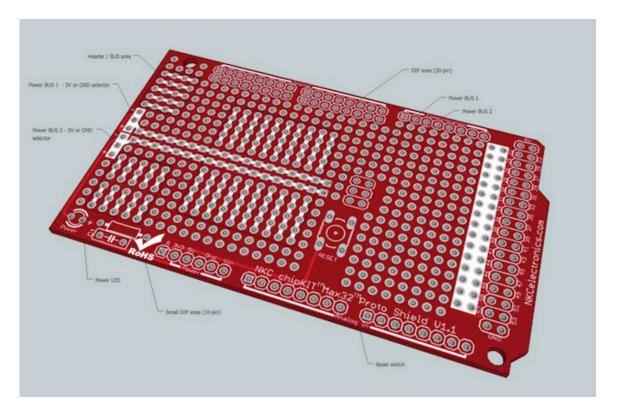
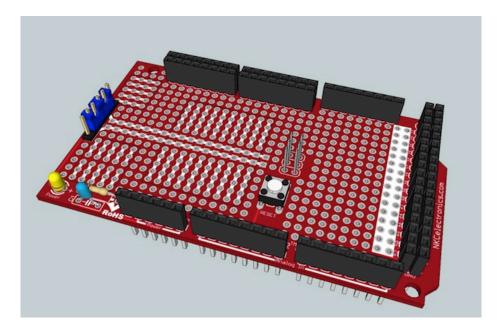
## Protoshield KIT for chipKIT Max32

What is a Proto Shield? We all know that the Shields are from the Arduino world and they are named after the little boards that sits on top of the Arduino and compatible boards. A Proto Shield is a combination of a ProtoBoard with a Shield. You usually use a Bread Board to build a prototype, to test the design. Once you have it working and want to house it in a more permanent board, is where a Proto Shield shows its benefits.

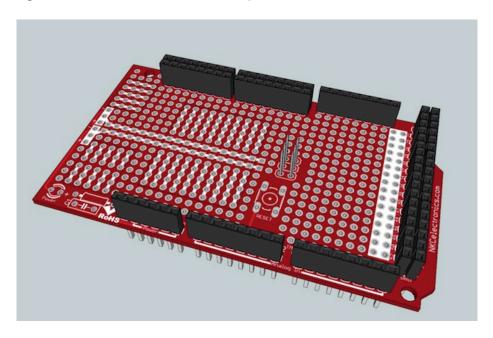
The Protoshield for the chipKIT Max32 is an exclusive design of NKC Electronics, and it has many nice features:



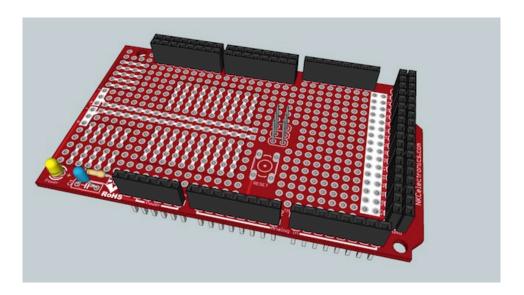
The fully assembled protoshield board looks like this:



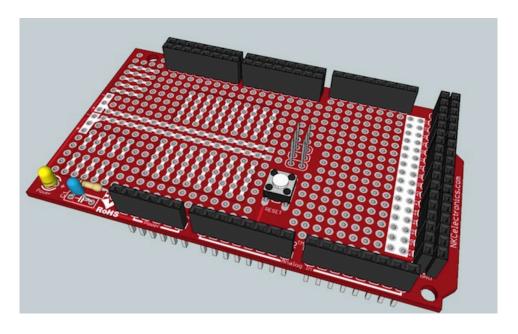
The kit includes the board and many extra components. What you finally end up installing on the ProtoShield will be based on your requirements. But in general, I recommend soldering all the female headers, as they are needed to bring all the signals and POWER from the chipKIT Max32 board to the ProtoShield.



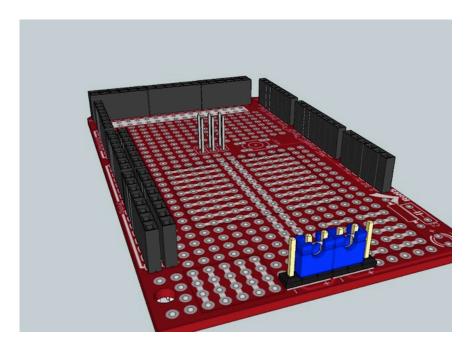
The LED with the associated resistor and filtering capacitor is to add a POWER indicator, meaning you have 5V power from the chipKIT Max32 board to the ProtoShield.



The RESET switch is necessary if you want to reset the chipKIT Max32 board from the top



The little 6-pin male header with the 2 jumpers are used to configure how you want to use the 2 power BUSES in the middle of the board. You can send +5V to one of them, GND to the other, or +5 or GND to both of them at the same time.



If you use the 6-pin male header jumpers to power the BUS, then you can only have +5V.

## 3.3V Projects

If you need the full ProtoShield to be 3.3V, then you can select one of the jumpers to GND and the other one open and connect +3.3V directly to the positive BUS. Take a look at the diagram below:

