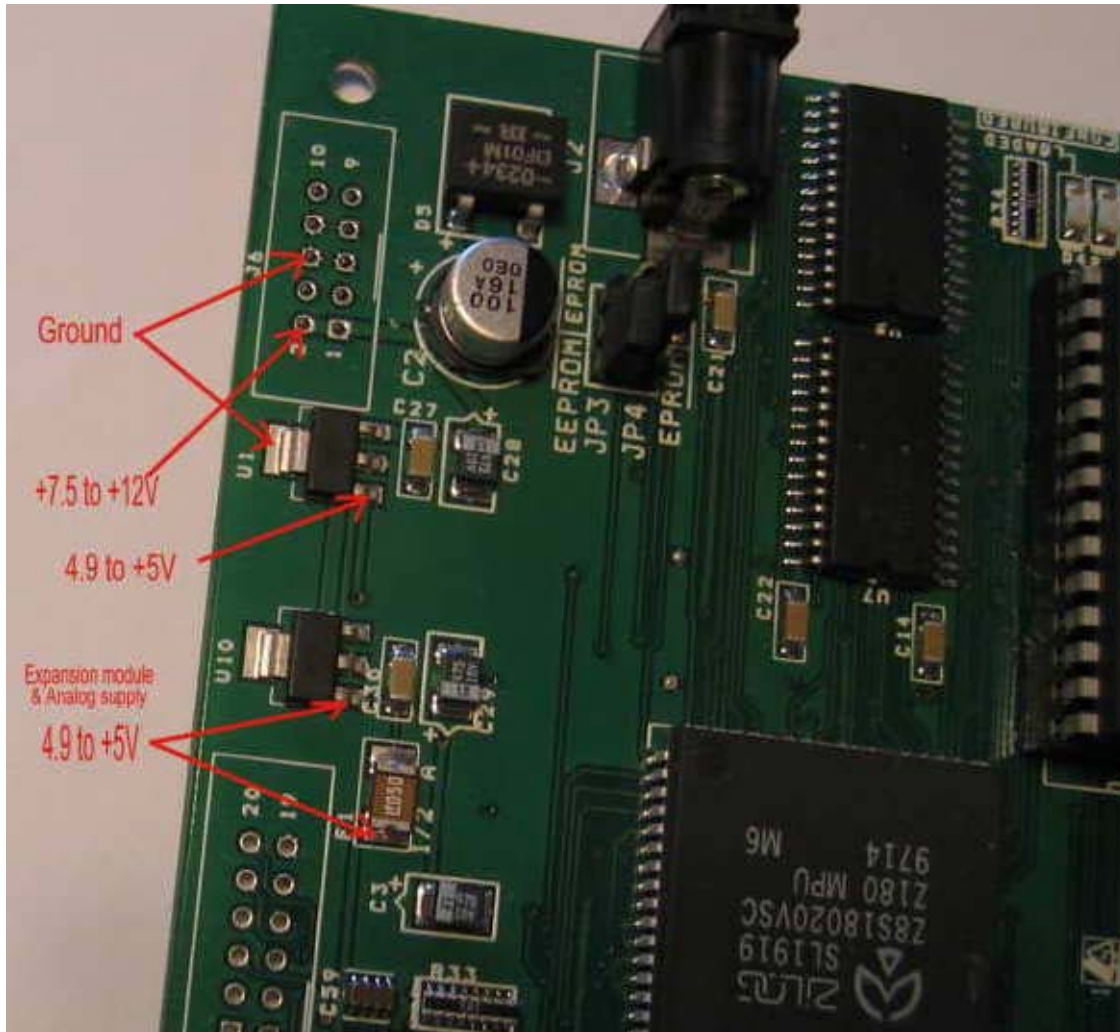


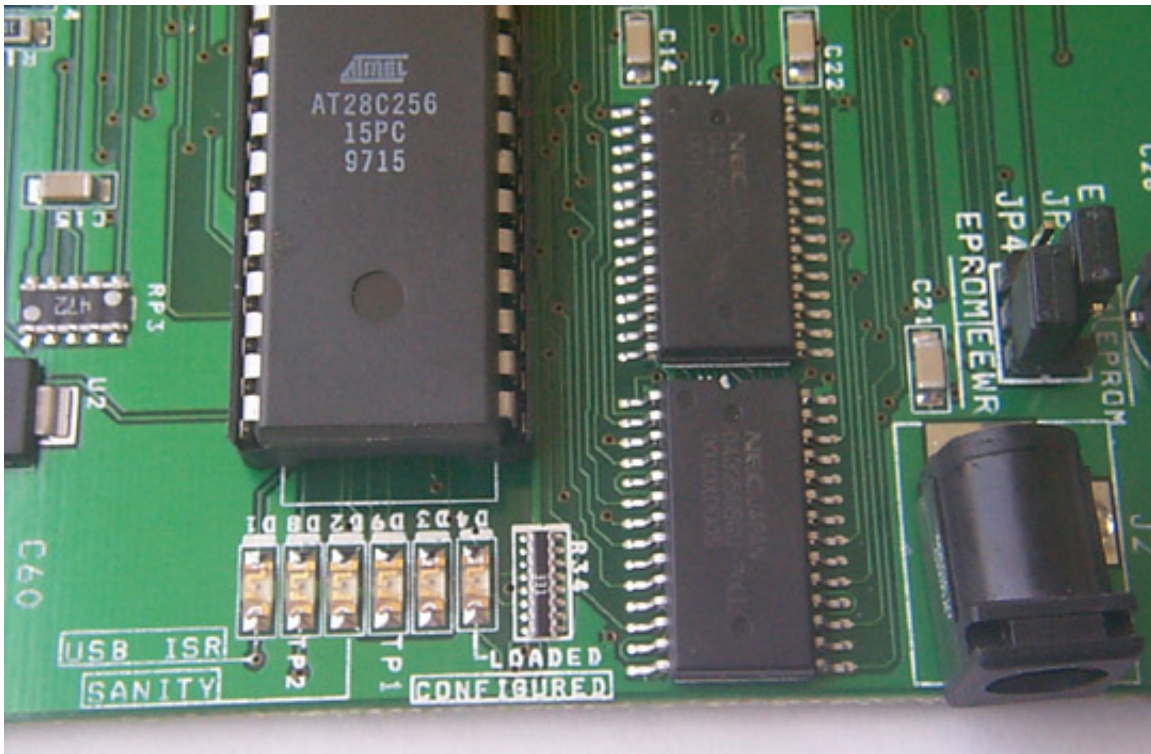
Trouble shooting

The regulators U1 and U10 on EPICUSB will normally get somewhat hot. How hot U1 gets will depend on the input voltage. If the input voltage is 9v U1 will not get as hot as it will with a 12v input. The input voltage should not be more than 12v.

