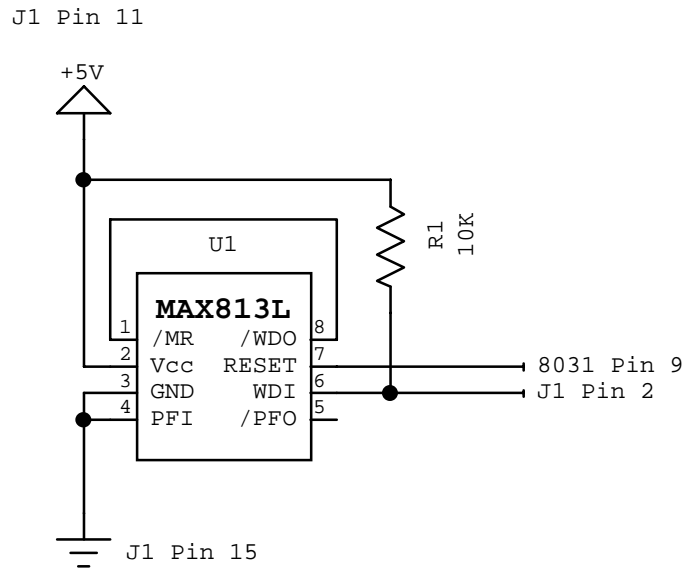


## PL-Link Stabilization Circuit

The original PL-Link modules based on COMM-Links have had problems where they get stuck in transmit mode or even lock up where the heartbeat stops. This has been debugged by many HCS users and the culprit is the RESET circuit and power glitches. The R/C Diode Reset circuit can often generate 'half' resets or worse, not reset at all if the Vcc dips below a valid level, thus the CPU can get into weird states. The solution is to replace the reset circuit on the PL-Link. I have run this circuit for months and my PL-Link has been rock solid.



Parts Required  
MAX813L IC  
10K Resistor (1/4W)  
8 Pin IC Socket (Optional)

- 1) Remove C1, R2, D1 from your PL-Link Board
- 2) Install MAX813L and 10K Resistor in prototype area
- 3) Wire circuit according to schematic

This circuit will ensure clean resets are sent to the 8031 during power up and power glitches. The PL-Link heartbeat is also monitored and if it stops toggling, the MAX813L will reset the PL-Link to recover it.

If you use REFRESH in your XPRESS code - send the command regularly (like once a day) since the REFRESH setting is reset if the PL-Link is reset due to a power glitch.

Also, if your PL-Link has long power supply wires, a large capacitor across the 12V or 5V supply can help. I currently use a 5,900uFd 30V cap (surplus). Even better would be the 1 Farad 5.5V backup caps.

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