

# Application of System Simulation to SMT Process Configuration in Flexible Circuit Board Production

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## ABSTRACT

Due to the fast development in wearable and high-end consumer electrical product, there are more and more request for flexible circuit board. It is very important to improve the process in order to raise the production capacity to satisfy the market requirement and increase enterprise competitiveness.

This study builds a simulation model for a flexible circuit board manufacture system and identifies the bottleneck through simulation experiment. Alternative plans are proposed to improve the bottleneck and their performance are evaluated.

In this study, we identify the bottleneck of the process when there are unexpected shutdowns of manufacture equipment. To consider the long term utilization rate and cost, the best improvement plan is to replace the bottleneck equipment with new equipment.

Key words: Flexsim 、 Simulation 、 Flexible circuit board 、 Surface-mount technolog