QFP Quad Flat package

Quad Flat package (QFP) describes a far common case form in electronics for integrated circuits. The connections of *(pin)* are on the four sides of the flat case. QFP gets soldered as components surface put together on circuit boards.

As a rule, 32 to 200 of pin have QFP, which are ordered in a grid *(Pitch)* from 0.4 to 1 mm. The Small rather becomes out line package (SOP or SOIC) used at less pins at which those of pin are ordered to two opposite edges. For larger pin numbers this often finds ball Grid Array (BGA) application at which the whole underside serves as an exchange area.

A direct predecessor of the QFP was the Plastic Leaded chip carrier (PLCC) which uses a longer pin distance of 1.27 mm (50 mil) and a clear larger case height.

Variants

44-pole QFP (a microprocessor Z80)

Bumpered Quad Flat package Microprocessor Cx486SLC)

Starting out from the basic form, a flat rectangular (often square) body with pin's to all four sides, a variety of forms is used. These are usually only different in pin number, Pitch, measurements and used materials (to improve around the thermal qualities) most. A variant changed considerably is the *Bumpered Quad Flat package* (Engl. bumper = bumper) at which here prominent "noses" shall protect that one of pin from mechanical damages at the four corners before the component gets one soldered.