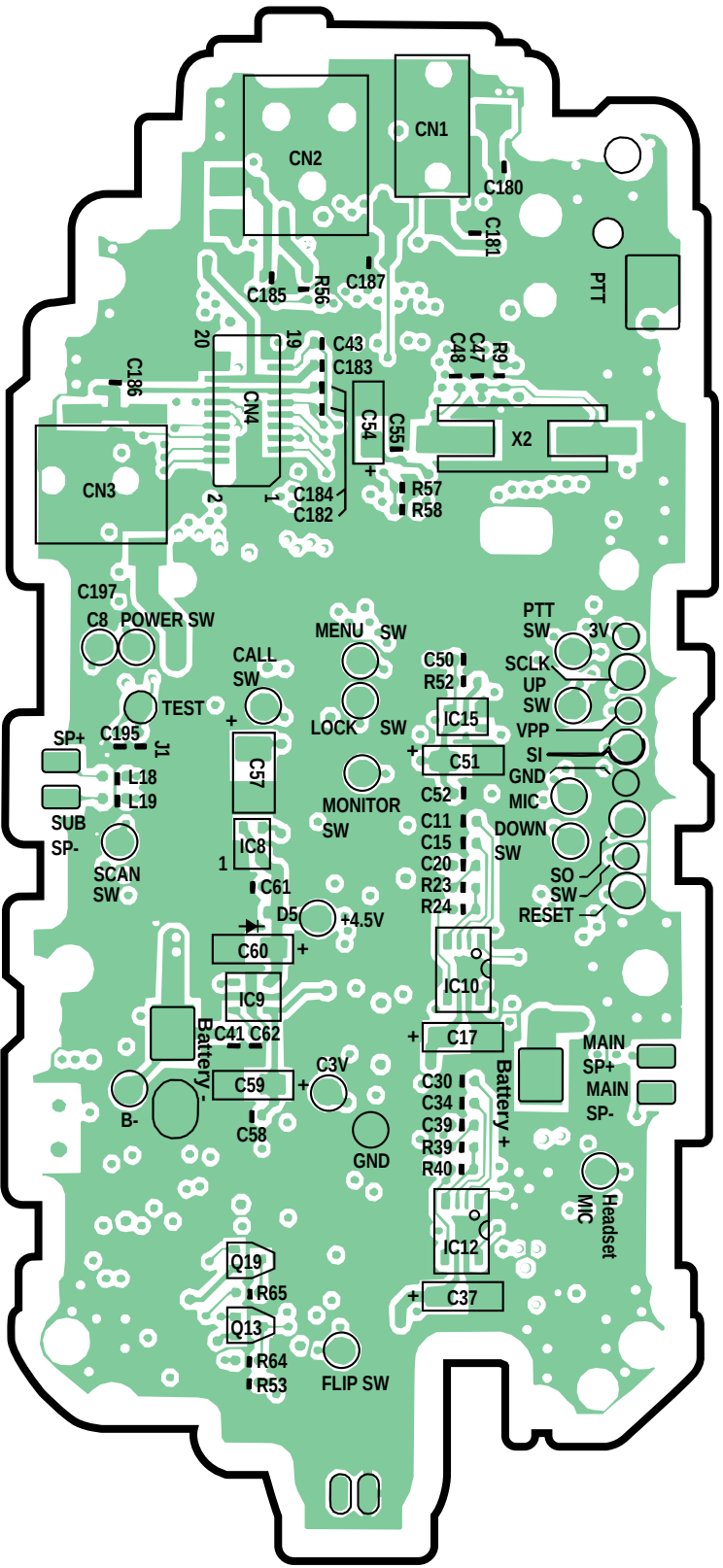
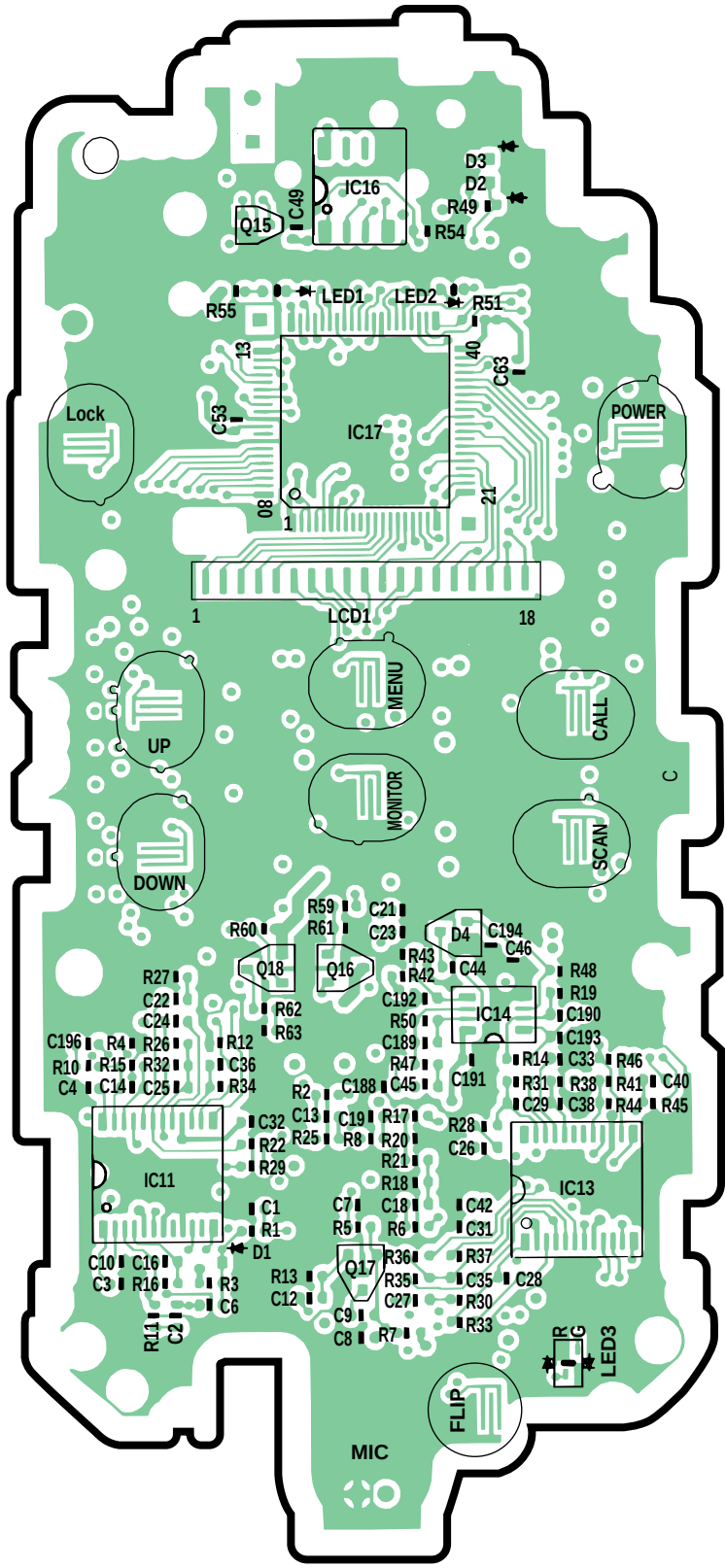
http://radiomen.ru

