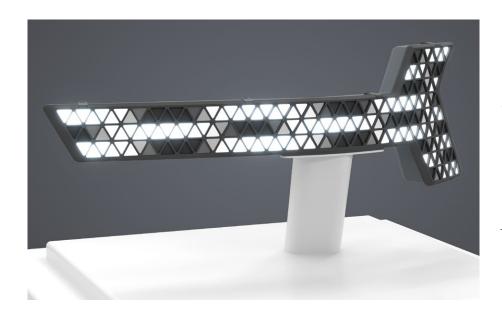






### **LUXEON Versat 2016**

Expanding the horizons of car-body lighting



Stylish, animated car-body lighting is gaining traction currently.
Regulated functions are complemented by communication features and elements of customization and personalization. Increasing numbers of LEDs are required, emphasizing tailored light output and smaller package sizes.

Joining the LUXEON Versat product family, the new 2016 miniaturized package meets those application needs.

### FEATURES AND BENEFITS

- LUXEON Versat 2016 package line with new, industry-smallest AEC-Q qualified footprint for car-body lighting
- Direct and phosphor-converted emitters available in a wide variety of color and power options for full range of signaling applications
- LED-emission spectral tuning (on request) to match transmission of foils as used in car-body and grille illumination for superior color control
- Additional color proliferations possible to meet styling and design requirements for car-body lighting

#### **PRIMARY APPLICATIONS**

- Car-body lighting
- Daytime running light
- Front signaling
- Rear signaling
- Communication functions
- Interior lighting

# Easing the system implementation of dynamic high-pixel count signature lighting





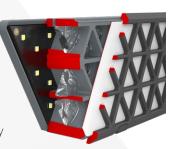




- Distinctive signature luminaire for DRL and position, following car curvature
- 192 LUXEON Versat 2016 30 CW, individually addressable for full dynamics
- 3 planar FR4 boards with different orientations, maximum angle of 50° towards outboard

## Optical architecture and performance

- Optimized collimator lens giving uniform look to each triangle
- Diffuse film cover for smooth appearance and wide bundle
- Triangular cells oriented to follow car-body contours enable smooth lit appearance from multiple viewing angles
- 25 lm per LED at 75 mA full driver current
- 29 cd peak intensity per LED in smooth, wide bundle
- Approximately 60% of front-facing triangles needed for good DRL function



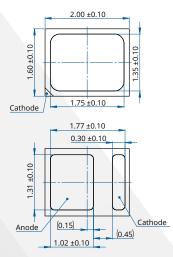
## Electronic architecture and PCB integration

- Design locates all electronic components on three FR4 PCBs
- Automotive-grade driver IC: 12-channel constant current supply of max. 75 mA per channel
- 16 drivers in one bus allow operation of up to 192 LEDs



### LUXEON Versat 2016 product portfolio

| Product                    |          | Color              | CCT<br>(K) | CRI | Test current (mA) | Max. current<br>(mA) | Min. flux<br>@ 25 °C (lm) |
|----------------------------|----------|--------------------|------------|-----|-------------------|----------------------|---------------------------|
| LUXEON Versat 2016 30 CW   | <b>e</b> | Cool White         | 5850       | 70  | 30                | 90                   | 6                         |
| LUXEON Versat 2016 60 CW   | <b>(</b> | Cool White         | 5850       | 70  | 60                | 200                  | 21                        |
| LUXEON Versat 2016 60 PCA  |          | PC Amber           | NA         | NA  | 60                | 200                  | 12                        |
| LUXEON Versat 2016 60 3570 | <b>e</b> | Warm White         | 3500       | 70  | 60                | 200                  | 18                        |
| LUXEON Versat 2016 60 3090 | <b>e</b> | Warm White         | 3000       | 90  | 60                | 200                  | 15                        |
| LUXEON Versat 2016 60 2790 | <b>6</b> | Warm White         | 2700       | 90  | 60                | 200                  | 15                        |
| LUXEON Versat 2016 50 LR   | 0        | Long Red [630 nm]  | NA         | NA  | 50                | 90                   | 5.1                       |
| LUXEON Versat 2016 50 SR   | 0        | Super Red [635 nm] | NA         | NA  | 50                | 90                   | 5.1                       |
|                            |          |                    |            |     |                   |                      |                           |



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