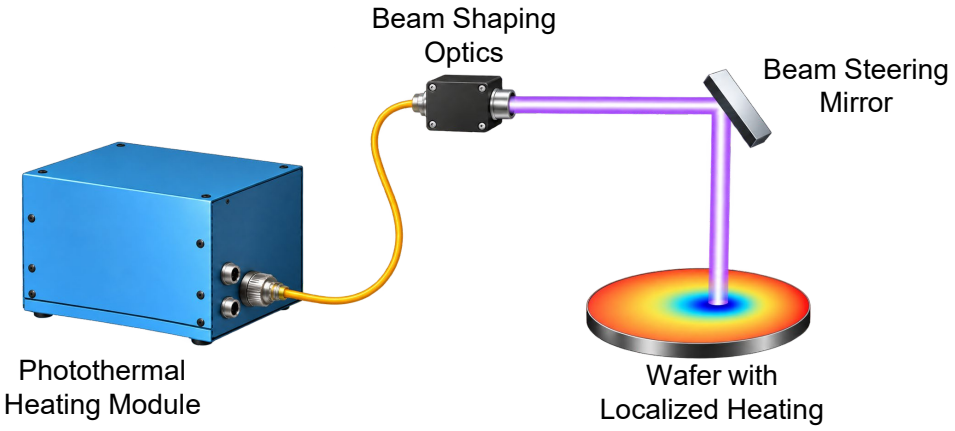
Precision Thermal Control for Semiconductor Processing

Localized Photothermal Heating with Beam Shaping

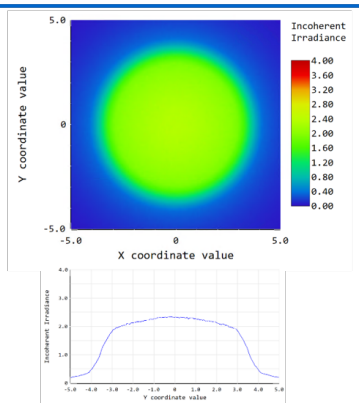
Spatially controlled optical heating for localized temperature modulation and improved thermal uniformity across wafers

Precision Photothermal Control Demonstration System

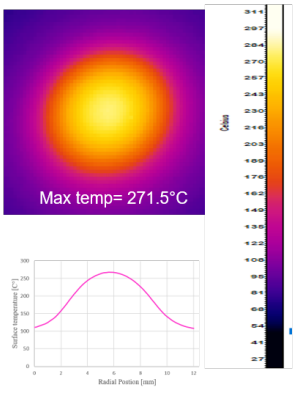
Laser Source	+	Beam Shaping Optics	+	Beam Steering	+	Closed Loop Control
Precision power control		Tailored spatial energy distribution		Targeted energy delivery		Dynamic power adjustment



Laser Beam Profile



Temperature Profile on 6” Silicon Wafer



Beam shaping gives control over the spatial distribution of the delivered optical power

The photothermal regulation system described here is in development. For more information, please reach out to info@energetiq.com.

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