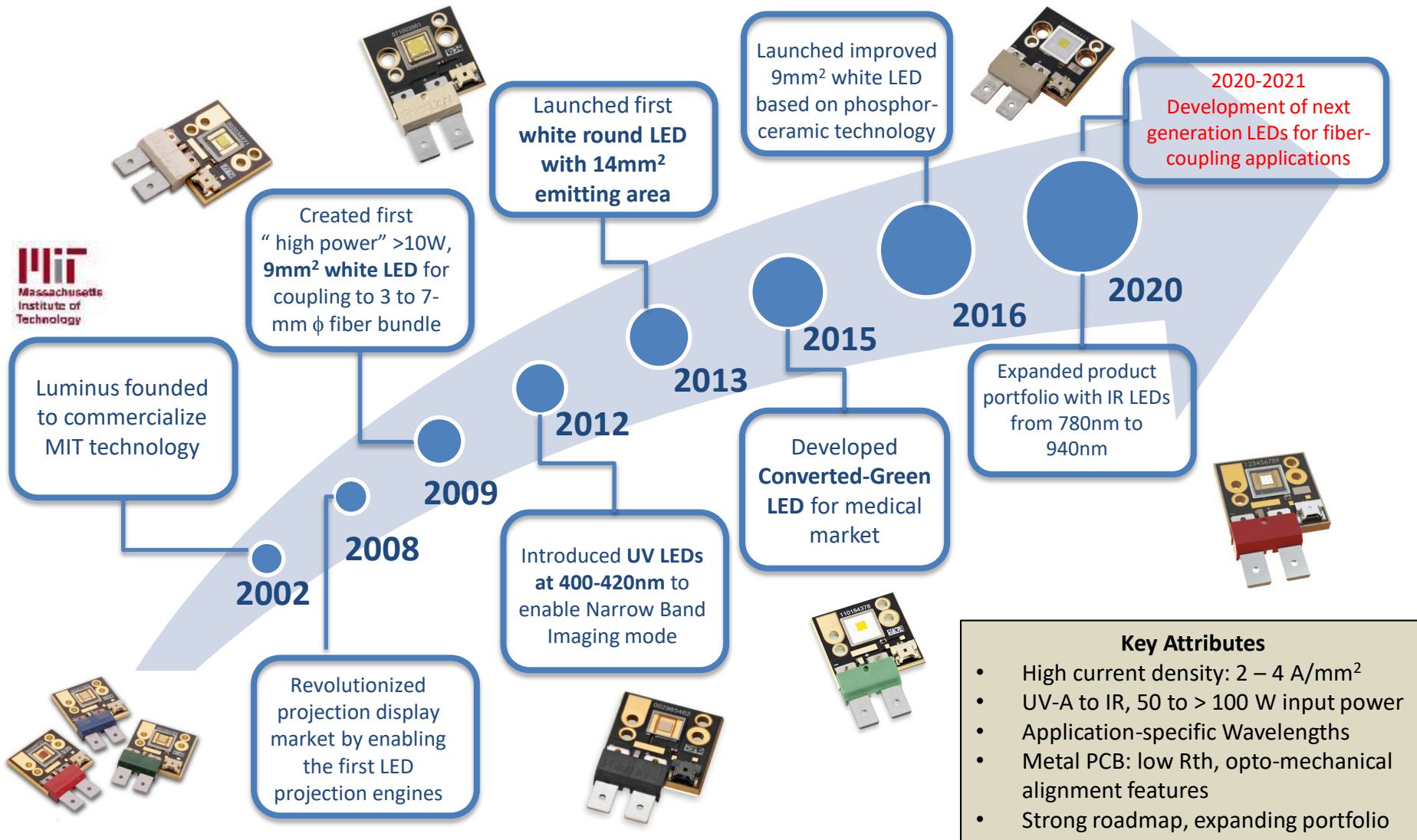




Luminus LEDs for Endoscopy Market

EPIC Online Technology Meeting on Endoscopy

Luminus Milestones in LED Endoscopy

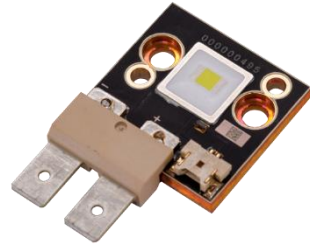


Endoscopy & Microscopy: full spectrum CBT-90 family



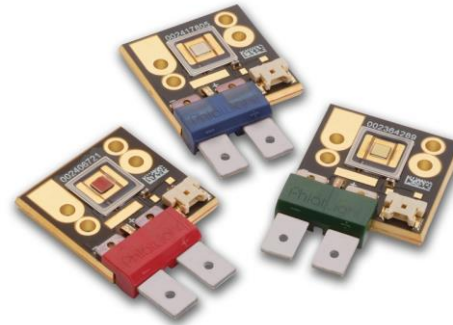
UV 405nm & 415nm

- Optimized for Medical
- > 20W



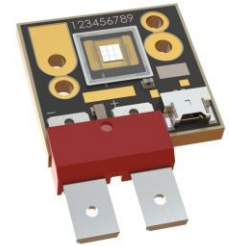
Specialty White

- Standard CRI: > 5,000 lm
- **High CRI > 3,500 lm**
- Exceeds 200- 300W Xenon



Red – Green – Blue & Converted Green

- Green: > 3,000 lm
- Converted Green > 11W
- Red: > 6 W
- Blue: > 15 W



IR & Near IR

- 780, 850 and 940 nm
- 7 – 15W output
- ICG Application

Xenon lamp replacement

IR Laser replacement

- Unified 9 mm² platform simplifies optical design and color combination (more than 10)
- Full digital control with large dynamic range (less than 1A to 36A – CW to PWM)
- Narrowband sources improve efficiency/performance versus subtractive filtering of lamps
