

Application Guidelines for Interconnecting Devices with Large Ground Pads such as QFN

This guideline applies to single PariPoser contact and does not apply to contactors incorporating PariProbe or flex structure.

PariPoser material consists of ~90% of silicone, which behaves physically like a liquid (it cannot be compressed). When pressure is applied, it needs "to flow" into gaps between the actual contact pads.

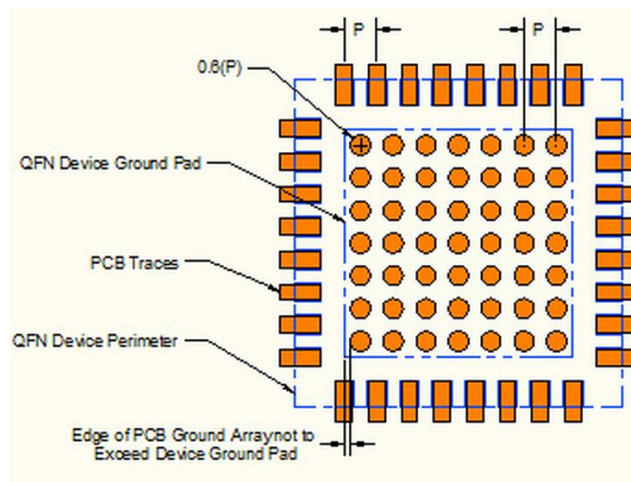
Optimum interconnection between a device with large ground pads and a PCB is achieved with segmentation of the matching ground pad on the PCB.

The general rules for designing the PCB are:

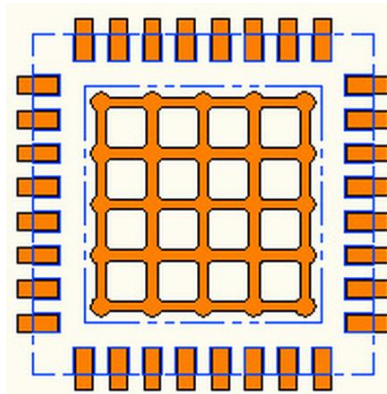
- Each ground pad should have same general area as surrounding contact pads.
- Maximize open area between pads with goal of ~2/3 of total area being open space. This provides adequate volume for incompressible silicone to flow into.
- Gap between ground pads and contact pads must meet PariPoser minimum design rule of 40% of pitch.
- Ground pad height should be same as contact pad height.

Shown below are four examples of how this can be done:

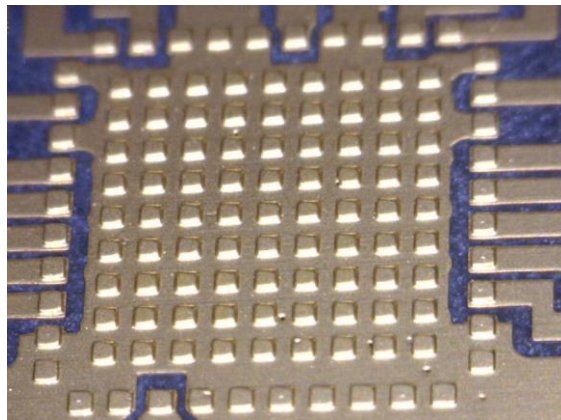
- Using an array of surface pads with the same general size and pitch as the device contacts.



- Introducing a lattice structure which can provide the same effect but perhaps assures better electrical uniformity.



- Button plating elevated structures over an even ground plane.



- This example shows one further option, in case the PCB design is not accessible any more. The PariPoser material will have punched holes under the ground plane. The material flows into the punched areas once pressure is applied. Best is to mount the material on a frame