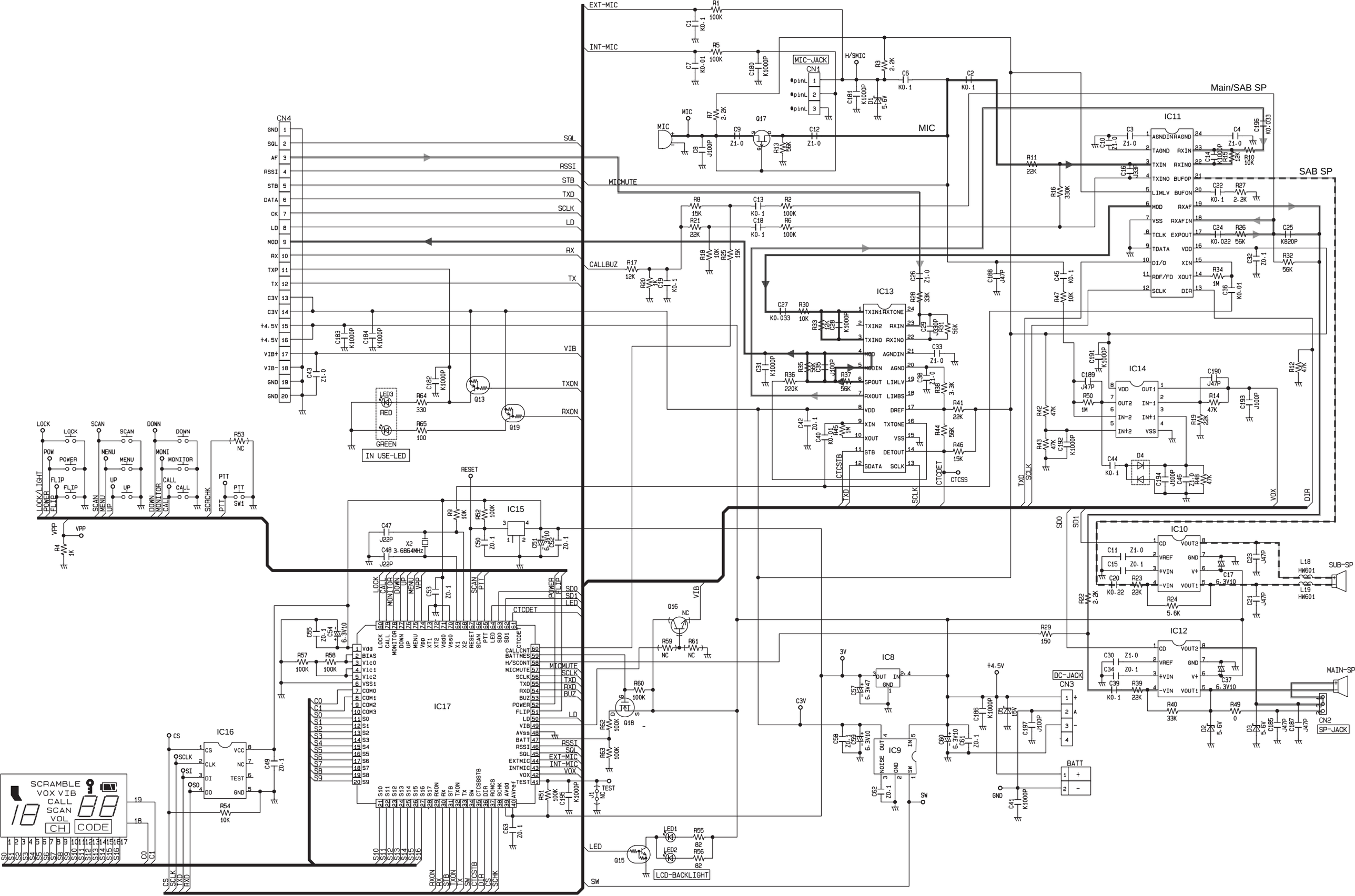


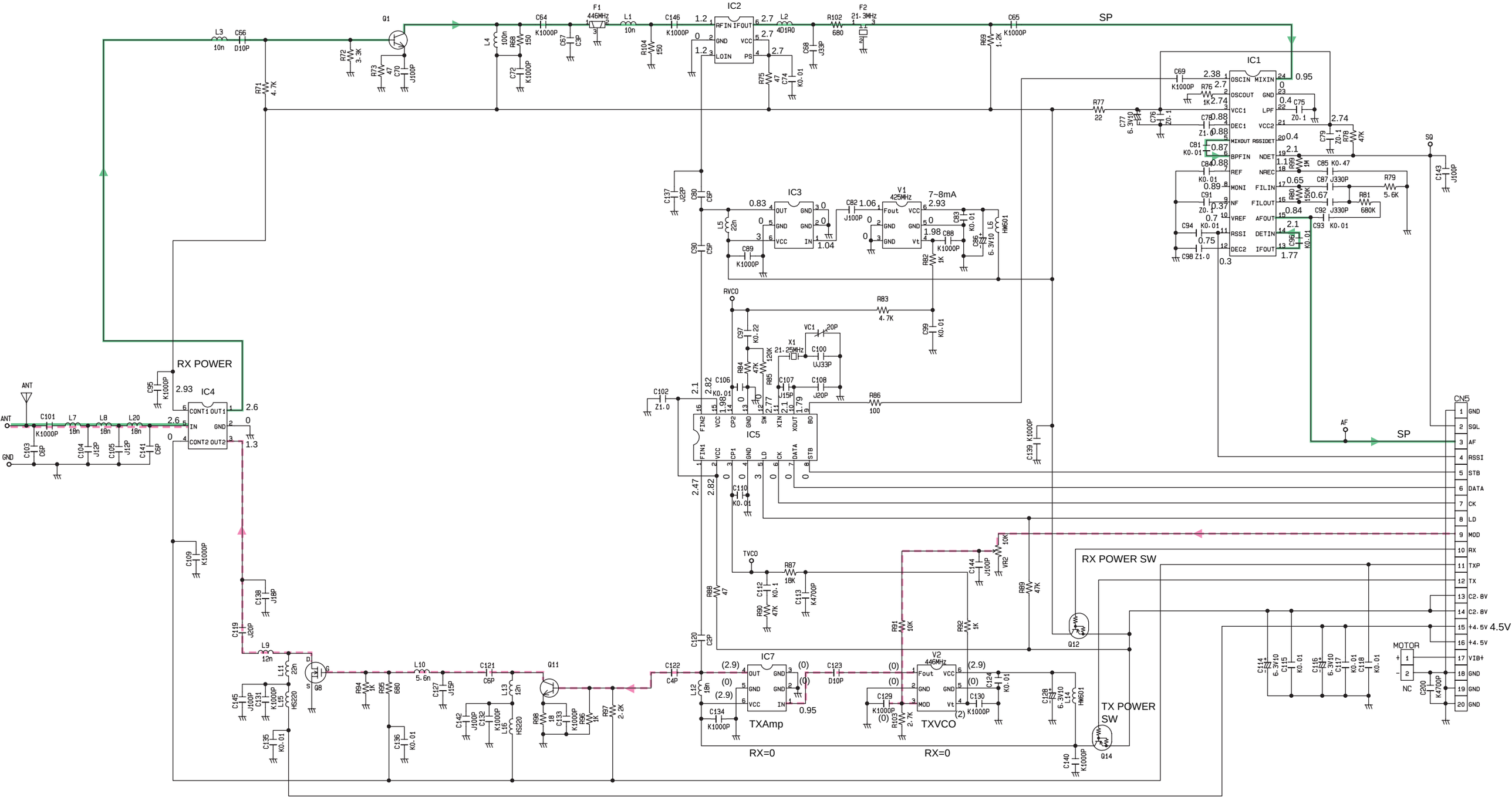
