The EZ Proto Board is the fastest and easiest electronic circuit prototyping system ever conceived. The system supports through hole and surface mount components. Whether you are a seasoned engineer, a professor looking for a better tool to teach with, a student who needs to get that senior project completed or a hobbyist who needs to solder a surface mount component, **EZ Proto Board is the best solution**.

Anyone can hand-solder Surface Mount Components

Please follow these instructions to assure success.

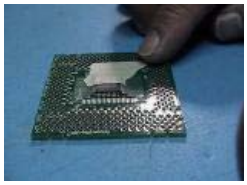
1) Place the chip

What makes this product line so revolutionary is that the solder mask (green part of the board) is higher than the electronic pads (silver part). This is the opposite of all other circuit boards you've seen. This will allow you to easily place the chip on the pads because these pads are in grooves. The chip legs fit in the grooves and the chip holds in place.

Chip legs are in the grooves, thus touching the pads and holding the chip in place

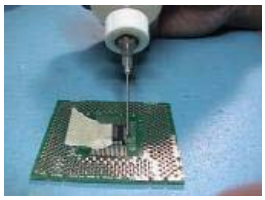
2) Put masking tape on one side of the chip to hold it in place

This will keep the chip aligned and keep both hands free to easily solder the board.



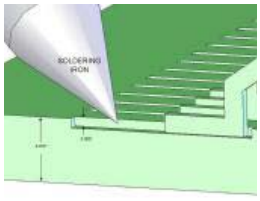
3) Put Solder Flux along the base of the chip where it touches the board

Flux only the side that you are currently soldering. (The side without masking tape)



4) Solder each chip leg to the EZ Proto Board, by pushing the solder from the outside of the groove to the chip leg

You do not need to add any solder to this board. All the solder you need is already on the board.
Put the soldering iron tip in the first electronic pad groove at the outside point of the groove and push it forward until it touches the chip leg. Do not put pressure in a downward position, the solder will melt and be pushed towards the leg. Do this in each groove that has a leg.



5) Remove the masking tape and repeat the steps 3 & 4 for other side(s) of the chip

Important Note: The tip of your soldering iron should be smaller than the pitch of your chip. So a .65 mm pitch chip should be soldered with a tip smaller than .65mm. Failure to do this may potentially create shorts and damage the board.

How It Works

Step 1. Select Boards:
Select the boards that you will need for the project.

Step 2. Connect Components:
Solder the components to each board
Tip: Segment your project into blocks to take advantage of pre-routed traces on board; this minimizes the number of wires needed on each board.

Step3. Connect Boards:
Using the mechanical bridges connect the boards together. You will notice two slots on each side of the board. The bridge has two notched that fit the slots. **(Figure 1-4).**

Step 4. Connect Wires:
Connect the wires. We have included wires and male headers in our combination and multi-packs. Use the headers to connect the wires.

Step 5. Test and make modifications:
Modifications can be made simply as needed.

Tip : Glue can be used to make the board more rigid. Do this only after you are satisfied with the final configuration (See figure 3.)

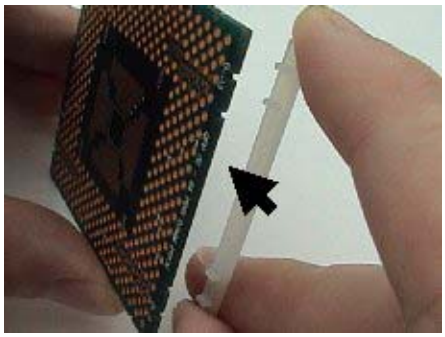


Figure1.
Mechanical bridge being connected to a board.

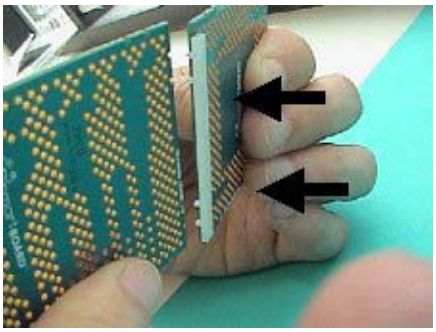


Figure 2.
2nd board connected to the 1st board via mechanical bridge.