Measure voltages by setting voltmeter to DC and placing negative lead to any point marked "Ground". The positive lead to the point being measured.



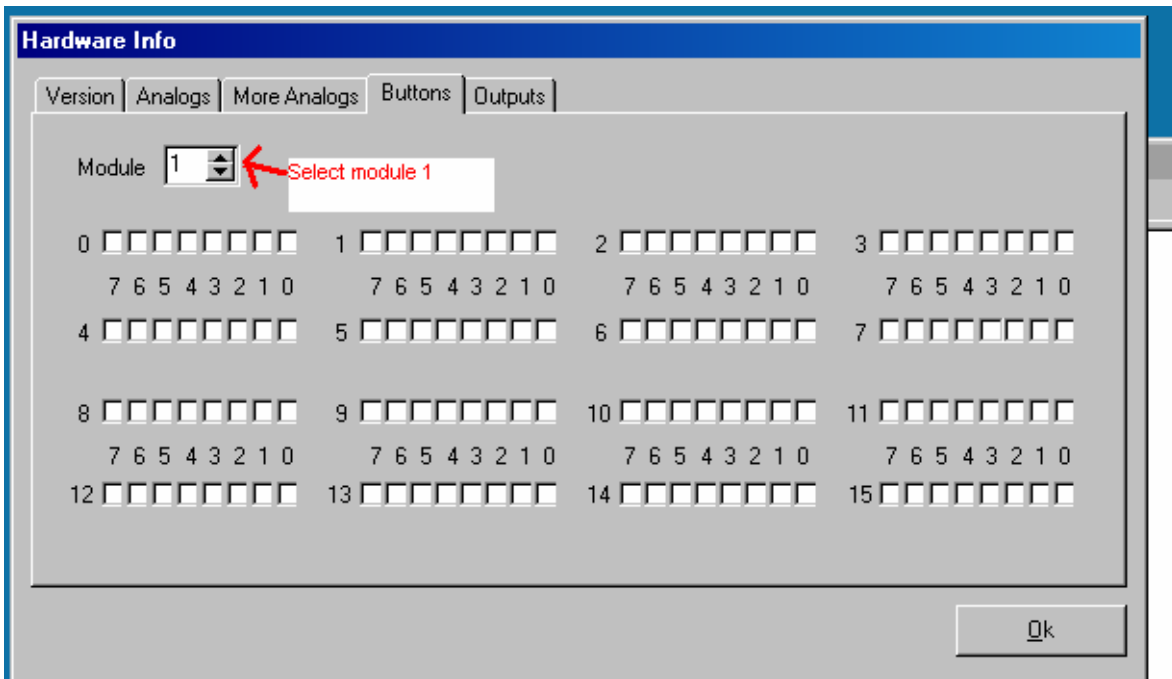
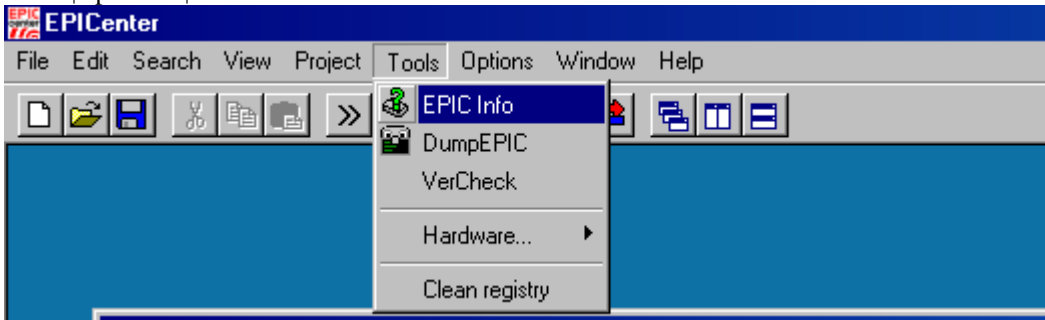
Led “loaded” should be lit solid and “sanity” flashing at about a 1 second rate.