(Component View)



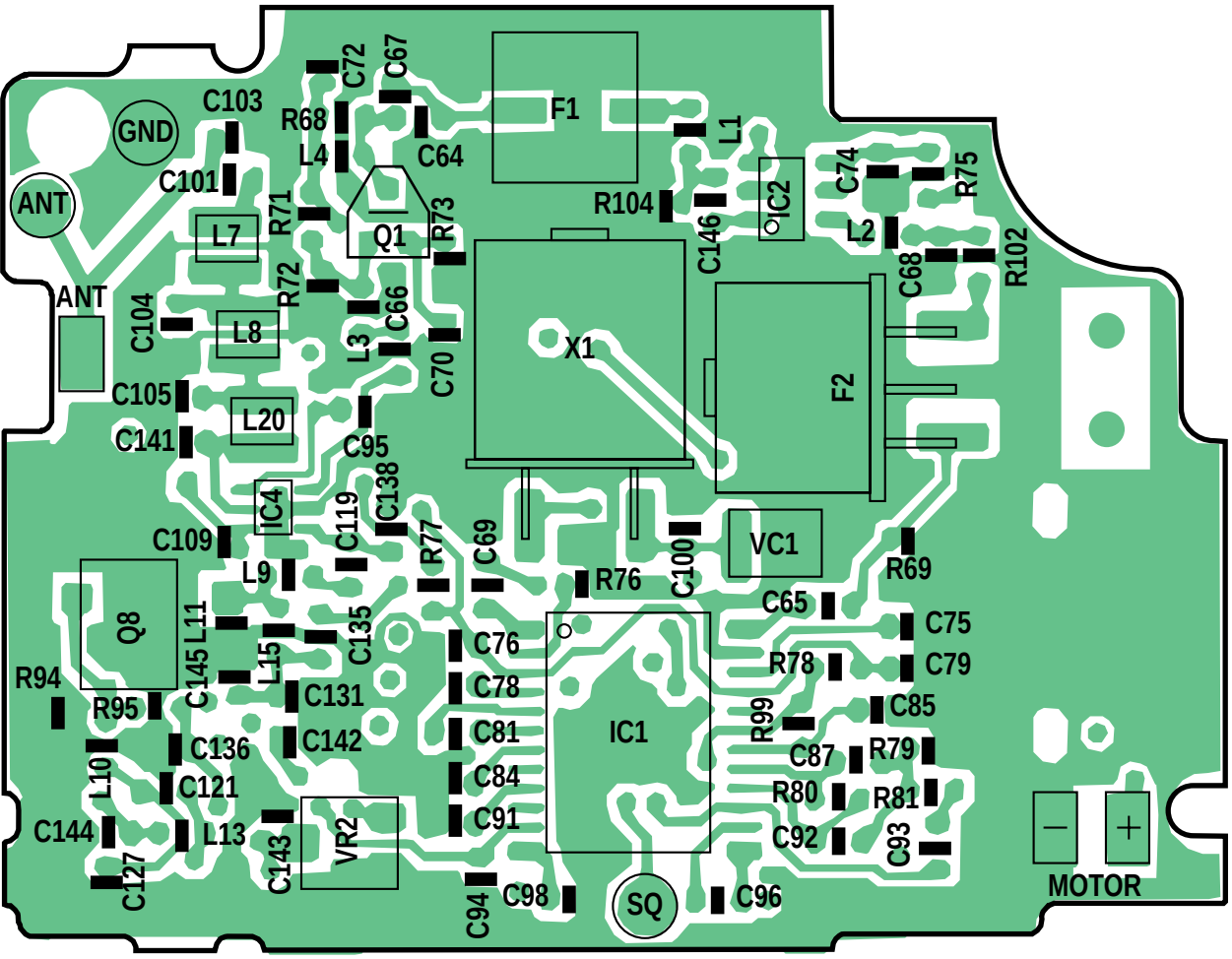
(Flow Solder Side View)



