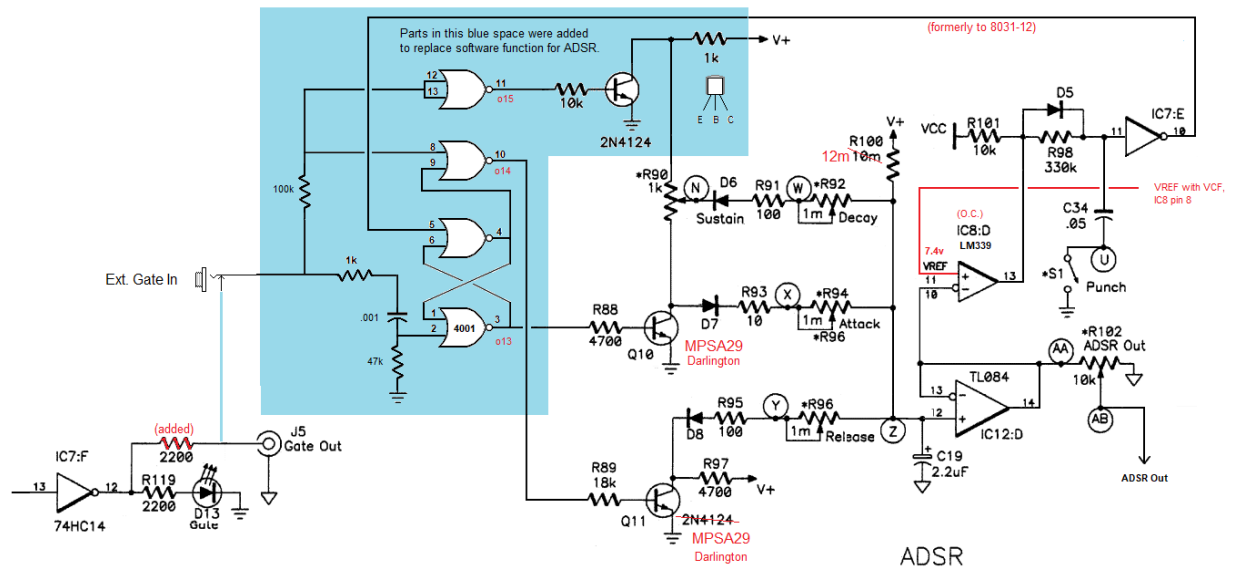


As mentioned in "My Modular FatMan Synth" PDF, I used Scott Lee's CD4001 circuit as a basis to make the gate trigger the ADSR independently of the 8031 μC so it could be used with external gate signals.

While Scott's circuit worked great, I found that the FatMan's gate signal was tied in with the A(S)R circuit for the VCF. I wanted to make those two be separate gate inputs, so I had to make a second circuit for the A(S)R but it needed some different logic. That took some experimenting to perfect its operation.

Here are the schematics with a few notes on how they bypass the 8031 μC signals.



Gate from front panel sets the flip-flop and triggers A(S)R.

Either a peak pulse on pin 8 or a key release pulse on pin 9 resets the flip-flop.

Envelope peak level detector IC8-14 (open-collector) goes high to reset the flip-flop.

If Sustain switch is down (grounded), the envelope sustains at the peak level until the key is released, resetting the flip-flop.



Ext. Gate In

Gate from front panel jack

