

# Axiom Electronics PCBA Design for Manufacturability Guidelines

Section: 10.22

Revision: B

Revision Date: 12/4/18

DFM Subject: BGA Inspection and Rework Clearance

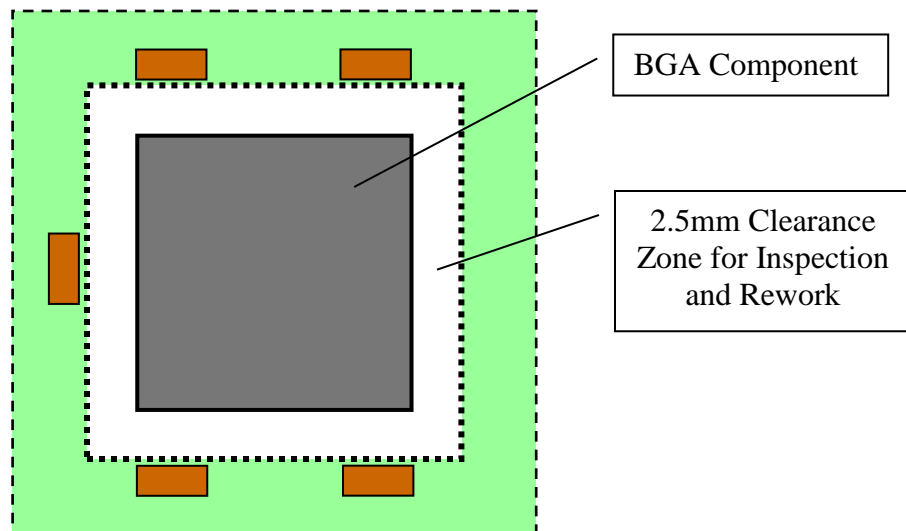
## DFM Requirement:

BGA components shall have a clearance zone of 2.5mm (0.100") around all four sides.

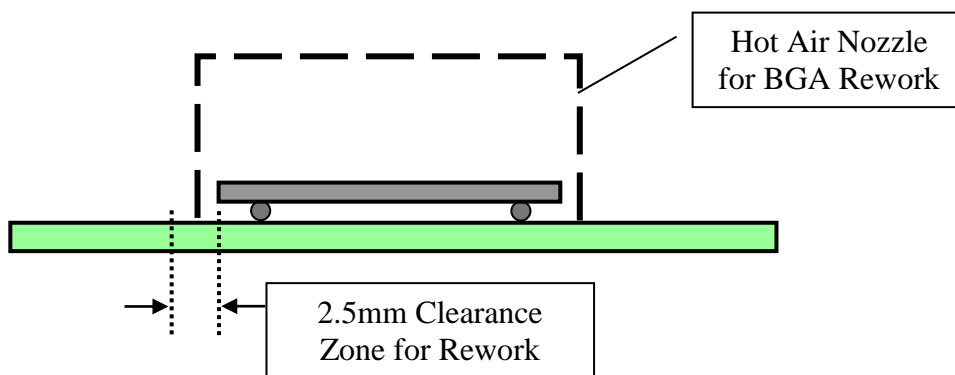
## DFM Impact:

The 2.5mm clearance zone is required for optical solder joint inspection (i.e. Ersascope) and rework. Without this clearance zone it is impossible to inspect or rework BGAs without removing adjacent components.

DFM Details: BGA Inspection and Rework Clearance



## DFM Details: BGA Rework Nozzle



## DFM Details: BGA Solder Joint Inspection



Optical BGA Inspection (Ersascope)