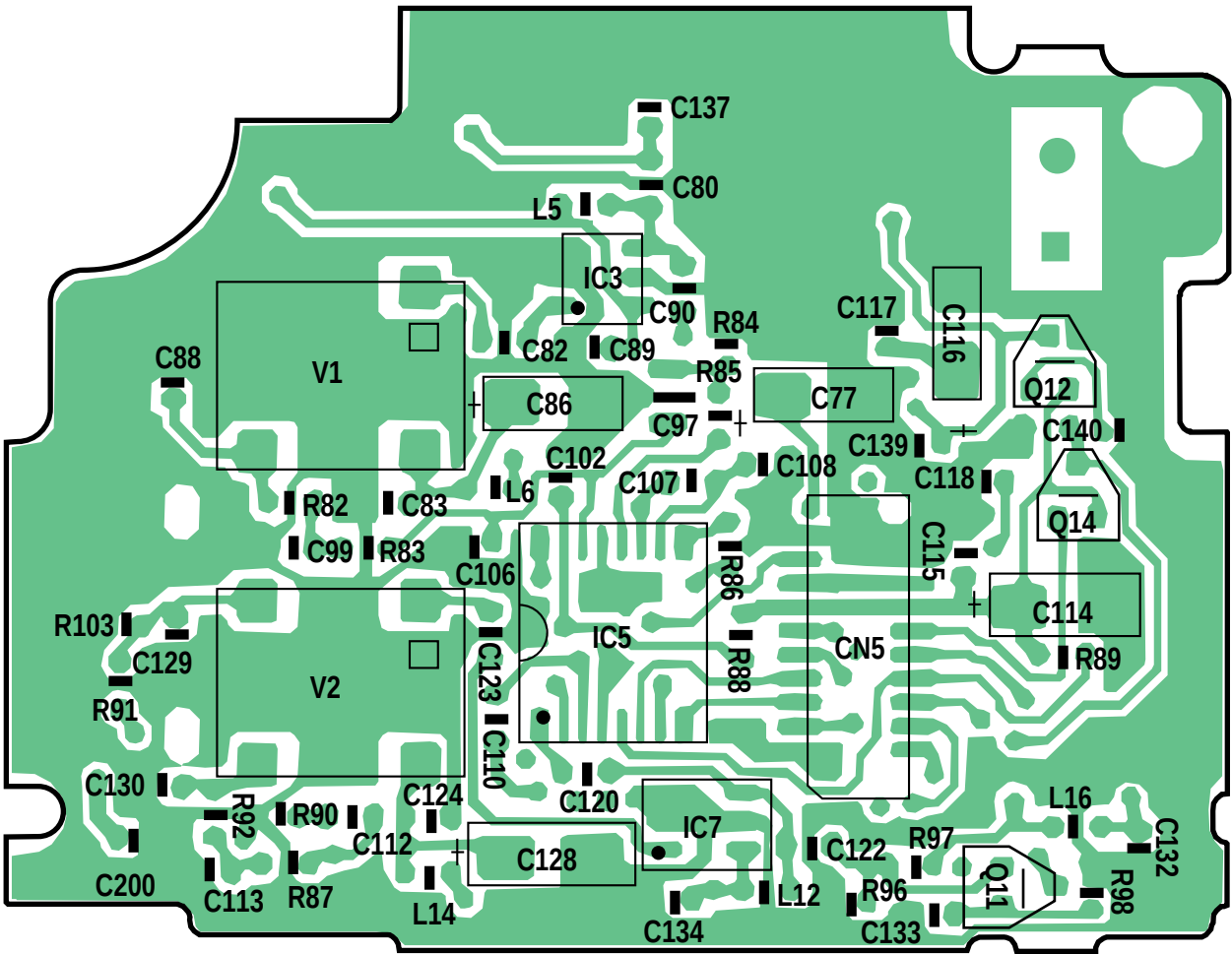

EXT-MIC
INT-MIC
MIC-JACK
CN1
H/SMIC
MIC
Main/SAB SP
SAB SP
IC11
SQL
RSSI
STB
TXD
SCLK
LD
RX
TX
VIB
TXON
RXON
CALLBUZ
MICMUTE
CN4
IC13
IC14
IC8
IC9
IC10
IC12
IC15
IC16
IC17
IC18
Q13
Q17
Q18
Q19
LED3
RED
GREEN
IN USE-LED
DC-JACK
BATT
SUB-SP
MAIN-SP
SP-JACK
LCD-BACKLIGHT
SCRAMBLE
VOX VIB
CALL
SCAN
VOL
CH
CODE

