

3534 S/H and Noise

The noise section:

Q1 is the noise transistor. You might have to try a few before you find one that generates the level of noise needed to drive the sample and hold. The first one I tried

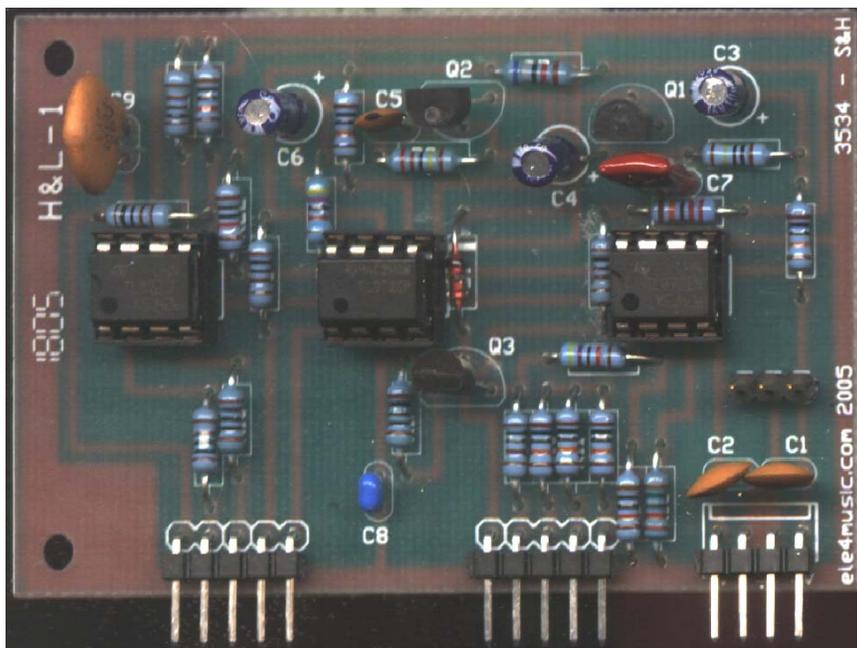
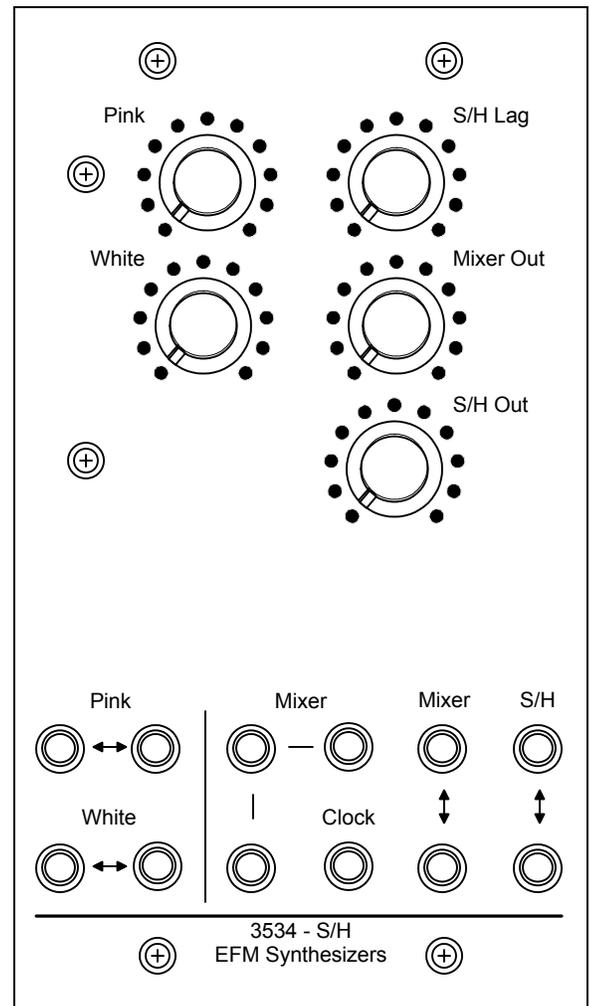
and U2b to generate white noise. U3b is a low pass filter it's output is pink noise.

