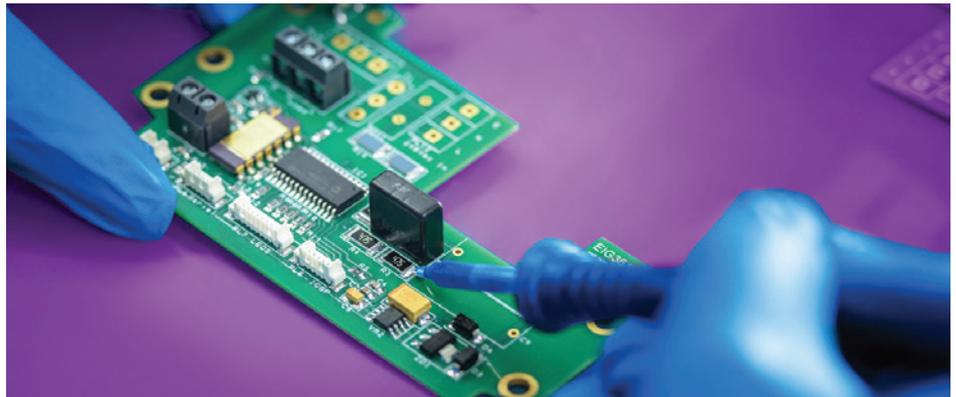


## Top 10 Questions to Ask Your PCA Contract Manufacturer

A contract manufacturer (CM) must have a very clear understanding of design, components, and processes in order to identify and correct the underlying causes of printed circuit board assembly (PCA) defects and to achieve high process yields. At Paramit we believe that anything that can be measured can be improved. We have found that methodical data collection in combination with rigorous root cause analysis leads to a dramatic reduction in the opportunities for latent failures. An added benefit of our focus on metrics is that Paramit is always prepared for an FDA audit should a field failure occur.

Based on our experience, Paramit has created a list of top 10 questions every PCA contract manufacturer should be able to answer. We can answer all these questions and provide the documentation to back it up. Can your CM do the same?

1. Does the CM perform a Design for Manufacturability (DFM) review with a sophisticated tool such as Valor?
2. If the CM does perform a DFM review, do they forward the results to you or do they review the results in detail with your design team, discussing priorities, impacts, and quantitative options?
3. Does the CM perform process validation on PCAs?
4. What is the yield of the CM's solder printing process? How is it measured?
5. What are the parameters for insufficient and excess solder during screen printing?
6. What is the defect per million opportunity (DPMO) yield of the CM's



7. What is the level of mechanical integrity for the ball grid array (BGA) solder joints the CM produces? How do they measure it?
8. What is the first pass integrated circuit test (ICT) yield?
9. What is the first pass functional test yield?
10. What is the scrap rate for PCAs and how do they charge the customer for discarded materials?

### For More Information

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