

MC88110RC50-TEST v0.1

Revision 3/28/2024

Caution

The CPU quickly gets hot with no heat sink installed; don't keep the board powered for more than 30-seconds or so without a CPU heat sink.

Rework Instructions

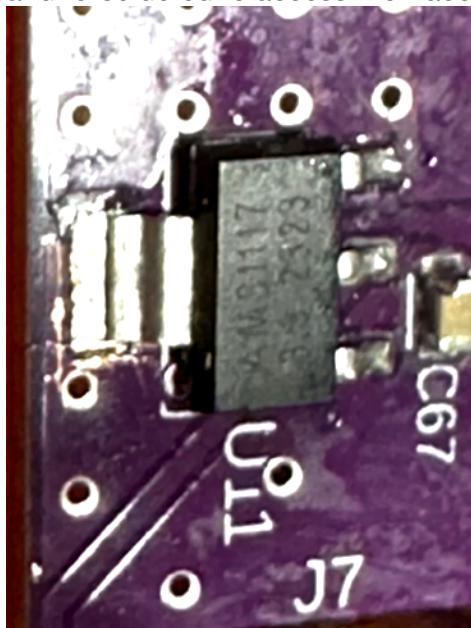
The following rework must be performed to make the board usable.

1. Install Connectors

- Install power connector J1
- Install MICTOR connectors J4-J7
- Install CPU socket U1.

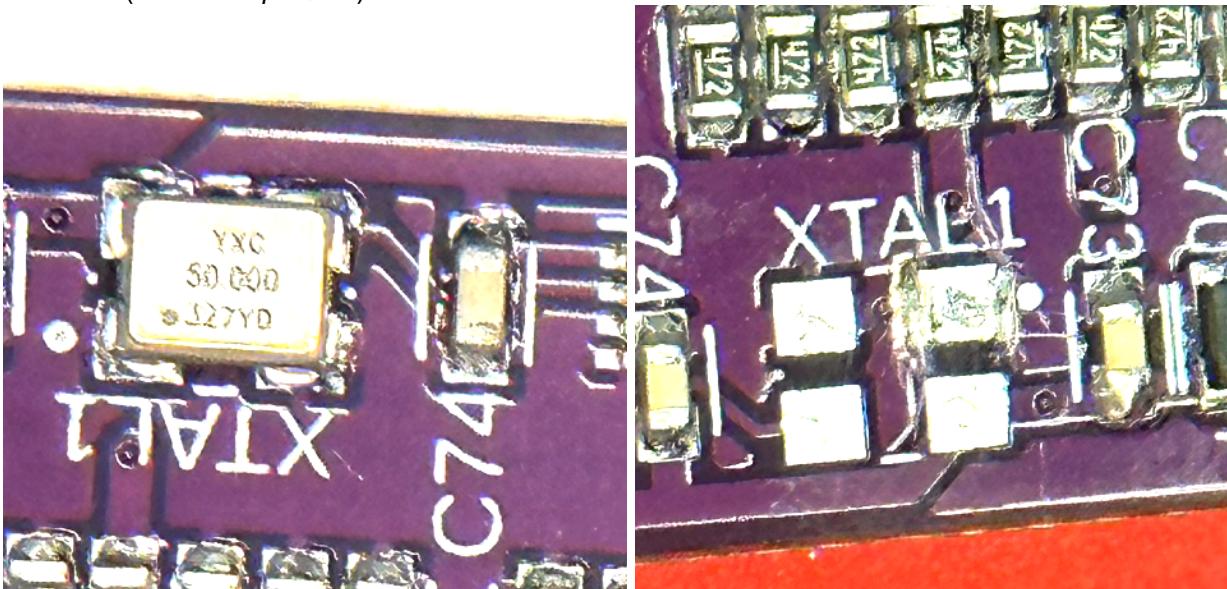
2. Disconnect U11 LDO tab from GND

The 3.3V LDO output tab is shorted to GND. There are three (?) traces on the sides of the LDO that must be cut. One trace is under the LDO, which must be de-soldered (I used Chip-Qwik) and re-soldered to access the trace.