When the USB cable is plugged in, “USB ISR” should blink several times and go out and “configured” should come on.

Load a project such as SCANALL that will scan modules 0,1,&2

Tools | epic info | buttons

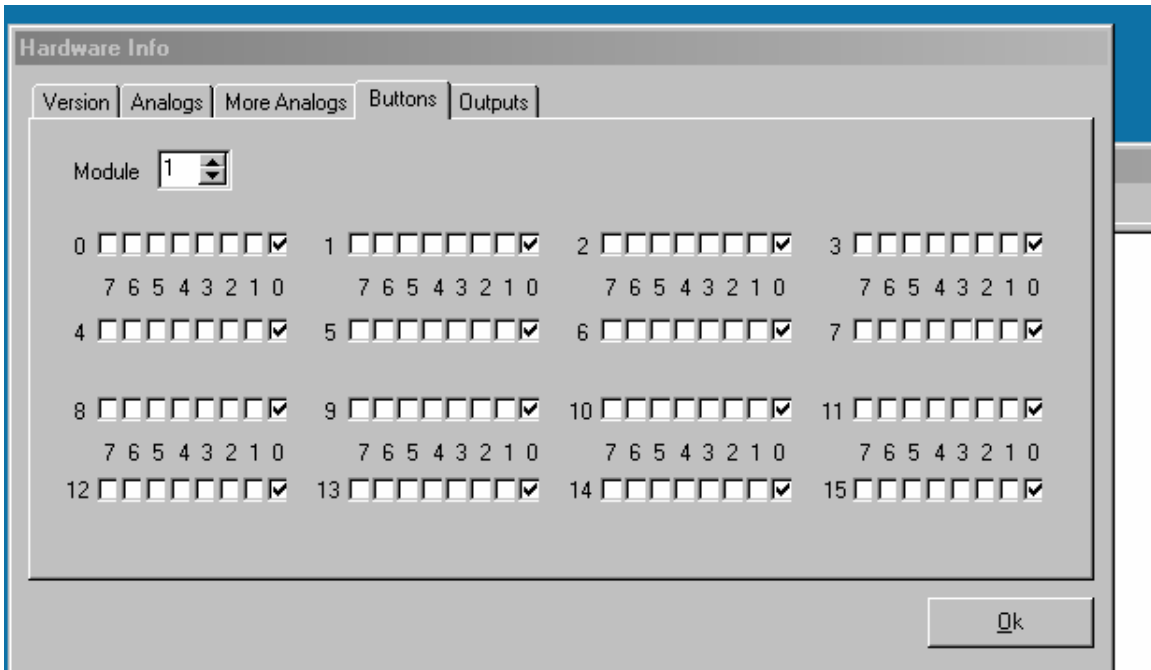


VIEW LEFT=37,41

Unplug DB37 from EPICUSB and short pins 1 (Ground) to 20 (Switch return 0)



You should get a check mark in every bit 0.

