VoltNode

U1 — SA818

+5V

R7 10K
D2 1N4001
C2 0,1uF
GND

R10 2K2
MIC1P
C3 470nF
R11 1K
GND

R6 4K7

C1 470nF
R4 10K
LINEOUT_R
R3 1K
GND

Pin	Name
6	PD
18	MIC_IN
5	PTT
16	RXD
17	TXD
7	H/L
8	VBAT
3	AF_OUT
12	ANT
1	SQ
10	GND
9	GND
19	PAD

UART_TX
UART_RX

RF_OUT

FL1 — LPF 0500LP15A500E

IN 8
OUT 4 ANT
NC 2
NC 6
GND 1 3 5 7
GND

J3 Conn_Coaxial
GND

SA818-U = UHF
SA818-V = VHF

GPIO_7
Active H
R2 2K2
Q1 Q_NPN_BEC BC847
R5 47K
GND

R1 330R
D1 PTT Green
GND

JP1 SolderJumper
PNP: BC857
NPN: BC847
low=0.5W
float=1W
GND

R8 2K2

+3V3
C4 0,1uF
GND
Q2 Q_PNP_BEC BC857
R9 47K
GPIO_10
Active H
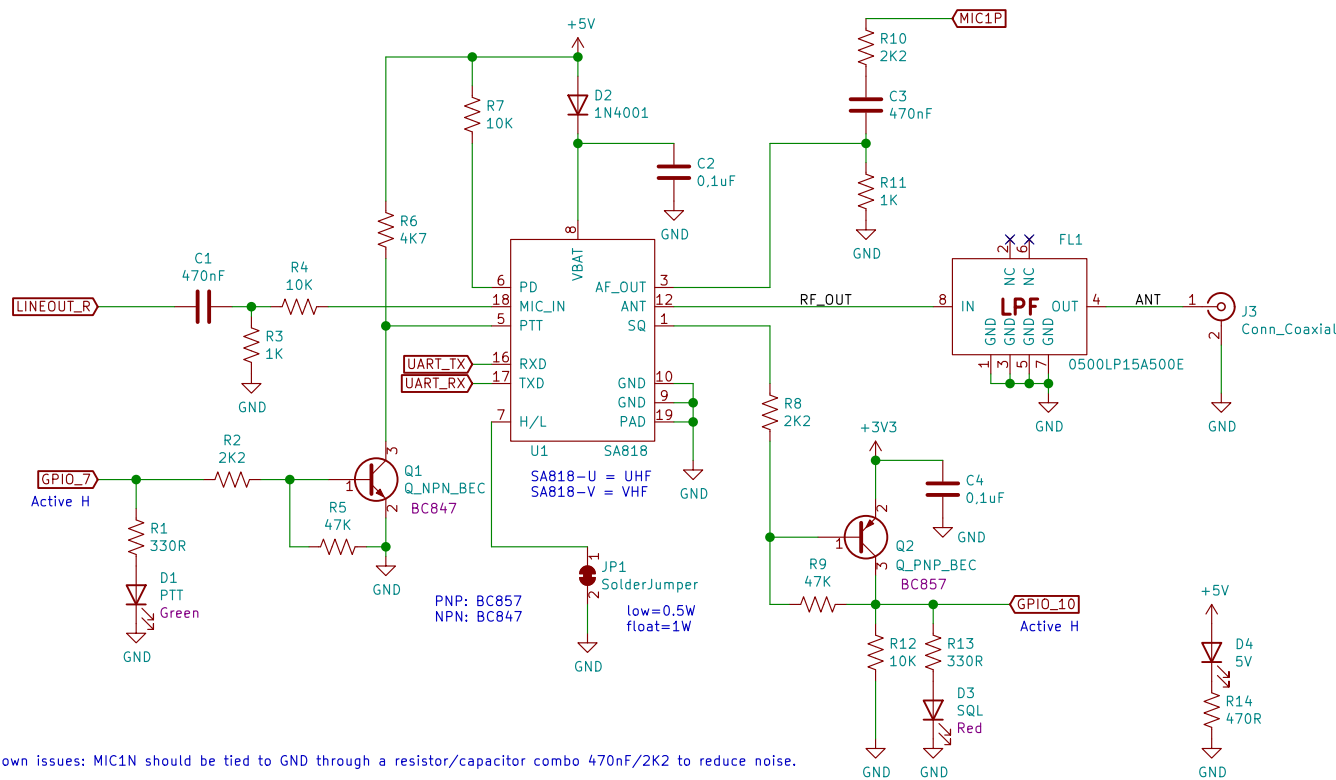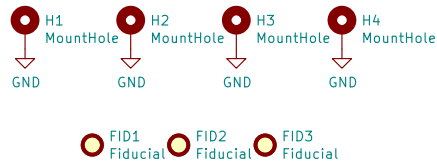
R12 10K
R13 330R
D3 SQL Red
GND GND

+5V
D4 5V
R14 470R
GND

Known issues: MIC1N should be tied to GND through a resistor/capacitor combo 470nF/2K2 to reduce noise.

Orange Pi header

J1 Conn_02x13_Odd_Even

Signal	Pin	Pin	Signal
+3V3	1	2	+5V
GPIO_12	3	4	+5V
GPIO_11	5	6	GND
GPIO_6	7	8	UART_TX
GND	9	10	UART_RX
GPIO_1	11	12	GPIO_7
GPIO_0	13	14	GND
GPIO_3	15	16	GPIO_19
+3V3	17	18	GPIO_18
GPIO_15	19	20	GND
GPIO_16	21	22	GPIO_2
GPIO_14	23	24	GPIO_13
GND	25	26	GPIO_10

J2 Conn_01x13

Signal	Pin
+5V	1
GND	2
USB_DM2	3
USB_DP2	4
USB_DM3	5
USB_DP3	6
LINEOUT_R	7
LINEOUT_L	8
TV_OUT	9
MIC_BIAS	10
MIC1P	11
MIC1N	12
CIR_RX	13

H1 MountHole GND
H2 MountHole GND
H3 MountHole GND
H4 MountHole GND

FID1 Fiducial
FID2 Fiducial
FID3 Fiducial

Voltlog

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Title: VoltNode — SA818 EchoLink Node

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