Qplace

Eliminating Tooling Time and Errors

Reduce Tooling time from hours to 15 minutes

Do your SMT line operators spend hours manually editing insertion and BOM files from many sources and formats?
Do you experience expensive placement errors due to manual preparation of placement files?

The need for automated tooling

In today's electronic manufacturing world, there is no room for errors or wasted time. SMT lines face increasingly complex PCBs with more and more placements. As a result, the time spent on preparing placements files increases and so does the risk of making placement errors. This problem is further intensified by the large diversity of products produced by SMT lines and due to the fact that the inputs for the tooling process arrive from a range of sources in a myriad of formats. Manual tooling can take hours if not days, depending on PCB complexity and quality of data. Errors in the tooling process lead to costly placement mistakes and result in even more expensive repair work. In this environment, an automated tooling mechanism that saves time and reduces errors is essential.

Qplace

Qplace provides a simple and easy to use solution for the tooling process. Customers using Qplace report that tooling time is reduced from hours to less than 30 minutes and even less, depending on PCB complexity. Tooling errors are reduced by 70%-80%.

QPlace enables quick tooling of SMT placement machines by combining the Bill of Materials and Insertion files from different sources and formats, It validates the data and automatically creates all the necessary inputs required by the SMT machine.

QPlace also includes the "locator" - a graphical representation of the placement plan (PCB and its components) that allows the operator to view and modify component placements.

Features

- Process Insertion files (XYZ) in any format
- Process BOM files in any format (TXT, XLS, DOC etc)
- Merging XYZ and BOM data while verifying data integrity
- Identification of components from BOM that are missing from Insertion data
- Matching components to SMT machine's shape library
- Automatic generation of SMT machine setup files (Siemens, Mydata, Fuji, Samsung, Phillips etc).
- "Locator" – A graphical display of the placement plan based on SMT machine shape library
- Locator allows for component search by catalogue number, shape and designation.
- Ability to change placement angle
- Ability to perform Offline tooling
- Seamless file upload – upload files to the SMT machine without halting machine work (for models that have line computers).
- Support for hybrid SMT lines – One tooling for all machine types
- Cluster support –Generation of placement data for clustered PCBs. Qplace performs all offset calculations for the series of nested PCBs automatically based on single PCB data.

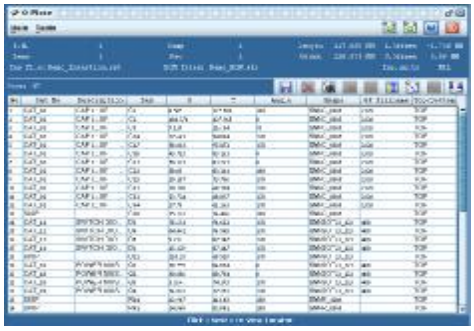

Figure 1: Merged Insertion and BOM data

Figure2: Graphical display of placement plan

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