- Simplifies manufacturing by managing critical thermal interface and optical alignment issues
- Broad range of applications: Medical, Industrial, Instrumentation...

High power LEDs: design overview

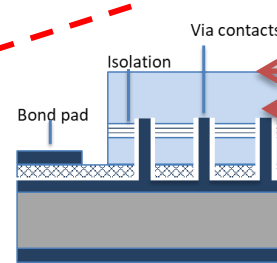
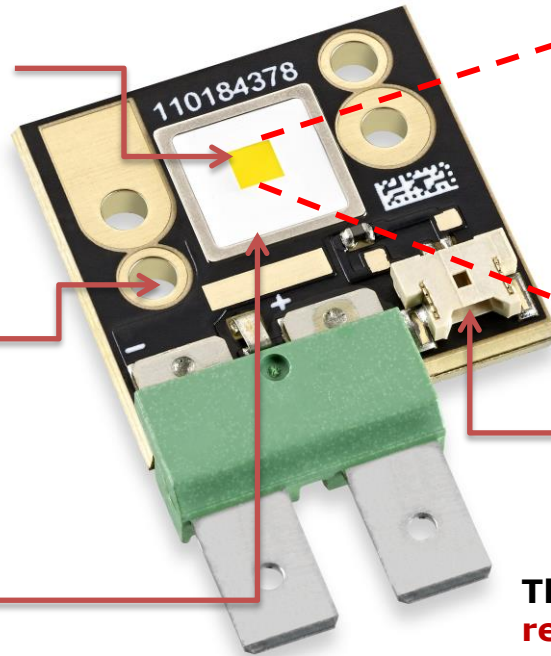
High-Power COB Package

LED Chip Structure

Chip directly attached to Copper PCB for optimum LED cooling

Integrated module with highly precise Optical Alignment

Window-less design for efficient optical coupling



Advanced Patterning for photon extraction

High current density LED design

Light Emitting Layers – Active Region

Back reflector

High thermal conductivity substrate

Thermistor connector for real-time temperature monitoring

From Chip to Package: Optimization of every aspect of the design for high-performance and reliable operation at up to 3 A/mm² CW and 5 A/mm² PWM



Thank you!

For more information you can contact us via:

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