

ECIA PUBLICATION

The Role of Distribution in Providing Production Part Approval Process (PPAP) Reports

An Industry Position Paper

Electronic Components Industry Association
1111 Alderman Drive, Suite 400
Alpharetta, GA 30005-4175
678-393-9990/678-393-9998 fax
www.ecianow.org

INTRODUCTION

A growing number of industries are relying on the Advanced Product Qualification Process (APQP) for design qualification and establishing process capability. The APQP process includes:

1. Plan and Define Program
2. Product Design and Development Verification
3. Process Design and Development Verification
4. Product and Process Validation
5. Production, Assessment, and Corrective Action

Production Part Approval Process (PPAP) is an output of the Product and Process Validation phase of the APQP.

The APQP is a process that includes 5 phases that are meant to be completed by a manufacturer prior to the start of production. The PPAP process is designed to demonstrate the component manufacturer has design and production processes in place to meet the customer's requirements.

There are 19 elements of the PPAP that are all specific to the component manufacturer's processes and results. Some elements of the PPAP include:

- Fabrication process flow diagram
- Dimensional results
- Records of material/performance tests
- Sample inspection reports
- Qualified laboratory documentation
- Sample production parts
- Special tools

The Authorized Distributor does not generate any of the elements of the PPAP.

BACKGROUND

APQP and PPAP were initially developed by the Automotive Industry in the late 1980's to ensure the product design and development met all requirements. Since then industries such as medical, industrial, and military, defense and aerospace have adopted similar processes that follow the APQP and PPAP methodology.

These industries purchase electronic components through the distribution supply channel and are asking the Authorized Electronic Component Distributor to provide PPAP

documentation. The OCM is responsible for the design and manufacture of the product and generates the APQP and PPAP documents.

RECOMMENDATION

The Original Component Manufacturer (OCM) generates the APQP and PPAP documentation. The Electronic Component Distributors can pass through APQP and PPAP customer requests to the component manufacturer and provide the manufacture's process, documentation, and final report to the customer.