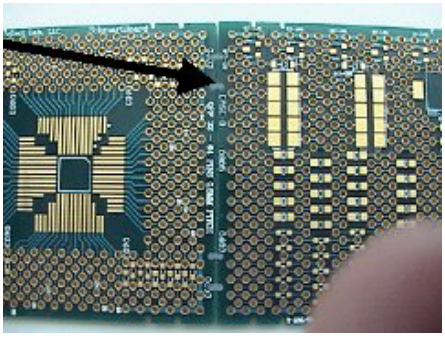


Figure 3.
Top view of 2 boards connected via a mechanical bridge. (A dab of Glue such as KrazyGlue can be put on the top of the board where the mechanical bridge shows through to make board rigid.)

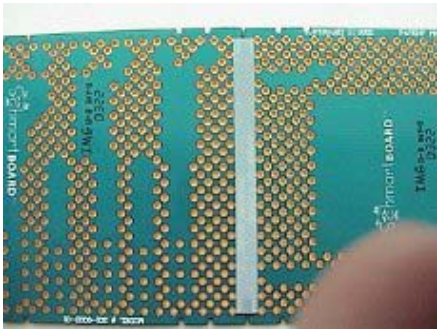


Figure 4.
Bottom view of 2 boards connected via a mechanical bridge.

Through Hole / Discrete SMT / PLCC Packages / SO Packages

Through Hole

Discrete Surface Mount

201-0001-01

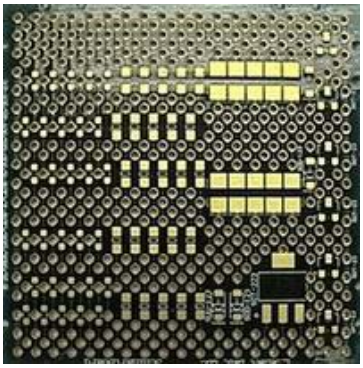
T.H. 0.1" Spacing With 0.05" Offset, 2" X 2" Grid
100% support of the thru hole components with the 0.1" spacing pitch. 12 ground holes are connected a copper plane on the bottom side.
Components such as capacitor, resistor, diode, inductor, crystal, headers, jumpers, fuse, transistors, voltage regulators, DIP IC 70 pins or sockets, DIP switches, relay, RJ11, RJ45 connector…etc. are supported.

910-0001-01
10 Pack of part number 201-0001-01

201-0002-01

T.H. 2mm Spacing With 1mm Offset
100% support of the thru hole components with the 0.1" spacing pitch. 12 ground holes are connected a copper plane on the bottom side.

910-0002-01
10 Pack of part number 201-0002-01

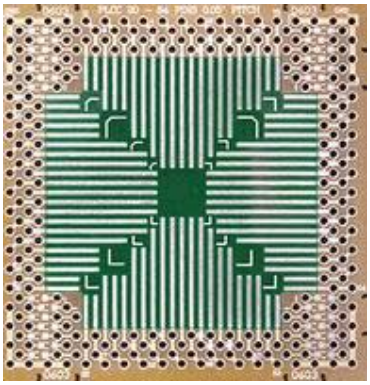


201-0003-01

0603/0805/1206/SOD-123/sot-23/SOT-223 2" X 2" Grid
Support up to max. 55 pcs. of 0603 package, max.35 pcs. of 0805 package, 4 pcs. of SOD-123 package, 1 pcs.of SOT-223 package, 6 pcs. of SOT-23 package, 10 pcs. Of CASE-B package and some thru hole passive components. 12 ground holes are connected a copper plane on the bottom side.

910-0003-01
10 Pack of part number 201-0003-01

PLCC Packages



202-0012-01

PLCC, 20 - 84 Pins 0.05" Pitch, 2" X 2" Grid
Support up to 84 pins PLCC package IC with 0.05" pitch, 26 pcs. of 0603 package, and some thru hole passive components. 14 ground holes are connected a copper plane on the bottom side.

912-0012-01
10 Pack of part number 202-0012-01

SO Packages

202-0004-01

SO, 4 - 56 Pins, 2" X 2" Grid
Support up to 56 pins SO package IC with 0.050" pitch, 20 pcs. Of 0603 package and some thru hole passive components. 12 ground holes are connected a copper plane on the bottom side.

