LUMILEDS

Illumination Line Card

A comprehensive portfolio of application optimized LUXEON LEDs and the infinitely configurable Matrix Platform

High Power LEDs - Industry leading flux, efficiency and design flexibility

Product	Description	Features and Benefits
LUXEON FlipChip White	Chip Scale Package for maximum design flexibility	• Up to 145 lumens, 148 lm/W at 350mA, 85°C (4000K 70CRI) • Direct Attach—no wire bonds for high reliability • 1.4mm x 1.4mm and 1.1mm x 1.1mm packages for design flexibility and high packing density
LUXEON M	Brightest, most uniform and highest efficacy multi-die emitter	• High flux >1,100 typical lumens at 700mA, 85°C • Thermal resistance of 1.25°C/W enables flexible system design to optimize for lm/$ and lm/W • Best in Class V_f of 11.2V delivering better lm/W than competitive solutions at similar flux levels
LUXEON MZ	Best combination of brightness, uniformity and luminance, enabling precision light control	• Highest lumen density for ideal optical control in a 600–1,000+ lumen package • High Central Beam Candle Power (CBCP) for portable and spot applications • Tighter beam angles for higher quality retrofit lamps and outdoor applications
LUXEON TX	Extreme efficacy and best performance	• 145+ lm/W, 700mA, 85°C (5000K 70CRI) • 1.5A maximum drive current • Compact, high lumen package for design flexibility and reduced LED count
LUXEON Z ES	Extreme flux density in a micro footprint package for precise optical control	• Micro footprint enables close packaging • No dome design allows precise optical control • *Freedom from Binning* enables color consistency

Mid Power & Low Power LEDs - A broad and expanding selection of high performance, reliable LEDs

Product	Description	Features and Benefits
LUXEON 2835C	Perfected performance, built on a proven legacy for higher output ranges in a 3V package	• 59 lumens at 120mA (4000K 80CRI) • Maximum drive current of 240mA • Hot-color targeted at 85°C and 1/9th ANSI micro-binning for tight color control
	Perfected performance, built on a proven legacy for higher output ranges in a 6V package	• 113 lumens at 120mA (4000K 80CRI) • Maximum drive current of 240mA • Hot-color targeted at 85°C and 1/9th ANSI micro-binning for tight color control
LUXEON 2835E	Perfected performance, built on a proven legacy for lower output ranges in a 6V package	• 54 lumens at 60mA (4000K 80CRI) • Maximum drive current of 120mA • Hot-color targeted at 85°C and 1/9th ANSI micro-binning for tight color control
	Perfected performance, built on a proven legacy for lower output ranges in a 9V package	• 72 lumens at 60mA (2700K 80CRI) • Maximum drive current of 120mA • Hot-color targeted at 85°C and 1/9th ANSI micro-binning for tight color control
LUXEON 3014	Hot-color targeted industry standard package for uniform light	• 156 lm/W at 60mA (4000K 80CRI) • 33 lumens at 100mA max drive for superior value • Enables tight color control
LUXEON 3020	Industry's most compact, highest drive current, 3V mid power LED	• 100 lumens at 240mA (5000K 80CRI) • Lumen package of 10–12 lumens (30mA) delivering uniform, smooth lighting • Industry standard footprint offering compatibility with existing designs
LUXEON 3030 2D	High flux, hot-color targeted 6V package	• 160 lumens at 240mA (6500K 80CRI) • EMC plastic QFN package delivers superior thermal properties and reliability • Tight color control
LUXEON 3030 HV	High flux, hot-color targeted, 24V and 48V mid power packages	• 117 lumens at 17mA, 48V and 34mA, 24V (4000K 80CRI) • Maximum drive current of 30mA for 48V and 60mA for 24V parts • Hot-color targeted at 85°C and 1/9th ANSI micro-binning for tight color control
LUXEON 3535L	3535 footprint LED, delivering the highest efficacy in its class	• 46 lumens at 100mA (4000K 80CRI) • Maximum drive current of 200mA • 1/7th ANSI micro-binning for tight color control • Enables T_s points of 105°C which allows for higher board temperatures
LUXEON 3535L HE	High flux and efficacy in a 3535 package with full range of CCTs and CRIs	• 51 lumens at 100mA (4000K 80CRI) • Maximum drive current of 300mA • 1/7th ANSI micro-binning for tight color control • Enables T_s points of 105°C which allows for higher board temperatures
LUXEON 3535L HE Plus	High flux and highest efficacy in a 3535 package with full range of CCTs and CRIs	• 52 lumens at 100mA (4000K 80CRI) • Maximum drive current of 300mA • 1/7th ANSI micro-binning for tight color control • Enables T_s points of 105°C which allows for higher board temperatures
LUXEON HR30	Superior lumen maintenance and corrosion resistance in punishing conditions	• 121 lumens at 150mA (4000K 80CRI) • Maximum drive current of 240mA • Available in two ESD protection levels 2kV and 8kV