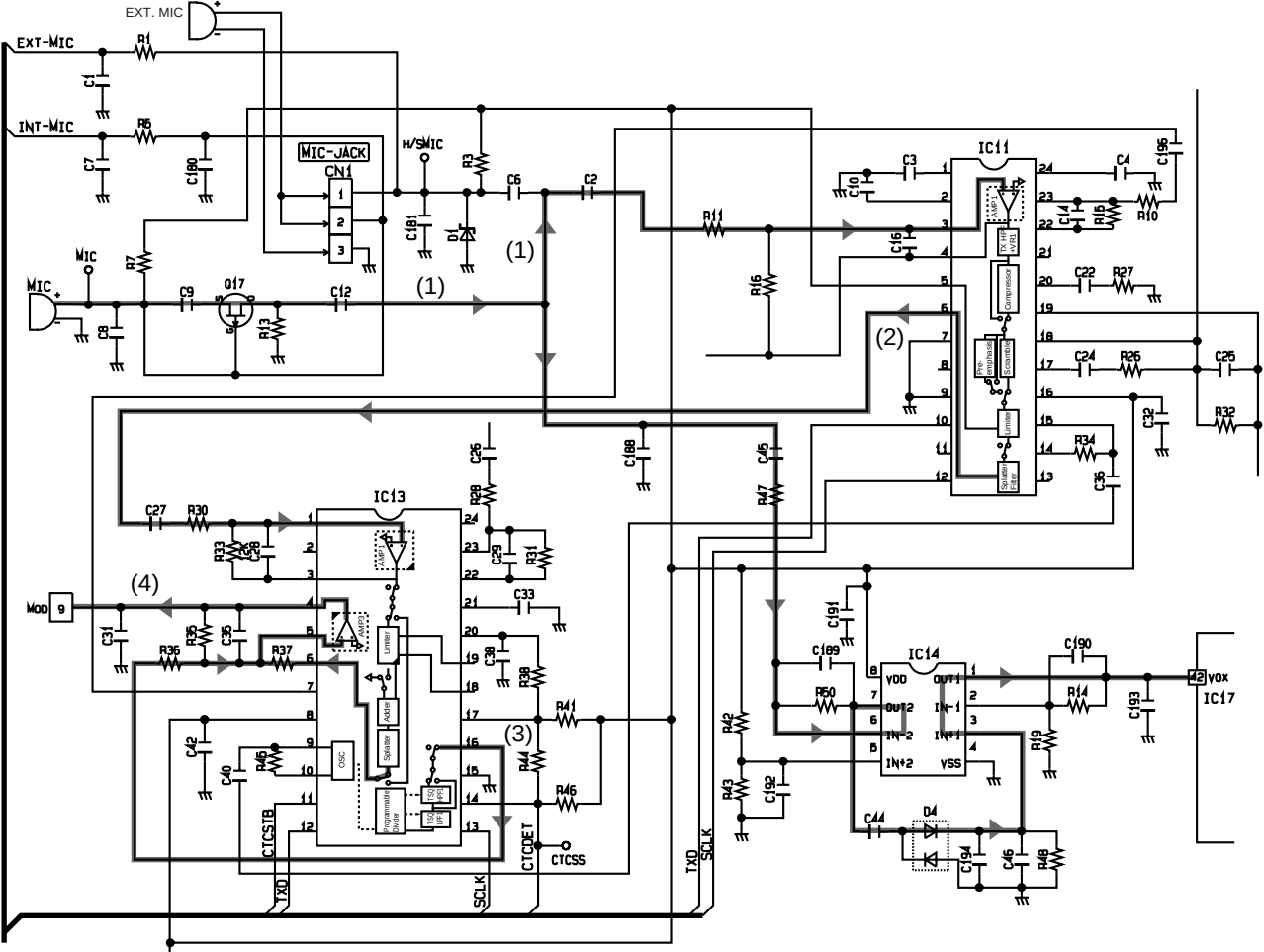

RX POWER
TXAmp
TXVCO
RX=0
RX=0
RX POWER SW
TX POWER SW
SP
SP
AF
SQ
4.5V
MOTOR
NC
IC1
IC2
IC3
IC4
IC5
IC7
V1
V2
Q1
Q8
Q11
Q12
Q14
CN5
ANT
GND
RVCO
TVCO

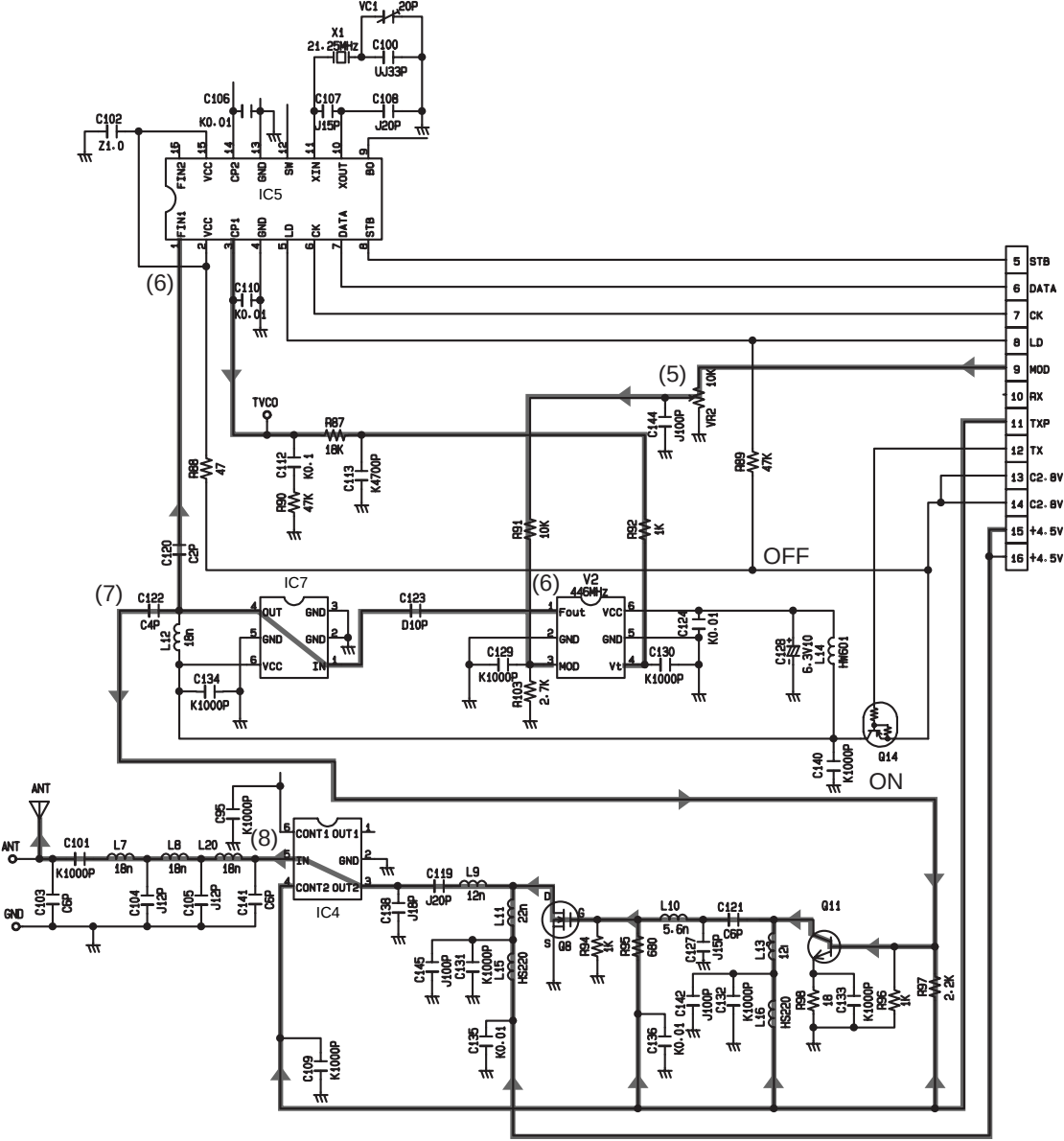
(Component View)