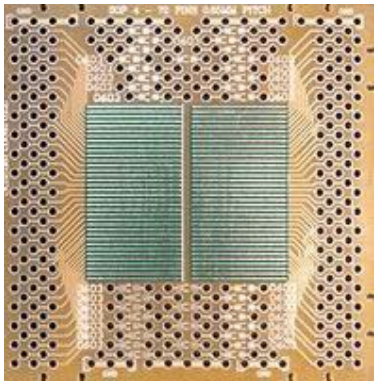
912-0004-01
10 Pack of part number 202-0004-01

SOP Packages

202-0005-01

SOP, 4 - 72 Pins 0.8mm Pitch, 2" X 2" Grid
Support up to 72 pins
SO, SOP, QSOP, SSOP, TSSOP, PSSOP package IC with 0.8mm pitch, 30 pcs. of 0603 package and some thru hole passive components. 14 ground holes are connected a copper plane on the bottom side.

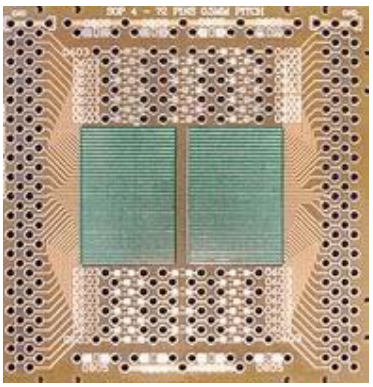
912-0005-01
10 Pack of part number 202-0005-01



202-0006-01

SOP, 4 - 72 Pins 0.65mm Pitch, 2" X 2" Grid
Support up to 72 pins
SO, SOP, QSOP, SSOP, TSSOP, PSSOP package IC with 0.65mm pitch, 37 pcs. of 0603 package and some thru hole passive components. 14 ground holes are connected a copper plane on the bottom side.

912-0006-01
10 Pack of part number 202-0006-01



202-0007-01

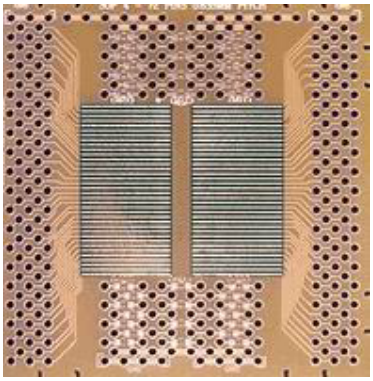
SOP, 4 - 72 Pins 0.5mm Pitch, 2" X 2" Grid
Support up to 72 pins
SO, SOP, QSOP, SSOP, TSSOP, PSSOP package IC with 0.5mm pitch, 43 pcs. of 0603 package, 8 pcs. of 0805 package and some thru hole passive components. 6 ground holes are connected a copper plane on the bottom side.

912-0007-01
10 Pack of part number 202-0007-01

202-0008-01

SOP, 4 - 72 Pins 0.4mm Pitch, 2" X 2" Grid
Support up to 72 pins
SO, SOP, QSOP, SSOP, TSSOP, PSSOP package IC with 0.4mm pitch, 23 pcs. of 0603 package, 10 pcs. of 0805 package and some thru hole passive components. 10 ground holes are connected a copper plane on the bottom side.

912-0008-01
10 Pack of part number 202-0008-01

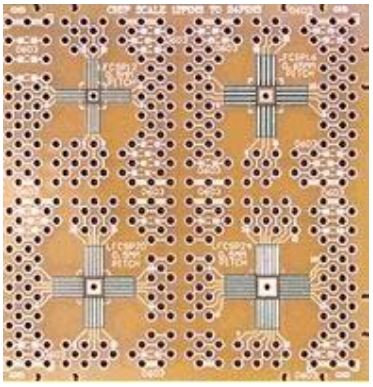


202-0013-01

SOP, 4 - 72 Pins 0.5mm Pitch, 2" X 2" Grid
Support up to 72 pins
SO, SOP, QSOP, SSOP, TSSOP, PSSOP package IC with 0.635mm pitch, 23 pieces of 0603 package, 10 pieces of 0805 package and some though-hole passive components.

