



NEWS RELEASE

# Lumentum Unveils PicoBlade® Core for Precision Manufacturing Across Wide Range of Applications and Markets

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*Ultrafast laser platform provides high throughput, compact footprint, and configurability across IR, green, and UV wavelengths*

SAN JOSE, Calif.--(BUSINESS WIRE)-- Lumentum Holdings Inc. ("[Lumentum](#)"), a global leader in optical and photonic solutions, today announced the launch of its [PicoBlade® Core](#) ultrafast laser platform, setting a new standard for industrial micromachining. PicoBlade Core combines high-power, mid-power, and low-power configurations across infrared (IR), green, and ultraviolet (UV) wavelengths—all within a single, compact form-factor that is three times lighter and half the size of Lumentum's previous-generation PicoBlade 3. The new product is currently being sampled with select customers and will be showcased at [Laser World of Photonics](#) in Munich at Lumentum's Stand 337, Hall A2 from June 24-27, 2025. Building on decades of innovation in industrial lasers, Lumentum's PicoBlade Core is designed for high-throughput, precision micromachining across a wide range of mass production manufacturing lines including printed circuit board, battery cell, solar cell, and consumer electronics.

"Today's precision manufacturers demand more—faster scalability, better integration, and lower cost of ownership, all without compromising performance," said Matt Philpott, chief commercial officer of the industrial tech platform at Lumentum. "PicoBlade Core embodies that vision, offering a breakthrough platform that will accelerate the next wave of advanced precision manufacturing worldwide."

## Technical Highlights of PicoBlade Core

- **High performance:** Up to 150 watts average power, <12 picosecond pulse width, 8 MHz pulse repetition rate, and 375 microjoules of pulse energy in three different wavelengths, enabling optimized throughput, precision, and quality.
- **Unified form factor:** Consistent, compact architecture across IR, green, and UV models for seamless tool integration.
- **Closed-loop power control:** Ensures outstanding pulse-to-pulse stability and long-term operational reliability.



- **Integrated nonlinear optics:** Internal harmonic generation for flexible, multi-wavelength operation without the need for external modules.
- **Beam shaper:** Onboard beam profiling for optimized material interaction and minimized heat-affected zones.
- **Advanced pulse engineering:** Features AccuTrig™, MegaBurst™, and FlexBurst™ for precise control over energy delivery—enabling cold ablation, high-aspect-ratio drilling, and surface structuring.

"PicoBlade Core delivers high precision, stability, and configurability, setting a new standard for the industry," said Dr. Kirk Price, chief technology officer of the industrial tech platform at Lumentum. "Its fully integrated architecture, multi-wavelength capability, and advanced beam shaping establish a new benchmark for ultrafast industrial processing."

### **Explore PicoBlade Core at Laser World of Photonics**

Visit Hall A2, Stand 337 to meet Lumentum experts and explore how PicoBlade Core is shaping the future of micromachining. Preview product configurations, review application results, and discover how [PicoBlade Core](#) can power next-generation manufacturing initiatives.

### **About Lumentum**

Lumentum (NASDAQ: LITE) is a market-leading designer and manufacturer of innovative optical and photonic products enabling optical networking and laser applications worldwide. Lumentum optical components and subsystems are part of virtually every type of telecom, enterprise, and data center network. Lumentum lasers enable advanced manufacturing techniques and diverse applications, including next-generation 3D sensing capabilities. Lumentum is headquartered in San Jose, California, with R&D, manufacturing, and sales offices worldwide. For more information, visit [www.lumentum.com](http://www.lumentum.com) and follow Lumentum on [Bluesky](#), [Facebook](#), [Instagram](#), [LinkedIn](#), [X](#), and [YouTube](#).

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