System analysis of 3D-MID technologies

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Some implemented concepts and perspective approaches to 3D-placement of SMT-components on molded interconnect devices are described. Approaches to solving the problem of component placement on surfaces random oriented to vertical axis of placement head movement are considered. Constructions of serial manufactured and designed as a prototype standalone equipment, production lines and tools intended for electronic devices production based on 3D-MID technology are presented. Described concepts are compared and recommendations on equipment choice are given for different manufacturing environments.

Keywords: *electronic assembly, 3D-MID technology, pick-and-place equipment, assembly robot, production line, interconnect device, assembly tooling.*

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