

Laser Marking Systems for PCBs

High-Precision Laser Marking Solutions

PCB marking—including etching codes, numbers and logos onto circuit boards—is necessary for inventory control and tracking. Many conventional methods, however, are time consuming and require additional consumables and cleaning processes. Our fully automated PCB laser marking systems overcome these challenges by making no direct contact with the circuits, substrate and other sensitive components. They utilize machine vision to recognize fiducials for positioning the mark location while also verifying the barcode and/or characters afterwards. Run our laser systems as reliable, free-standing machines, or add them to your automated manufacturing line to enable real-time data tracking. We can also integrate them into parts handling systems, including stackers and flippers.

SYSTEM FEATURES

- CDRH Class 1 laser marking system
- CO2 laser source
- Depanel boards up to 20" x 18"
- Automatic board entrance/exit slots with safety interlocks
- Standalone or SMT line integration
- Welded steel frame with aluminum paneling
- Windows® operating system with CMS Laser HMI software



WATCH VIDEO



System Advantages

- Mark boards up to 24 by 18 inches
- Low maintenance
- Non-contact marking with machine vision
- No consumables and additives
- Computer-controlled marking content
- Serialization
- Flat panel touch screen
- Meets SMEMA requirements
- Permanent marking on board materials: FR-4, CEM-1, Phenolic paper, ceramic substrate and solder mask

Mechanical Features

- Edge-belt conveyor
- Pneumatic board stop
- PAT light system status indicator
- Welded steel base for mechanical stability
- NEMA 1.2 power distribution
- SMEMA interface with I/O conveyors
- CDRH Class I compliance

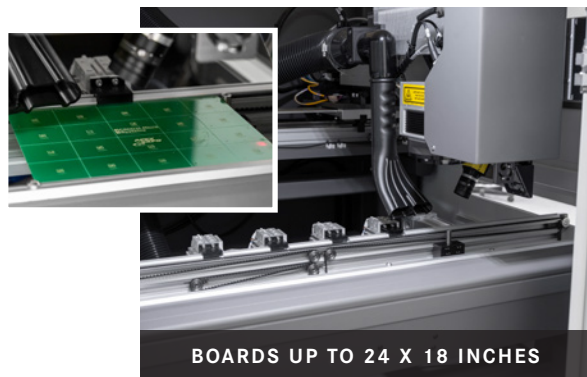
Other Options

- Customer Database integration
- Internal or external board flipper
- Manual or programmable Z-axis
- Integrated reject station
- Other loading configurations—manual, rotary table, etc.
- Ytterbium fiber laser for ceramics and metallic substrates
- Vision system for 2D matrix and linear barcode verification
- Hardened part transports and guides for ceramic substrates
- Automated bulk loading and unloading—upstacker and downstacker

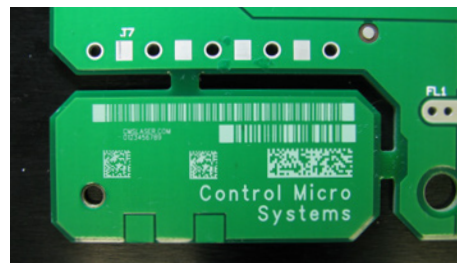


CO2 PCB MARKER

Edge-belt Conveyor
External Board Flipper & Stackers



BOARDS UP TO 24 X 18 INCHES



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CMS Laser follows a policy of continuous product improvement. Specifications and system design are subject to change without notice.



The CMS Laser Systems described in this brochure complies with the requirements of 21 CFR 1040.10 and 1040.11, except for deviations pursuant to laser notice No. 50 dated June 24, 2007. These systems are certified by Control Micro Systems as a Class I laser product or Class IV Compliance with 21 CFR and may be verified by contacting the Office of Compliance at the Center of Devices and Radiological Health. Copyright © 2022 Control Micro Systems, Inc.