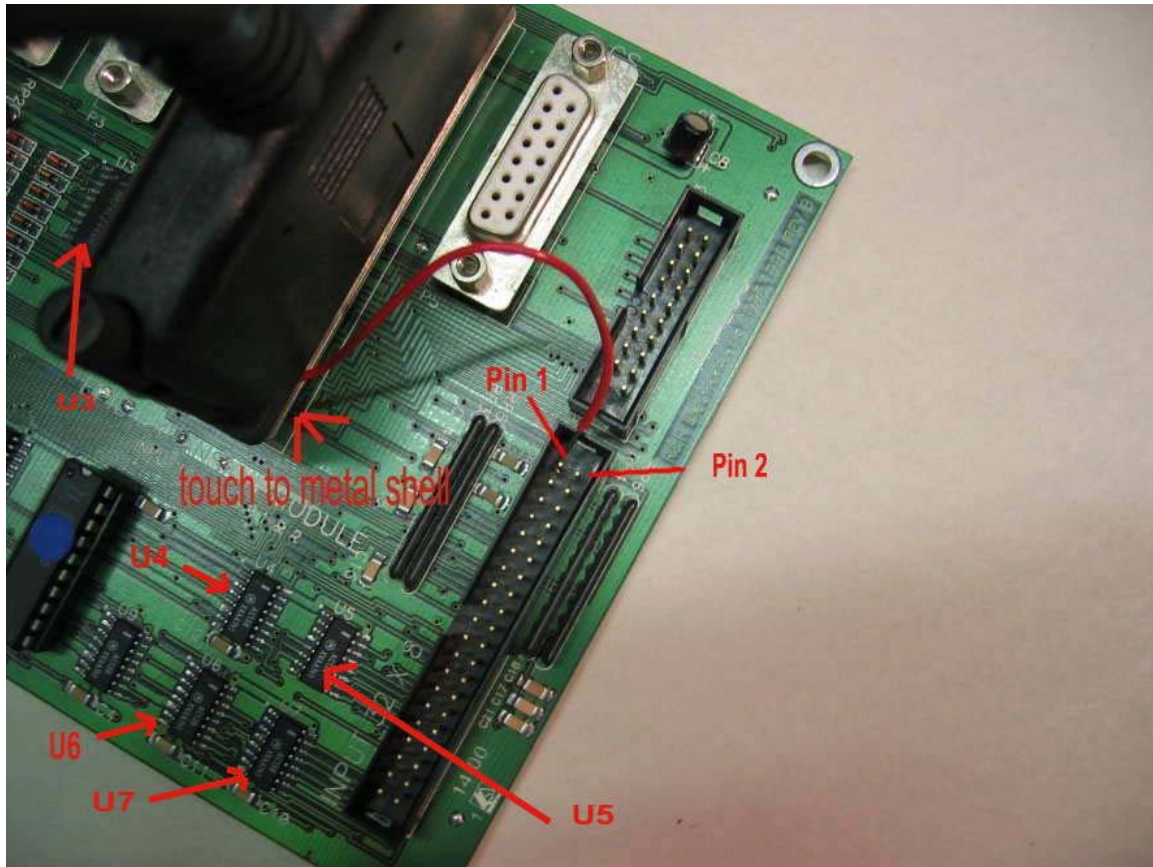


Then short pin 1 to 21, bit 1 should check in all rows. Repeat for 22 (bit 2), 23 (bit 3), 24(bit 4), 25 (bit 5), 26 (bit 6), and 27 (bit 7).

Plug the DB37 back into EPICUSB and the first expansion module. **Remove all other cables from the expansion module.**

If you get check marks in a bit(s) for all rows, the expansion module is bad. This is usually caused by a bad U3. This is usually caused by static electricity entering the switch return leads (40 pins 1 thru 8). Make sure switches, yokes, panels, etc are all grounded to prevent this problem.

Short the 40 pin connector pin 1 to ground (DB37 metal shell is ground)



Again you should get a check mark in all bit 0s. Pin 2 is bit 1, pin3 bit2, to pin 8 bit 7.

Short pin 1 to pin 9, you should get a check mark in Mod 1 row 0 bit 0 only. Pin 1 to pin 10 is row 1 bit 0. Pins 11 through 24 are mod 1 rows 2 thru 15.

Select module 2 and repeat .

Pins 25 thru 40 are mod 2 rows 0 thru 15

If any rows do not show a checkmark see if U4-U7 are getting hot. If so they are bad and must be replaced.

U4- Module1 rows 0-7

U5- Module1 rows 8-15

U6- Module2 rows 0-7

U7- Module2 rows 8-15

This is usually caused by static electricity entering the module by the row leads. Make sure that switch metal parts, panels, yokes, controls, etc are tied to ground to discharge any static build up.

A module on the expansion bus with no power can cause things like all check marks on the **tools | epic info | buttons** screen. If this is the case, attach each module to the 26 pin ribbon expansion bus until you see the problem.

Check each module for power as shown below.