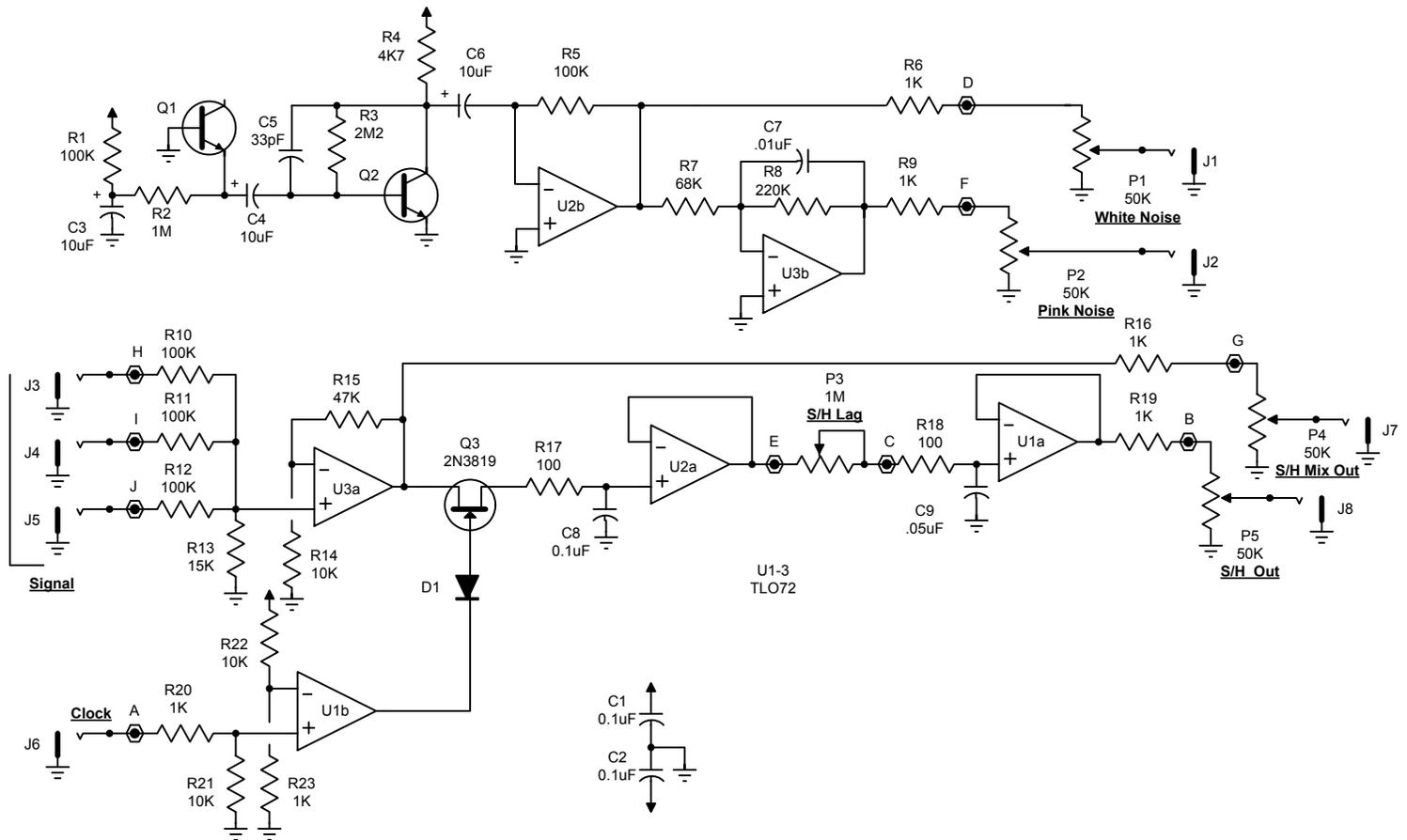
Sample and Hold section:

The S/H has a signal mixer U3a and lag P3,C9,U1a. The mixed signal has an output on J1. A LFO clock pulse or keyboard gate can be used to operate the S/H. Gate signals on J6 cause U1b to go from maximum off to maximum on, turning Q3 off and on.

When Q3 is on C8 charges to the mixed signal level and

and the hold voltage is refreshed. The signal is buffered by U2a and smoothed by the lag circuit made up of P3,C9,U1a and then buffered again by U1a.





Small Kit

PCB	PC Board	1
C1,2,8	0.1uF Ceramic	3
C3,4,6	10 uF Ele	3
C7	.01uF Ceramic	1
C9	.05uF Ceramic	1
R1,5,10,11,12	100K	5
R2	1M	1
R3	2.2M	1
R4	4.7K	1
R7	68K	1
R8	220K	1
R6,9,16,19,20,23	1K	6
R13	15K	1
R14,21,22	10K	3
R15	47K	1
R17,18	100	2
D1	1N4148	1
Q1,2	2N3904	2
Q3	2N3819	1
U1,2,3	TLO72	3

Full Kit

P1,2,4,5	50K Pot	4
P3	1M Pot	1
Knob		5
Jack	1/8"	12
L Bracket w/hardware		2
Header		1
Panel		1
Overlay		1

