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## A Framework of Autonomous System Prognostics and Production Planning for the Electronic Packaging Industry Under Uncertainties of Supply Chain Shortages and System Breakdowns

## Z. Wang

Department of Systems Science and Industrial Engineering State University of New York, Binghamton Binghamton, NY 13902, USA

Corresponding author's Email: zimowang@binghamton.edu

**Abstract:** We present the systematic analytic approach that allows characterizations of the uncertainties within the manufacturing system and autonomous real-time control. The implementation of this framework has been tested on electronic packaging production lines and shown significant improvements in downtime reductions and throughput rate improvements.

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