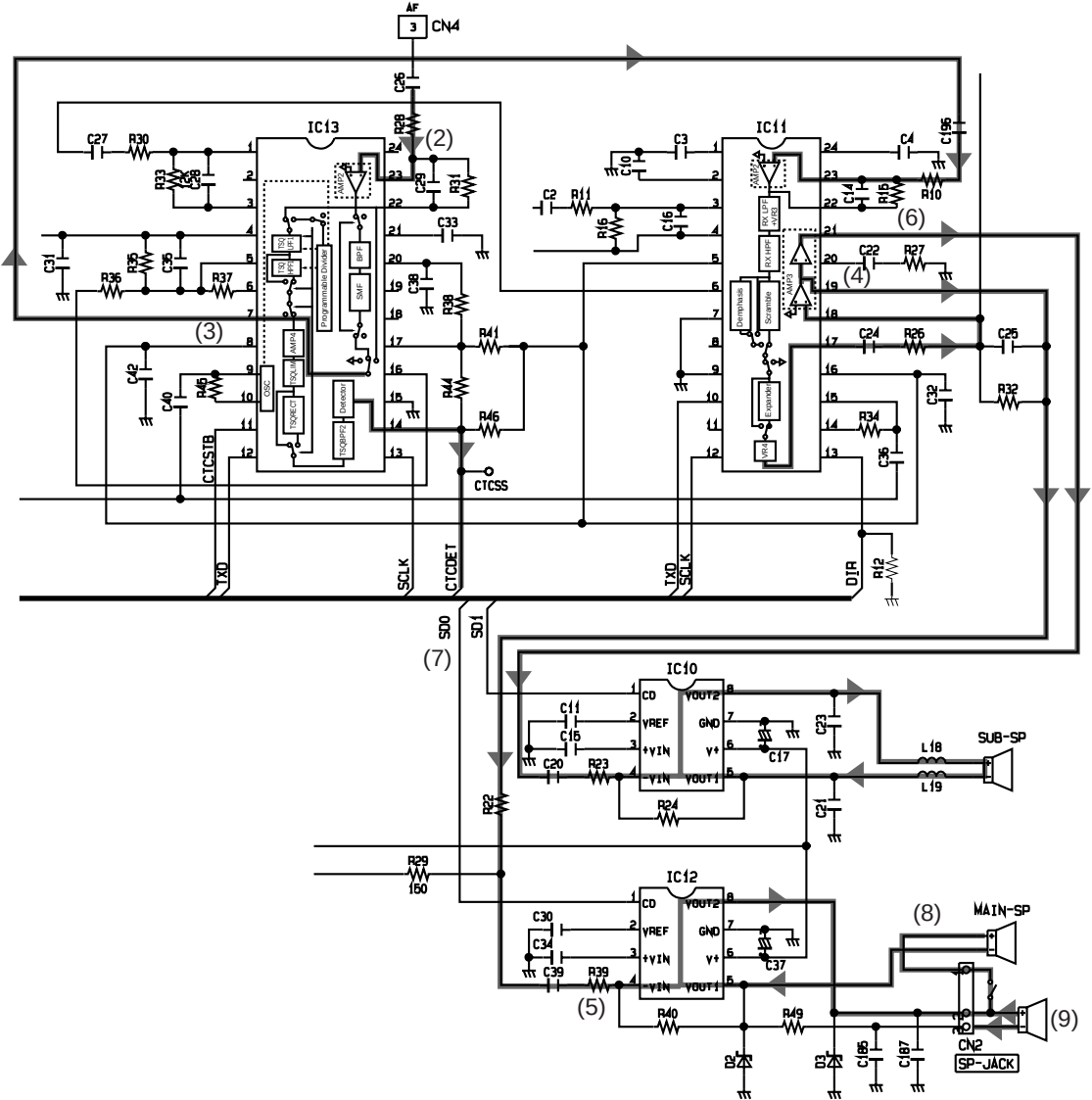


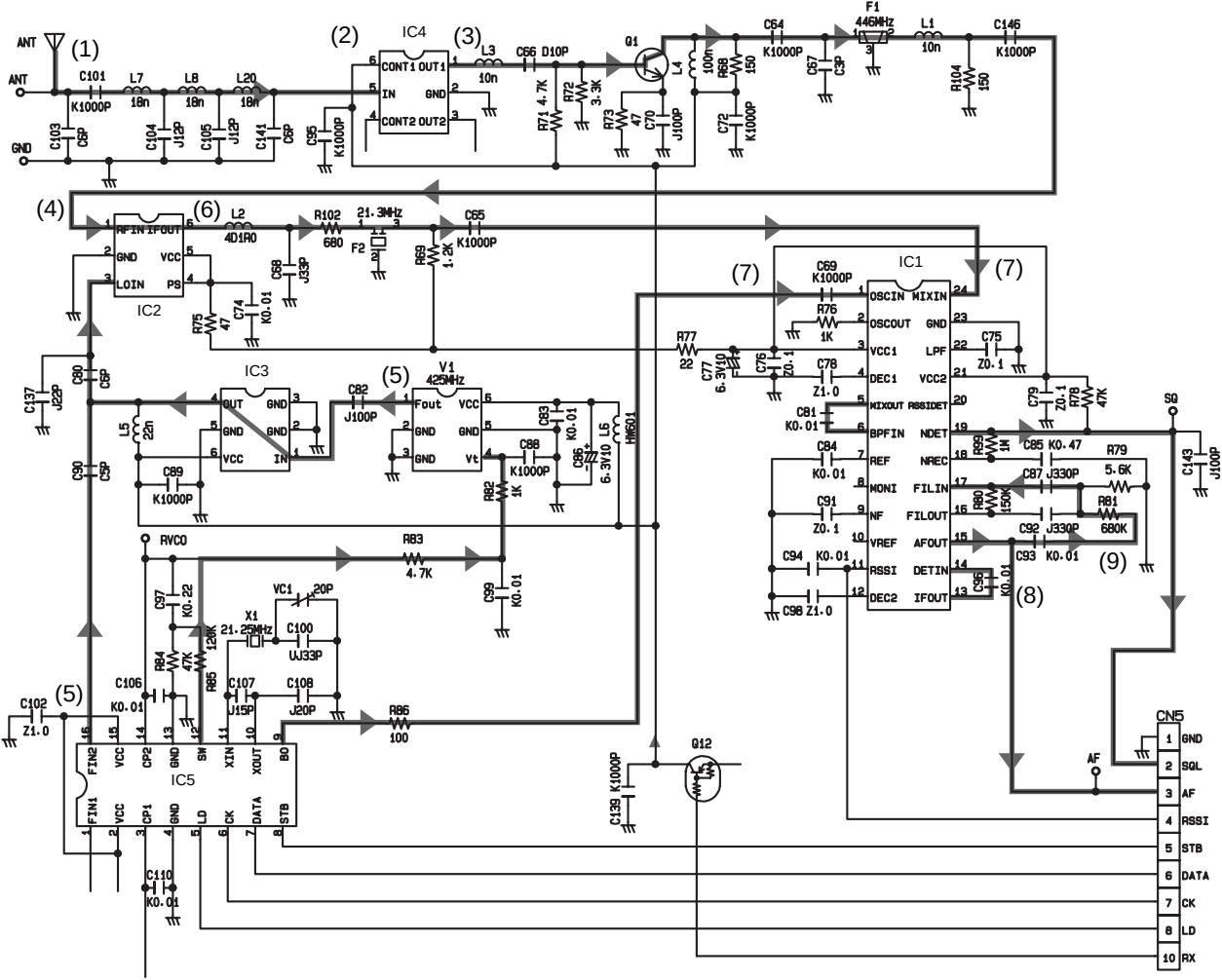
(Flow Solder Side View)

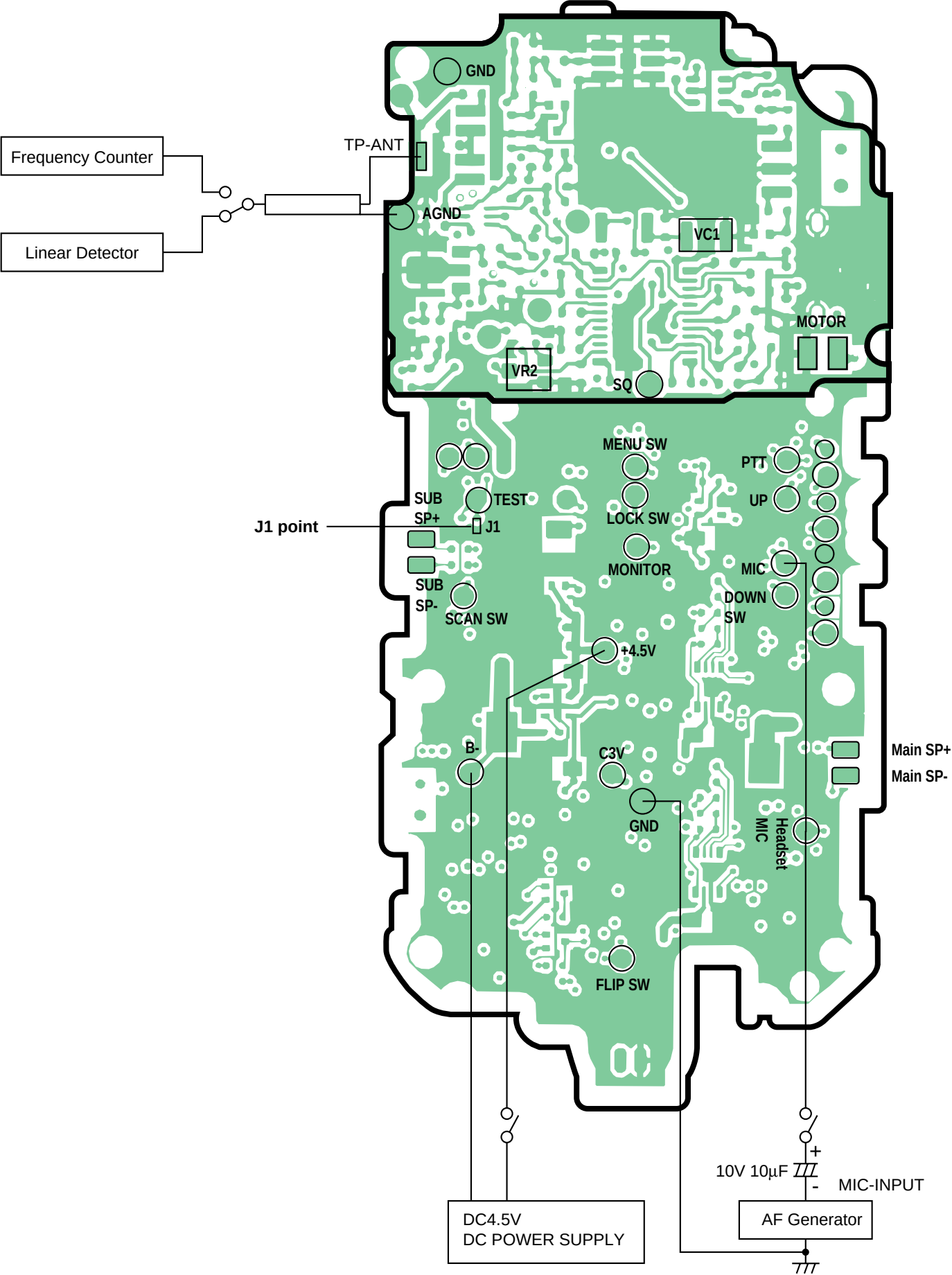



EXT. MIC
EXT-MIC
INT-MIC
MIC-JACK
CN1
H/SMIC
MIC
Q17
IC11
IC13
IC14
IC17
MOD
VOX
CTCSTB
TXD
SCLK
CTCDET
CTCSS
Limiter
Splatter
Programmable Divider
Compressor
Pre-emphasis
Deemphasis
Splatter Filter
VOX
(1)
(2)
(3)
(4)