Chip on Board LEDs - High performance array solutions that optimize system designs

Product	Description	Features and Benefits
LUXEON 5258	Multi-die single LED for effective single source lamps, high bay and streetlight applications	• Up to 600 lumens, 150 lm/W at 160mA (4000K 70CRI 24V) • 24V and 96V versions compatible with low cost and high efficiency drivers • 5mm diameter optical source enables good optic design with high lumens in small Light Emitting Surface (LES)
LUXEON CoB Compact Range	Unsurpassed light quality and CBCP due to small LES	• Up to 1,200 lumens, 125 lm/W at 250mA, 85°C (3000K 80CRI) • Available in 80CRI and 90CRI—3 SDCM color definition: *Freedom from Binning* • Highest flux densities with the smallest Light Emitting Surface (LES)
LUXEON CoB Core Range	Uniform, high-efficacy and easy-to-design array	• Multiple lumen packages up to 15,000 lumens with 140 lm/W typical performance (3000K 80CRI) • Available in 80CRI and 90CRI—3 SDCM color definition: *Freedom from Binning* • Up to 4x lower thermal resistance than competition, enabling smaller heatsinks and higher lumens
LUXEON CoB with CrispWhite Technology	Fashion retail lighting that makes an impact, revealing the whitest whites	• One light source for clean, crisp white light, and rich colors • Content activates Fluorescent Whitening Agents (FWAs) in fabrics to mimic actual daylight • Can be used with standard LUXEON CoB Ecosystem

Color LEDs - A complete color spectrum for a variety of architecture, entertainment and horticulture applications

Product	Description	Features and Benefits
LUXEON 3535L Color Line	Color LEDs that deliver the perfect amount of color you need. No more. No less.	• Same focal length as other LUXEON Color Lines—optically compatible for simpler design cycles • Color palette +3V white portfolio on the same footprint • Unique phosphor converted PC Amber and Lime colors provide unrivaled maximum performance
LUXEON C Color Line	Multiple colors, a single focal length	• Single focal length allows flawless color mixing, maximum optical efficiency and removes halos • Hot tested, 85°C, removes guesswork for designers • Industry's lowest thermal resistance for greater light output and lower heatsink costs • Small symmetrical package enables dense packing
LUXEON FlipChip UV	Unique UV LED enables limitless design freedom	• 400–700mW at 25°C (380–410nm) • Two large pads with 200µ separation for easy die attach and reflow process • 1.0mm^2 package for design flexibility and packing density
LUXEON Rebel Color Line	High flux and efficacy on industry's most widely used color platform	• High flux and efficacy on industry's proven LUXEON Rebel platform • Distinct 105 lumens LUXEON Rebel PC Amber • 1200mW LUXEON Rebel ES Royal Blue offerings at 700mA, 85°C
LUXEON Z Color Line	High power color LEDs in a micro footprint package for ultimate design flexibility	• Small 1.3mm x 1.7mm footprint enables designs for space constrained applications • 440–670nm color selection with White and Violet/UV portfolio available on same footprint • Undomed package allows better optical management through collimated light output
LUXEON Z UV	Superior flux density, efficiency and design freedom—the industry's only micro-package UV LED	• Smallest footprint, 2.2mm^2 SMD enables highest W/cm^2 system, design flexibility • 1A max drive current allows more flux per LED • Up to 45+% WPE leading performance

Matrix Platform - Infinitely configurable LED boards, linear flex and modules using LUXEON LEDs

