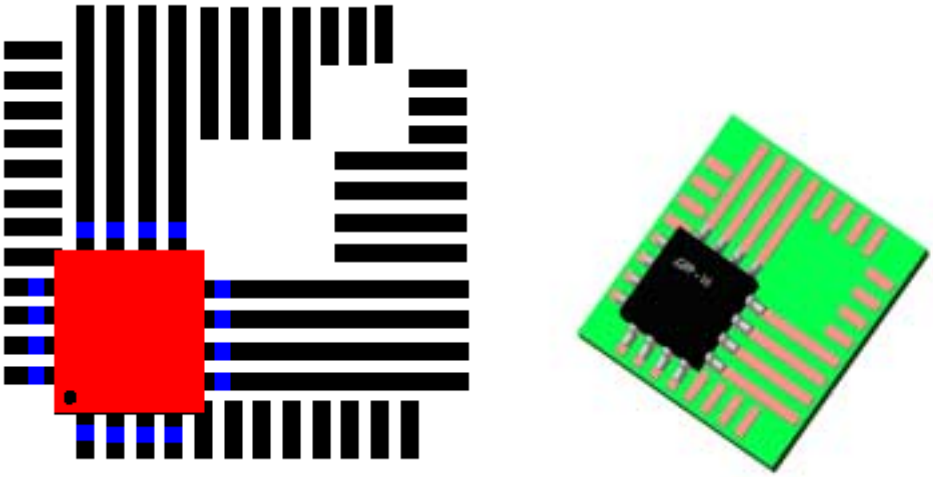
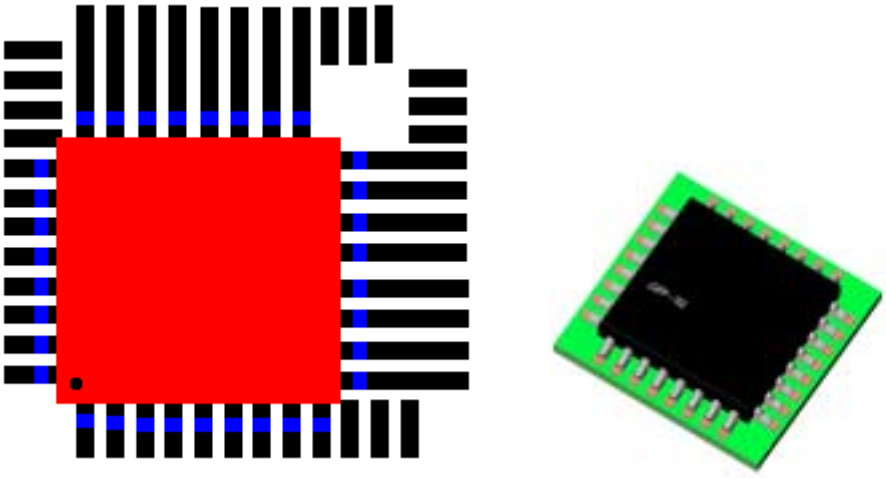
5 x 5 Prototype Board

A unique concept in Prototyping SMT circuits

The 5 x 5 prototype board* allows you to breadboard circuits using SMT components without having to layout a PCB or buy expensive SMT to through-hole adapters. This is achieved through the design of SMT footprints that allow you to place a variety of sizes of SMT components on the same footprint. The example below shows how the process works. In this example, the same footprint is used for both a 16 pin QFP and a 36 pin QFP.

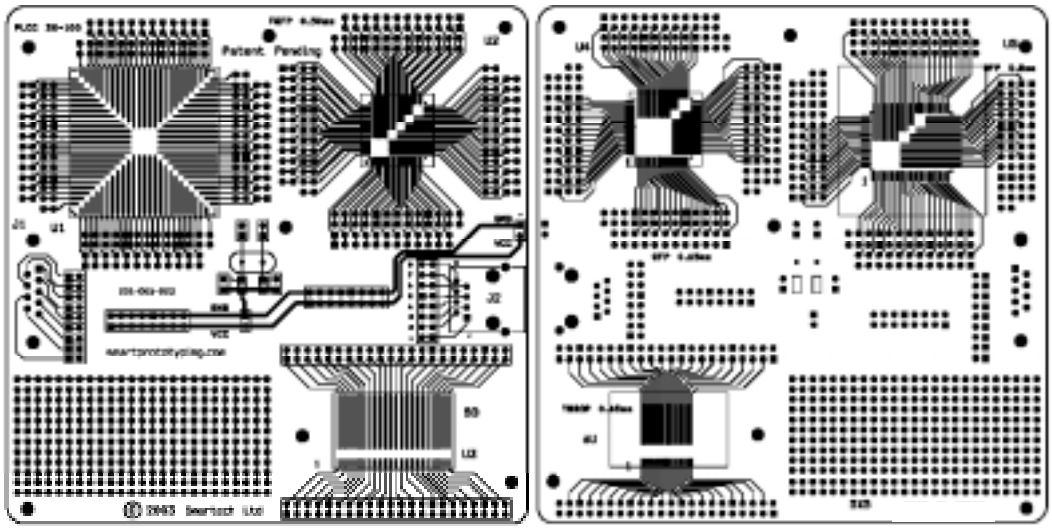


16 pin QFP



32 Pin QFP

Each footprint is connected to through-hole pins that allow you to place wires or other components. Each board also contains an area to mount through-hole components including connectors and a crystal.



Top **Bottom**

Each Board is double-sided allowing a large number of footprint options some of which are overlapping. The charts below explain the various options.

Socket Name	Footprint Name	Available Options
U1	PLCC	20,28,36,44,52,60,68,76,84,,92,100
U2	TQFP 0.50 mm	32.48,64,80,100
U3	SOIC 0.5 mil	8-44 (244-642 mil)
U4	QFP 0.65 mm	52,64,80
U5	QFP 0.8 mm	32,44,54,64,80(24 X 13)
U6	TSSOP	8-40
J1	DB9	Male / Female
J2	RJ45	4-8 pin
Y1	HC45	HC45

Overlapping Sockets	Footprint Names
U1 and U5	PLCC and TQFP 0.8mm
U2 and U4	TQFP 0.5mm and TQFP 0.65mm
U3 and U6	SOIC 0.5 mil and TSSOP

The 5 x 5 prototype board was designed by engineers for engineers. We tried to accommodate most of the typical prototyping problems we have faced over the years. Included on the board are a large through-hole prototype area, extra pads for decoupling capacitors, commonly used connector pads and a crystal. All SMT pads are connected to two through-hole pads allowing additional mounting of components as well as daisy chaining.

*Patent Pending