

Axiom Electronics PCBA Design for Manufacturability Guidelines

Section: 10.5	Revision: B	Revision Date: 12/12/18
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DFM Subject: Fiducial Size and Location

DFM Requirement:

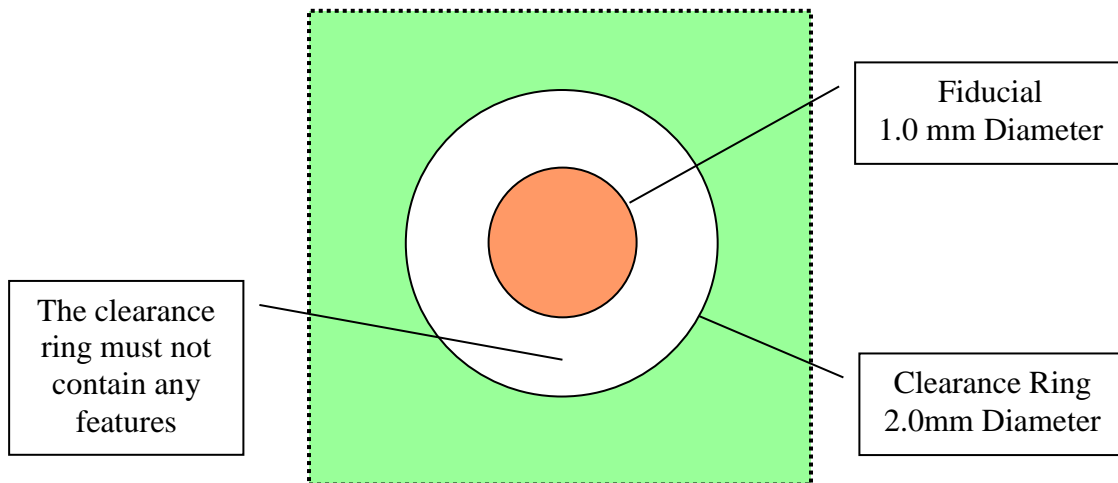
- Two global Fiducials are required on each populated side of the PCB. Fiducials shall be located in opposite corners on the longest diagonal.
- Two local Fiducials are desirable for any device with a lead pitch of $\leq 0.5\text{mm}$ (0.020").
- Fiducials shall not be located in the 5mm (0.200") edge clearance zone (see Section 10.2).

Each Fiducial shall be a solid circle 1.0mm (0.040") in diameter. A clearance ring around the Fiducial shall be 2.0mm (0.080") in diameter (minimum). The area inside the clearance ring must not contain any features such as circuitry, patterns, markings, holes or soldermask.

DFM Impact:

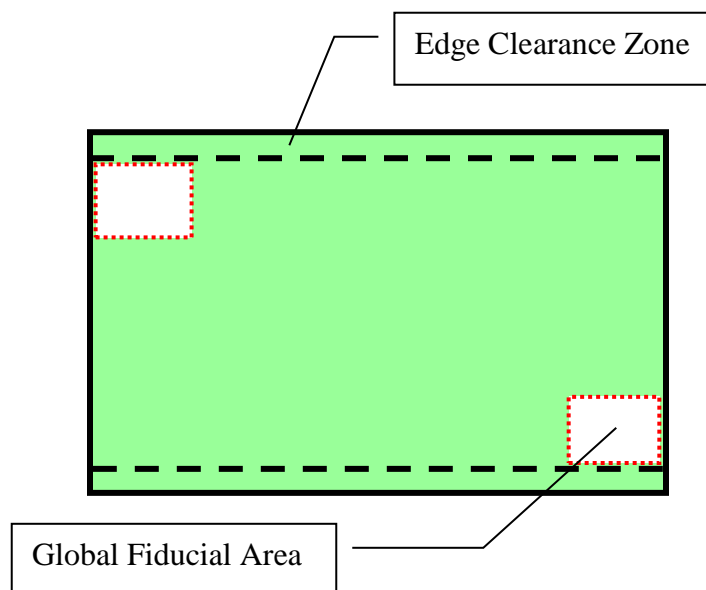
Fiducials are used to locate the PCB during assembly and inspection. Without them it is virtually impossible to manufacture a PCBA, especially if the PCBA contains fine pitch devices and BGAs. The requirements in this section follow the SMEMA 3.1 Fiducial Mark Standard. All SMT equipment suppliers use this standard.

DFM Details: Fiducial Size



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DFM Details: Global Fiducial Location



DFM Details: Local Fiducial Location