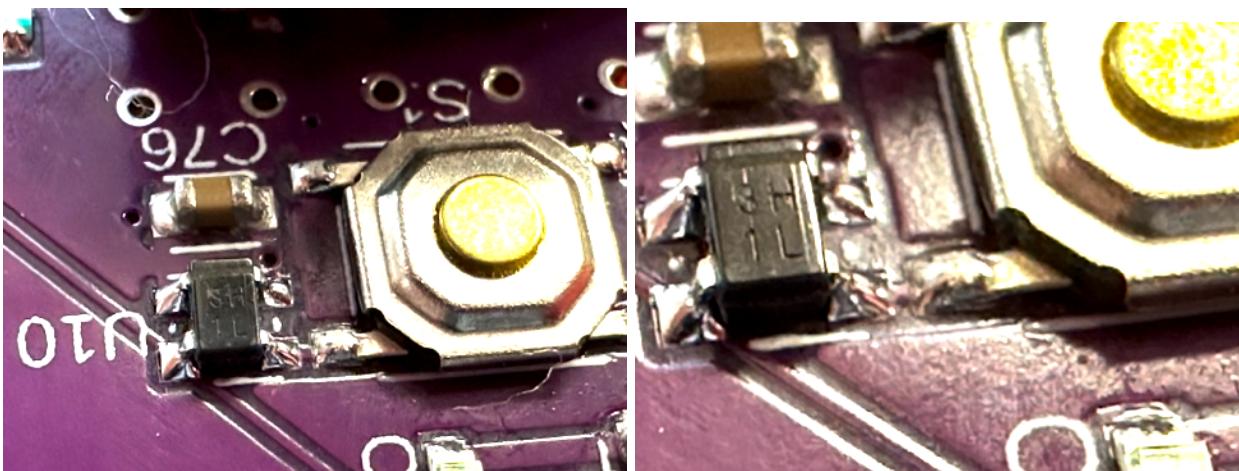


3. Disconnect XTAL1 pin 1 from GND

The 50MHz oscillator is disabled via pin 1 connection to GND. There are two traces to cut on either side of pin 1 that must be cut. One trace is under the oscillator, which must be de-soldered (*I used Chip-Qwik*) and re-soldered to access the trace.

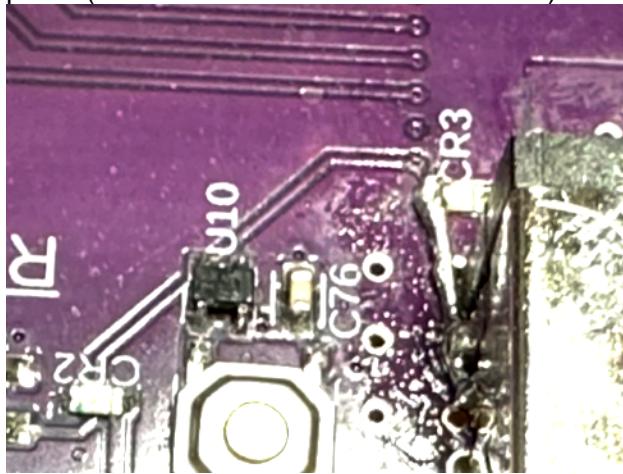


4. Install Reset IC (U10)



5. Connect CR3- to GND

The CR3- lead is not connected to anything. It should be connected to the surrounding GND plane (or GND lead of J1 as shown below).



6. Connect DBUG to GND via 10K pull-down

The DBUG signal is floating and must be pulled high or low as desired using a resistor (1K, 4.7K or 10K should suffice). The DBUG signal is accessible on pin 17 of J3 and GND is available on any even-numbered pin of J2 except pin 2.



Known Issues (Errata)

1. U10 orientation is not clearly marked
2. Via near C73 is unnecessary
3. D63-D0 pull-up/down are installed in reverse order:

1 1 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NOP
0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1	ld.d r0, 0x002F(r26)
[0x001A002F] Actual value	