912-0013-01
10 Pack of part number 202-0013-01

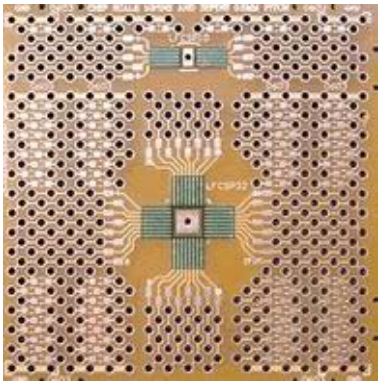
Chip Scale Packages



202-0016-01

12 Pins to 24 Pins .5mm & .65mm

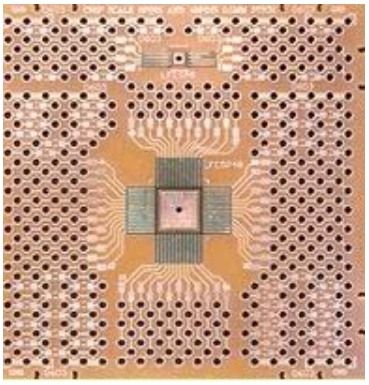
912-0016-01
10 Pack of part number 202-0016-01



202-0017-01

10 Pins and 32 pins, .5mm Pitch

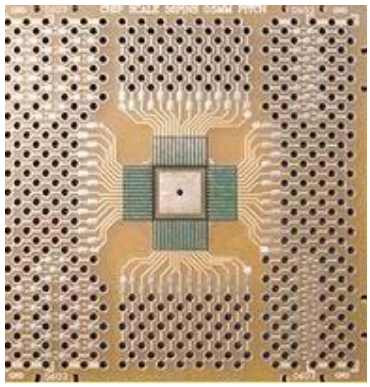
912-0017-01
10 Pack of part number 202-0017-01



202-0018-01

8 and 48 pin 0.5mm Pitch

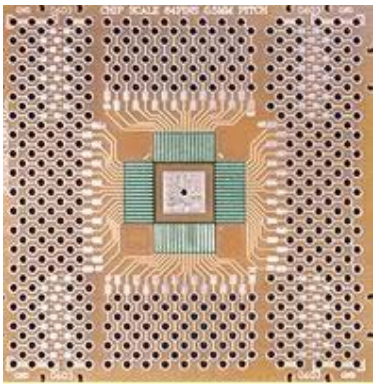
912-0018-01
10 Pack of part number 202-0018-01



202-0019-01

56 Pins, 0.5mm Pitch

912-0019-01
10 Pack of part number 202-0012-01

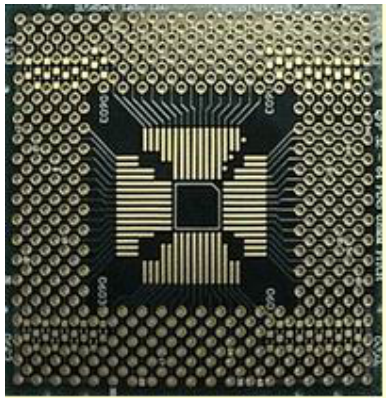


202-0020-01

64 Pins, 0.5mm Pitch

912-0020-01
10 Pack of part number 202-0020-01

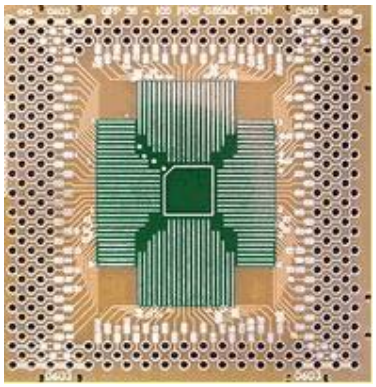
QFP Packages



202-0009-02

QFP, 32 - 64 Pins 0.8mm Pitch, 2" X 2" Grid
Support up to 64 pins QFP, TQFP, PQFP package IC with 0.8mm pitch, 38 pcs. of 0603 package, and some thru hole passive components. 22 ground holes are connected a copper plane on the bottom side.

