

Taking the Case Apart

The first step is to get inside the plastic case. Start by pulling the two gray feet off the left side and taking the two screws out of the bottom. The second screw is hiding under the label. You should be able to get to it without cutting or tearing the label if it is peeled back carefully from one of the front corners.

Now the only thing holding the case together are two plastic tabs. Use a small screwdriver or some other tool to reach into the rectangular holes in the bottom case near where the gray feet were. With the two tabs worked free, the case halves should separate and the board come out.

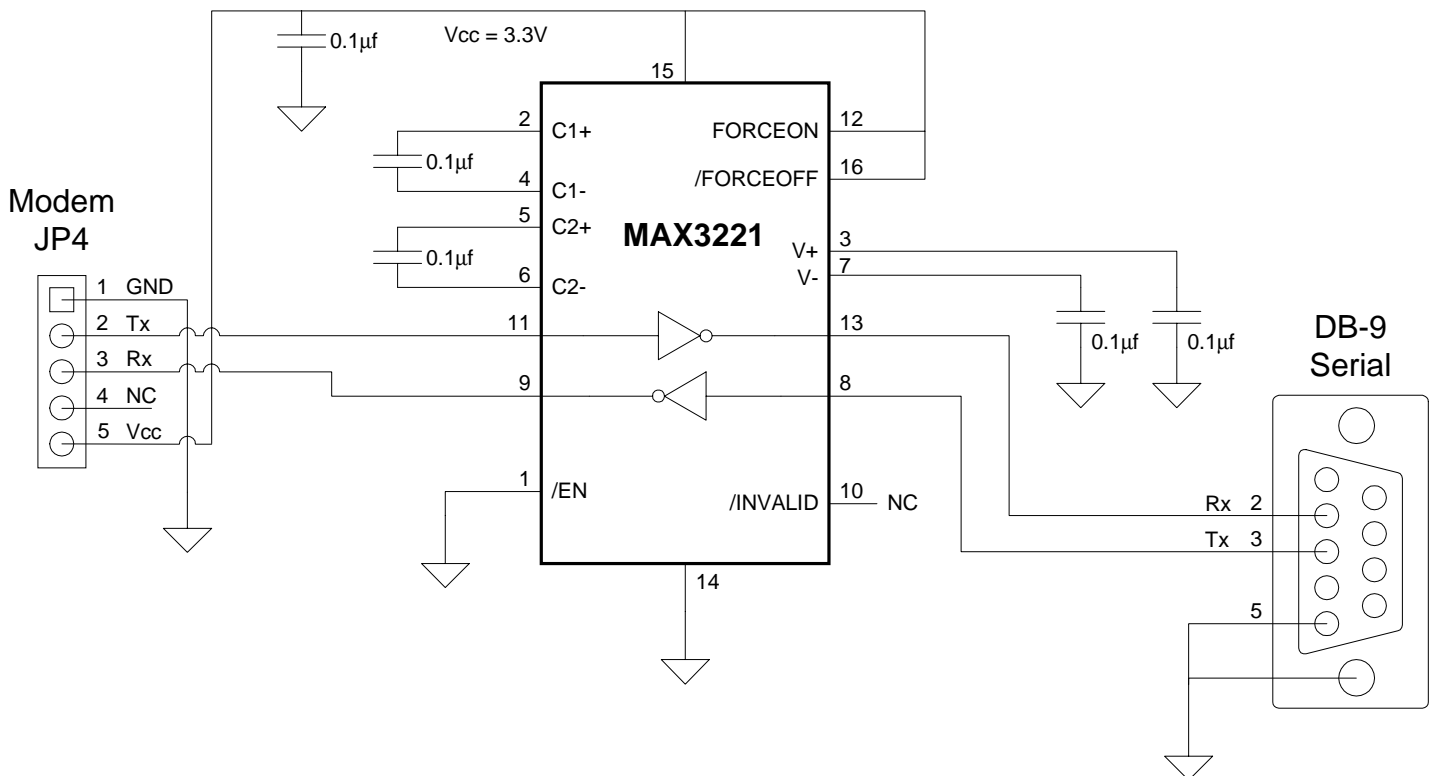
Finding the Serial Connector

Find the unloaded 5-pin connector labeled JP4 near the part labeled 'Efficient Networks Bowmore' (U10). The pinout of JP4 is shown in the schematic below. Either load a connector into JP4 or solder wires directly into the holes to make the connection to the serial interface.

At this point, a word of caution is in order. These Rx and Tx lines are 3.3V logic. They connect directly to pads on the Bowmore part (U10) which are most likely not 5V tolerant. If you connect anything to this that can provide more than 3.6V, you are taking a big risk. It is strongly recommended that you double-check any circuit that is attached to these pins to ensure it is 3.3V logic safe.

Making an Interface Circuit

There are many ways to make an interface that can sit between a host computer UART and JP4 in the Modem. A circuit based on the [MAX3221](#) device (available from [DigiKey](#)) is a good option because it can be powered from the available +3.3V supply and still drive RS-232 levels back to the host computer. The one disadvantage to this part is that it is only available in a fine-pitch surface mount package (16-SSOP). If you don't have a fine tipped soldering iron and a steady hand, look for one of the similar DIP packaged devices like the [MAX3222CPN](#) (also available from [DigiKey](#)).



Connecting the Host

Once this circuit is constructed, a terminal program on the host should be configured for 19200bps, 8-bits, no parity, and 1 stop bit. When a successful connection is made type 'help' at the 'shell>' prompt for a menu of options.