VC1
20P
X1
21.25MHz
C100
UJ33P
C106
K0.01
C107
J15P
C108
J20P
C102
Z1.0
IC5
FIN2
VCC
CP2
GND
SW
XIN
XOUT
BO
FIN1
VCC
CP1
GND
LD
CK
DATA
STB
(6)
C110
K0.01
TVCO
R87
18K
C112
K0.1
C113
K4700P
R88
47
R90
47K
C120
C2P
R91
10K
R92
1K
(5)
C144
J100P
VR2
10K
R89
47K
OFF
ON
5 STB
6 DATA
7 CK
8 LD
9 MOD
10 RX
11 TXP
12 TX
13 C2.8V
14 C2.8V
15 +4.5V
16 +4.5V
(7)
C122
C4P
L12
18n
IC7
OUT
GND
GND
GND
VCC
IN
C123
D10P
C134
K1000P
(6)
V2
445MHz
Fout
VCC
GND
GND
MOD
Vt
C129
K1000P
R103
2.7K
C130
K1000P
C124
K0.01
C128
6.3V10
L14
HM601
Q14
C140
K1000P
ANT
C101
L7
18n
L8
18n
L20
18n
C103
C8P
C104
J12P
C105
J12P
C141
C8P
C95
K1000P
(8)
IC4
CONT1
OUT1
GND
IN
CONT2
OUT2
C119
J18P
L9
12n
C138
J18P
C145
J100P
C131
K1000P
L15
HS220
L11
22n
Q8
R94
1K
R95
680
L10
5.6n
C121
C6P
Q11
C127
J15P
L13
12n
C142
J100P
C132
K1000P
L16
HS220
R98
18
C133
K1000P
R96
1K
R97
2.2K
C135
K0.01
C136
K0.01
C109
K1000P


AF
3
CN4
C26
R28
IC13
C27
R30
R33
C28
C29
R31
C33
C31
R35
C36
R36
R37
C38
R38
R41
C42
C40
R45
R44
R46
OSC
Programmable Divider
BPF
SMF
AMP4
TSQ/VM
SQ/RECT
Deemph2
TONE/SQ
TSQ
RPF
TPF
AMP1
(2)
(3)
CTCSTB
CTCSS
TXD
SCLK
CTCDET
IC11
C3
C10
C2
R11
R16
C16
C14
R15
R10
C195
C4
C22
R27
C24
R26
C25
R32
C32
R34
C35
R12
RX-LPF
AMP2
RX-HPF
AMP3
Demphasis
Scramble
Expander
MIX
(4)
(6)
RXD
SCLK
DTR
SD0
SD1
(7)
IC10
IC12
CD
VREF
+VIN
-VIN
VOUT2
GND
V+
VOUT1
C11
C15
C20
R23
C17
C23
C21
R22
R24
L18
L19
SUB-SP
R29
150
C30
C34
C39
R39
C37
(5)
(8)
MAIN-SP
(9)
R40
R49
D2
D3
C186
C187
CN2
SP-JACK


ANT
(1)
C101
K1000P
L7
18n
L8
18n
L20
18n
C103
C6P
C104
J12P
C105
J12P
C141
C6P
GND
(2)
IC4
CONT1 OUT1
IN GND
CONT2 OUT2
C95
K1000P
(3)
L3
10n
C66 D10P
R71 4.7K
R72
3.3K
R73
47
C70
J100P
Q1
L4
100n
R68
150
C72
K1000P
C64
K1000P
C67
C3P
F1
446MHz
L1
10n
C146
K1000P
R104
150
(4)
(6)
L2
4D1R0
R102
680
21.3MHz
F2
C68
J33P
R69
1.2K
C65
K1000P
IC2
RFIN IFOUT
GND VCC
LOIN PS
R75
47
C74
K0.01
C80
C6P
C137
J22P
C90
C6P
IC3
L5
22n
C89
K1000P
C82
J100P
(5)
V1
425MHz
Fout VCC
GND GND
GND Vt
C83
K0.01
C88
K1000P
C86
6.3V10
L6
HM01
R82
1K
(7)
IC1
C69
K1000P
OSCIN MIXIN
R76
1K
OSCOUT GND
VCC1 LPF
C75
Z0.1
R77
22
C77
6.3V10
C76
Z0.1
C78
Z1.0
DEC1 VCC2
C79
Z0.1
R78
47K
C81
K0.01
MIXOUT RSSIDET
BPFIN NDET
SQ
R99
1M
C85
K0.47
R79
5.6K
C84
K0.01
REF NREC
C87
J330P
NONI FILIN
R80
150K
R81
680K
C91
Z0.1
NF FILOUT
C92
J330P
C93
K0.01
(9)
C94
K0.01
VREF AFOUT
RSSI DETIN
C96
K0.01
(8)
C98
Z1.0
DEC2 IFOUT
C143
J100P
RVCO
R83
4.7K
C99
K0.01
C97
K0.22
VC1
20P
X1
21.25MHz
C100
UJ33P
R84
47K
12K
R85
C106
K0.01
C107
J15P
C108
J20P
R86
100
(5)
C102
Z1.0
IC5
FIN2 VCC CP2 GND SW XIN XOUT BO
FIN1 VCC CP1 GND LD CK DATA STB
C110
K0.01
Q12
C139
K1000P
CN5
AF
1 GND
2 SQL
3 AF
4 RSSI
5 STB
6 DATA
7 CK
8 LD
10 RX


Frequency Counter
Linear Detector
TP-ANT
GND
AGND
VC1
MOTOR
VR2
SQ
MENU SW
PTT
UP
SUB
SP+
TEST
J1
J1 point
LOCK SW
MONITOR
MIC
SUB
SP-
SCAN SW
DOWN
SW
+4.5V
B-
C3V
GND
MIC
Headset
Main SP+
Main SP-
FLIP SW
10V 10µF
+
-
MIC-INPUT
DC4.5V
DC POWER SUPPLY
AF Generator