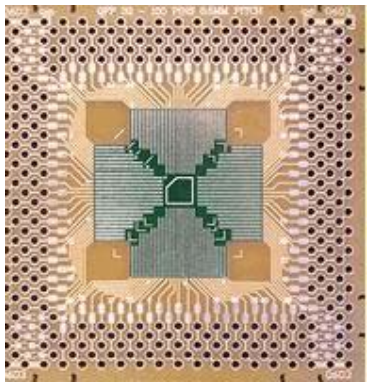
912-0009-02
10 Pack of part number 202-0009-01



202-0010-02

QFP, 36-100 Pins 0.65mm Pitch, 2" X 2" Grid
Support 36-100 pins QFP, TQFP, PQFP package IC with 0.65mm pitch, 10 pcs. of 0603 package, and some thru hole passive components. 9 ground holes are connected a copper plane on the bottom side.

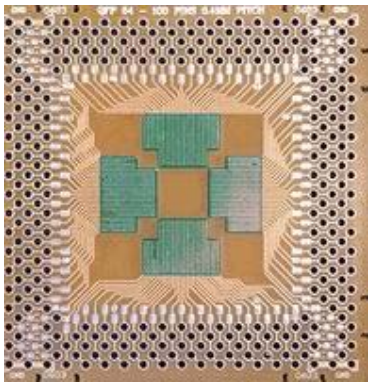
912-0010-02
10 Pack of part number 202-0010-02



202-0011-01

QFP, 32 - 100 Pins 0.5mm Pitch, 2" X 2" Grid
Support up to 100 pins QFP, TQFP, PQFP package IC with 0.5mm pitch, 20 pcs. of 0603 package, and some thru hole passive components. 6 ground holes are connected a copper plane on the bottom side.

912-0011-01
10 Pack of part number 202-0011-01

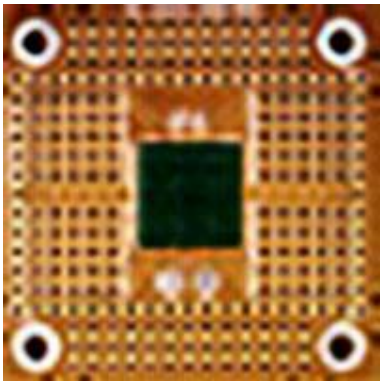


202-0014-01

QFP, 64-100 Pins, 0.4mm Pitch
Support 64-100 pins QFP, TQFP, PQFP package IC with 0.4mm pitch, 20 pieces of 0603 package, and some though-hole passive components. 6 ground holes are connected a copper plane on the bottom side.

912-0014-01
10 Pack of part number 202-0014-01

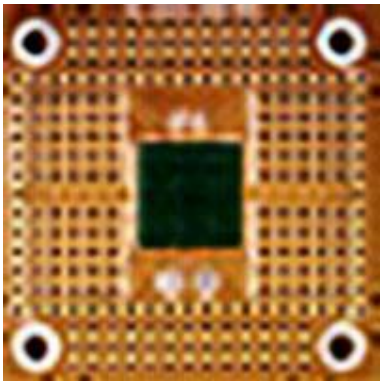
BGA Packages



202-0021-01

BGA 100 Pins, 1.27mm Pitch
Support 100 pins BGA package IC with 1.27mm pitch, and some thru holes passive components.

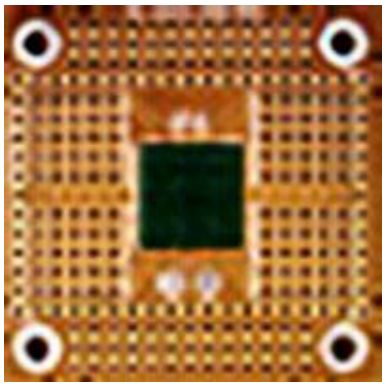
912-0021-01
10 Pack of part number 202-0021-01



202-0023-01

BGA 100 Pins, .8mm Pitch
Support 100 pins BGA package IC with 0.8mm pitch, and some thru holes passive components.

912-0023-01
10 Pack of part number 202-0023-01



202-0024-01

BGA 100 Pincs, .75mm Pitch
Support 100 pins BGA package IC with 0.75mm pitch, and some thru hole passive components.

912-0024-01
10 Pack of part number 202-0024-01

I/O & Power

201-0100-01

T.H. Power And Gnd Strip 0.5" X 2" Grid
Connect the power source or ground.

