

These circuits provide the following to a ZX81:
 32kb battery backed ram, 16 to 48k
 Switchable M1Not circuit
 Reset pushbutton
 Reset supervision

The 32kb of ram is mapped as follows:
 16k ram between 16 and 32 kb, cleared during power reset
 16k ram between 32 and 48 kb, retained when power is off

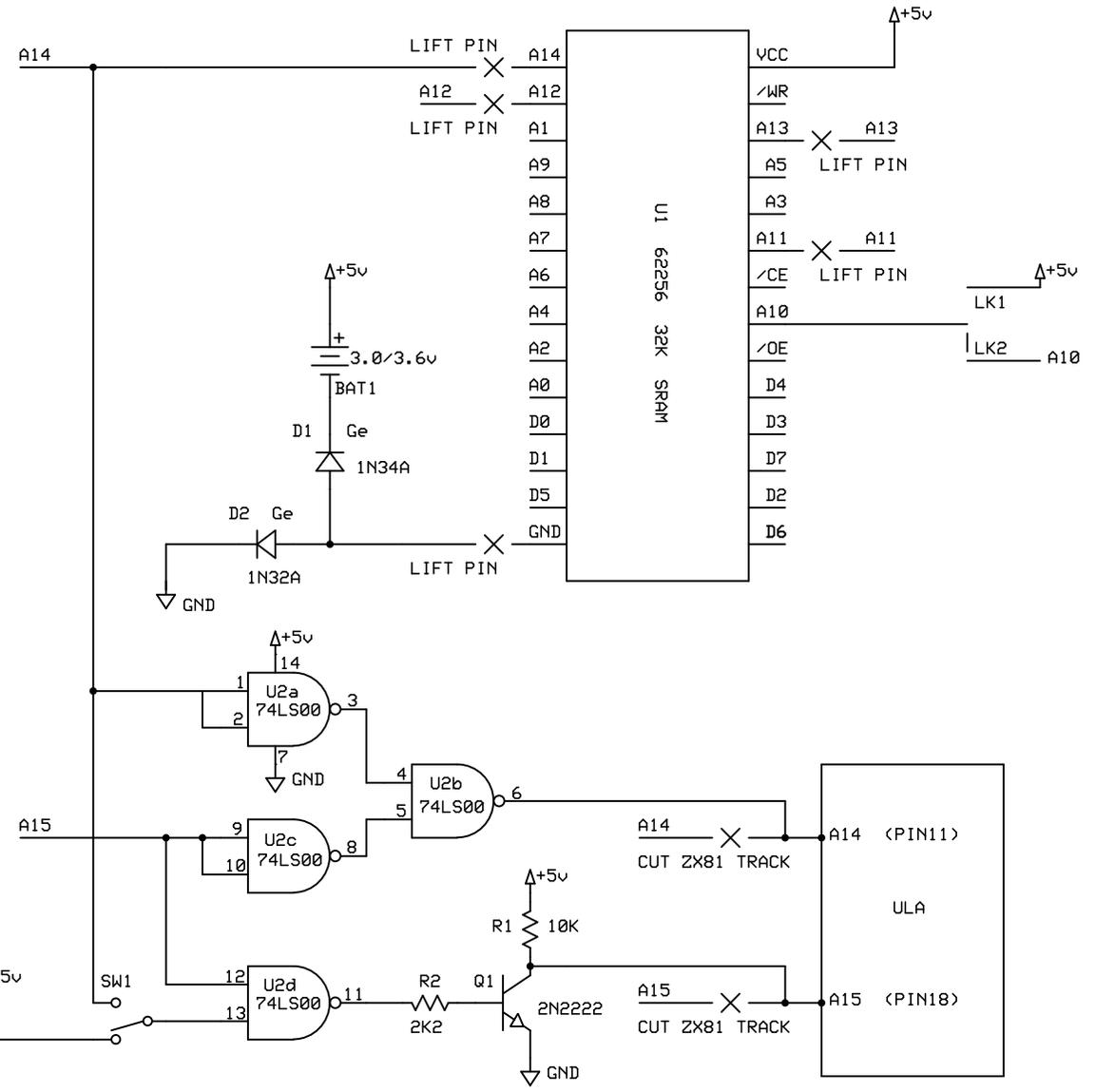
The M1Not circuit allows Machine code to be stored and used between 32 and 48kb. If SW1 is operated the M1Not is deactivated allowing large BASIC programs to be used, but the Display File must not be allowed to cross the 32k boundary (it must end before address 32768 or start after address 32768)

The reset pushbutton allows the user to reset the ZX81 without removing the power plug

The reset supervisor IC reduces the opportunity of the battery backed memory (32-48k), becoming corrupted during reset or power off

This modification requires the ZX81 PCB tracks to be cut in order to connect the circuits so great care and patience should be exercised while making these changes

The original 1 or 2kb ram IC(s) will need to be carefully removed and a new 28 pin IC socket soldered in place to take the new 32kb ram IC. Pins 1, 2, 14, 23 and 26 of the new Ram IC should be lifted so as not to connect to the new IC socket and wires soldered to them for connection to the new circuits



DereX81		
32K Int. Ram M/C >32768		
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