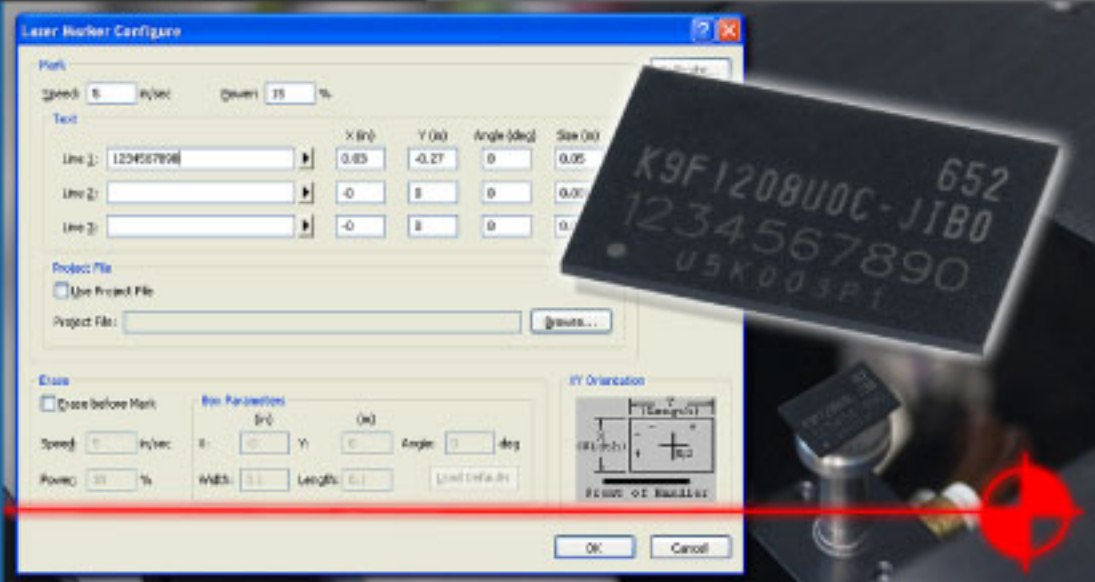


- Mark up to three lines, 15 characters each line
- Alphanumeric text, TrueType fonts and graphics
- Create and modify complex marks with ProLase
- Combine standard text and ProLase job files
- Select font size and orientation
- Set laser speed and power
- Lase real-time information, including date codes and serialization
- Dust control and collection with vacuum and two-stage filtration
- Standard nozzle kit included
- Dual nozzles for high throughput
- Class 1 Laser Unit
- Sealed enclosure safely isolates the laser operation
- Permanent mark supports control and traceability standards
- Robust Synrad laser tube and ScanLab marking head
- Laser tube rated for 1000's of hours resulting in low cost per device
- Teach and test before running a job



## CO<sub>2</sub> Laser Marker

The CO<sub>2</sub> Laser Marker from BPM Microsystems is offered as an integrated part of the 3000 and 4000 series automated programming systems. This optional peripheral is able to quickly and reliably laser mark up to three lines of 15 characters each on many programmable semiconductor devices. Users can easily configure laser settings, character settings and erase\ablate settings, all from the Laser Marker Configure dialog within BPWin.

The CO<sub>2</sub> Laser Marker comes standard with ProLase software by American Laserware to support advanced laser marking capabilities. With its intuitive user interface, users can create and modify ProLase project files to laser complex markings like graphics and TrueType fonts. Save the project file to laser mark future programming jobs or construct a template for a fast and easy job changeover.

## How the CO<sub>2</sub> Laser Marker Works

After programming successfully, the device is moved into the laser chamber on a dual nozzle shuttle. Once the device is presented in the sealed enclosure, the laser firing tube is activated to generate a small, intense laser beam. The beam is projected into the scan head, which controls and positions the beam to form the markings. Within only a few seconds, the lased device is transferred from the laser chamber to an output media station.

## CO<sub>2</sub> Laser Marker Advantage

As more industries require traceability and quality control, BPM Microsystems offers precision, reliability and efficiency with its CO<sub>2</sub> Laser Marker. The robust assembly of the laser marking system is proven to operate for thousands of hours with little maintenance and requires less consumable supplies as compared to labels, making it an economical choice for marking semiconductor devices. Featuring BPWin software and ProLase software, users can easily create designs and modify for a quick job changeover. The BPM Microsystems CO<sub>2</sub> laser marker solution is a natural complement to the automated device programming process.

### SYSTEM REQUIREMENTS

**Input Line Voltage:** 120 -240 VAC  
**Air Pressure:** 80 psi (5.56 bars)

### SOFTWARE

**Software Features:** BPWin with ProLase by American LaserWare Inc.

Configure and save laser settings including speed, power, character attributes, erase, orientation and angle.

Create ProLase job files offline for complex graphics

Browse and select ProLase “.laz” file via BPWin

Combine alphanumeric text, dynamic data and complex job files

Save and recall laser jobs via BPWin Jobmaster

**Object Types:** Vector graphics, bitmap graphics, serial text

### LASER TUBE

**Manufacturer:** SYNRAD Model 48-1S  
**Type:** CO<sub>2</sub>, Digital, All metal RF excited, sealed tube design  
**Output Power:** 10W  
**Rise Time:** <150µsec  
**Wavelength:** 10.2-10.8µm  
**Power Stability:** (cold start) - ±10%  
**Cooling:** Air  
**Life Expectancy:** 48000 Hours

### MARKING HEAD

**Application:** 3000 Series Laser Marker  
**Manufacturer:** SCANLAB SCANgine® 14 - 75mm Focal Length  
**Typical marking speed:** 5 rads/sec  
**Typical positioning speed:** 30 rads/sec  
**Max positioning speed:** 50 rads/sec  
**Repeatability:** 1.65 µm (0.00165 mm)

**Application:** 4000 Series Laser Marker  
**Manufacturer:** SCANLAB SCANgine® 14 - 200mm Focal Length  
**Typical marking speed:** 5 rads/sec  
**Typical positioning speed:** 30 rads/sec  
**Max positioning speed:** 50 rads/sec  
**Repeatability:** 2.20 µm (0.00220 mm)

### LASER MARKING PROCESS