201-0101-01

T.H. Drive Power Conn And Power Jack 0.5" X 2" Grid
Support 1 piece drive power connector and 1 piece power jack. 12 ground holes are connected a copper plane on the bottom side.

201-0102-01

T.H. ATX Power Connector 0.5" X 2" Grid
Support 1 piece ATX 20 pins power connector. 10 ground holes are connected a copper plane on the bottom side.

201-0103-01

T.H. Audio/RCA Jack 0.5" X 2" Grid
Support 2 RCA jack and 1 3.5mm phone jack. 4 ground holes are connected a copper plane on the bottom side.

201-0104-01

T.H. DB 25 Connector 0.5" X 2" Grid
Support DSUB connector from 9 to 25 pins. 4 ground holes are connected a copper plane on the bottom side.

201-0105-01

T.H. JTAG 20 Pins 0.1" SP And IEEE1394 Connector 0.5" X 2" Grid
Support 1 JTAG connector 20 pins and 1 IEEE1394 connector. 4 ground holes are connected a copper plane on the bottom side.

201-0106-01

T.H. RGB 15 Pins Connector 0.5" X 2" Grid
Support 1 RGB 15 pins connector. 4 ground holes are connected a copper plane on the bottom side.

201-0107-01

T.H. Switches T.H. 0.5" X 2" Grid
Support 4 different type of switches. 12 ground holes are connected a copper plane on the bottom side.

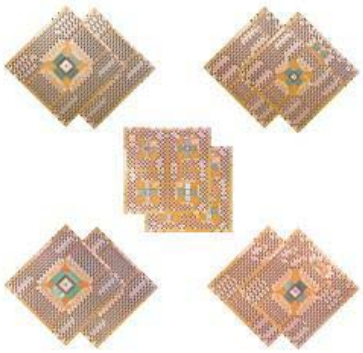
201-0108-01

T.H. RJ11/45 AND USB Connector 0.5" X 2" Grid
Support 1 RJ11 OR RJ45 connector and 1 USB Type B connector. 8 ground holes are connected a copper plane on the bottom side.

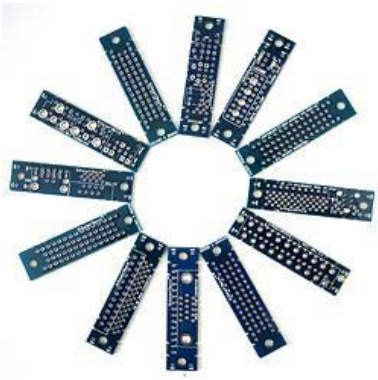
Combo Packages

900-0100-01
SO Design Kit
202-0004-01 (Qty 2)
202-0005-01 (Qty 2)
202-0006-01 (Qty 2)
202-0007-01 (Qty 2)
202-0008-01 (Qty 2)
202-0013-01 (Qty 2)

900-0101-01
QFP/PLCC Design Kit
202-0009-02 (Qty 2)
202-0010-02 (Qty 2)
202-0011-01 (Qty 2)
202-0012-01 (Qty 2)
202-0014-01 (Qty 2)



900-0102-01
Chip Scale Design Kit
202-0016-01 (Qty2)
202-0017-01 (Qty2)
202-0018-01 (Qty2)
202-0019-01 (Qty2)
202-0020-01 (Qty2)



900-0027-01
I/O Combo Pack
Qty 1 of each
201-0101-01, 201-0102-01,
201-0103-01, 201-0104-01,
201-0105-01, 201-0106-01,
201-0107-01, 201-0108-01,
Qty 4 of 201-0100-01

Combo

900-0001-01
Combo Pack 1
Qty 1 of each
201-0001-01, 201-0002-01, 201-0003-01,
201-0004-01, 201-0005-01, 201-0006-01,
201-0007-01, 201-0008-01, 201-0009-01,
201-0010-02, 201-0011-01, 201-0012-01,
201-0101-01, 201-0102-01, 201-0103-01,
201-0104-01, 201-0105-01, 201-0106-01,
201-0107-01, 201-0108-01,
Qty 1 of 920-0003-01, 920-0004-01
Qty 4 of 201-0100-01