Product	Description	Features and Benefits
LUXEON XF-3014 CV	Flexible light source distributing uniform light across user selectable lengths	• 112 lumens per 96mm segment with 105 lm/W efficacy at 24V, T_j=50°C • Offered in 80CRI: 2700K, 3000K, 4000K • <2% light output attenuation over 10m length
LUXEON XF-3535L	Illumination grade, flexible LED strips enabling high lumen and high efficacy design	• Up to 5,076 lumens and 157 lm/W typical at 25°C and 100mA/LED • Offered in 80CRI and 90CRI: 2200K–5700K • Ultra-thin, drop-in solution for linear applications such as troffers
LUXEON XR-3020	Linear LED module on an ultra-slim and rigid substrate enabling high efficacy designs	• 1,100 or 2,200 lumen packages at 100mA/LED and 45°C board temperature • Offered in 80CRI and 90CRI: 3000K–5000K • 160 lm/W for maximum light output and low power consumption
LUXEON XR-3535L	Turnkey solution on a rigid substrate enabling high efficacy designs	• Up to 1,502 lumens and 152 lm/W typical at 25°C and 100mA/LED • Offered in 80CRI: 3000K–5000K • Designed for Zhaga compliant assemblies
LUXEON XR-M	Bright, uniform light source in practical, convenient and easy to configure modules	• Typical 3,200–5,300 lumen building blocks with 140 lm/W efficacy at 700mA, T_c=85°C • Offered in 70CRI: 4000K, 5000K, 5700K • MCPCB for efficient heat dissipation and mechanical robustness
LUXEON XR-TX	High performance LED modules with extreme effi-cacy for robust lighting designs	• Typical 3,300 lumens with 140 lm/W efficacy at 700mA and 85°C board temperature • Offered in 70CRI: 4000K–5700K • 150mm x 45mm footprint is designed for use with standard third party optics

Illumination Product Portfolio

Product	Architectural	Downlights	High Bay & Low Bay	Indoor Area Lighting	Lamps	Outdoor	Specialty Lighting	Spotlights
LUXEON 2835C		✓		✓				
LUXEON 2835E		✓		✓				
LUXEON 3014		✓					✓	
LUXEON 3020	✓	✓		✓				
LUXEON 3030 2D		✓	✓					
LUXEON 3030 HV		✓						✓
LUXEON 3535L	✓	✓	✓	✓			✓	
LUXEON 3535L Color Line	✓			✓			✓	
LUXEON 3535L HE			✓	✓				
LUXEON 3535L HE Plus			✓	✓				
LUXEON 5258			✓		✓	✓	✓	✓
LUXEON C Color Line	✓						✓	✓
LUXEON CoB Compact Range	✓	✓					✓	✓
LUXEON CoB Core Range	✓	✓			✓	✓	✓	✓
LUXEON CoB with CrispWhite Technology	✓	✓		✓			✓	✓
LUXEON FlipChip UV								✓
LUXEON FlipChip White		✓		✓				✓
LUXEON HR30				✓		✓		
LUXEON M*	✓				✓	✓		
LUXEON MZ*			✓		✓	✓	✓	✓
LUXEON Rebel Color Line	✓					✓	✓	
LUXEON TX*		✓		✓		✓	✓	
LUXEON XF-3014 CV		✓		✓			✓	
LUXEON XF-3535L				✓			✓	
LUXEON XR-3020	✓			✓				
LUXEON XR-3535L				✓				
LUXEON XR-M	✓		✓			✓		
LUXEON XR-TX	✓		✓			✓		
LUXEON Z Color Line	✓				✓		✓	
LUXEON Z ES*	✓	✓		✓	✓			✓
LUXEON Z UV							✓	

*Product also offered in Royal Blue.

About Lumileds

Lumileds is the global leader in light engine technology. The company develops, manufactures and distributes groundbreaking LEDs and automotive lighting products that shatter the status quo and help customers gain and maintain a competitive edge.

With a rich history of industry "firsts," Lumileds is uniquely positioned to deliver lighting advancements well into the future by maintaining an unwavering focus on quality, innovation and reliability.

To learn more about our portfolio of light engines, visit lumileds.com.

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