

## **i3 Electronics Laminations Optimization**

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**Abstract:** i3 Electronics designs, manufactures, and tests printed circuit boards (PCBs), offering an entire package for PCB fabrication. They receive daily orders from a diverse set of customers whose PCB dimensions require different equipment used in the laminations process. The laminations process has limited tooling and often underutilizes both resources and time. Orders can differ by hot press cycle time, priority, materials, panel size, and required tooling, but there is not an effective method for determining the order of parts going from the lay-up station to the hot press. The goal for this project was to increase the utilization of the laminations hot presses by creating a robust, adaptable scheduling tool. This was achieved by establishing a method of prioritizing orders and implementing an Excel program scheduling tool. This tool can be used to maximize the efficiency of the laminations production schedule.

*Keywords:* Printed Circuit Boards, Fabrication, Laminations, Utilization, Production, Maximizing, Scheduling