

Lamina BL-4000 EZ-Connect Board and Wiring Harness

New!

Lamina LED Light Engines

As the market leader in the development and manufacture of super-bright LED arrays, Lamina brings solid state lighting to applications which until now were only possible with traditional lighting sources.

Lamina's LED arrays are manufactured by combining high brightness LEDs from industry-leading LED manufacturers with Lamina's proprietary packaging technology, multilayer Low Temperature Co-Fired Ceramic on Metal (LTCC-M). LTCC-M is a breakthrough in thermal performance for LED packaging technology, a key factor in determining LED life and reliability. Unmatched thermal performance coupled with package interconnectivity allows Lamina to densely cluster multiple LEDs to achieve exceptionally high luminous intensity in very small footprints. Lamina's LED light engines are available in white, RGB and monochrome, from 1W to 100W, and also in custom packages up to 1000W.

Lamina LED Light engines provide:

- **HIGH LUMINOUS FLUX IN SMALL FOOTPRINT**
- **SUPERIOR THERMAL PERFORMANCE FOR IMPROVED RELIABILITY**
- **LONG LIFE AND HIGH LUMEN MAINTENANCE**
- **SUSTAINABLE DESIGN – LIGHT SOURCES ARE ROHS COMPLIANT¹**
- **CUSTOM SIZES AND SHAPES AVAILABLE**

BL-4000 EZ-Connect Board and Wiring Harness

Lamina now offers a printed wire board that makes prototyping easy with Lamina's BL-4000 products. The EZConnect board is designed for use with all BL-4000 products and has mounting holes for Lamina's optic and a built-in connector. A mating color coded wiring harness is also available. EZConnect boards are sold separately, or soldered to BL-4000 RGB+, Warm White and 5500K White light engines.

Lamina BL-4000 EZConnect Board and Wiring harness advantages:

- **FITS ALL BL-4000 PRODUCTS**
- **MOUNTING HOLES FOR LAMINA OPTICS**
- **STANDARD AMP CONNECTOR**
- **MATING COLOR CODED WIRING HARNESS AVAILABLE**

1. ALL LAMINA LIGHT ENGINES ARE ROHS COMPLIANT. LAMINA IS CURRENTLY CONVERTING THE EZ-CONNECT BOARDS TO BE ROHS COMPLIANT.



LAMINA LED LIGHT ENGINE TYPICAL APPLICATIONS

ARCHITECTURAL LIGHTING

- DECORATIVE AND ACCENT
- COVE AND UNDER-SHELF
- GARDEN AND PATHWAY
- STEP LIGHTS

ARCHITAINMENT

DISPLAY BACKLIGHTING

SIGNAGE & CHANNEL LETTERS

SIGNALS

- AIRFIELD TAXIWAY
- TRAFFIC
- SECURITY
- BEACONS
- RAIL

MACHINE VISION

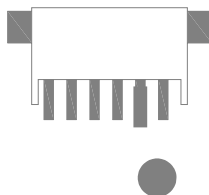
MEDICAL

To see how you can realize all these design benefits, to request a sample, or to speak with an engineer about your design, contact Lamina at 800.808.5822 or 609.265.1401 or visit www.laminaceramics.com.

Mechanical Dimensions

Dimensions for the EZ-Connect boards (without BL-4000 light engines attached) and for the mating wiring harness:

BL-4000 EZConnect Board – P/N EZ-4000-0357



Lens and holder assembly (sold separately)

BL-4000 RGB+ Light engine attached to EZ-Connect Board along with optic, optic holder, and wiring harness

Assembled BL-4000 Module

Note: Optic is sold attached to the optic holder.

Soldering EZ-Connect Board to Lamina's Light Engines

The recommended method for attaching Lamina's light engines to the EZ-Connect boards can be found in Lamina's application note "Soldering BL-2000s and BL-4000s to Printed Wire Boards", on Lamina's website, www.LaminaCeramics.com.

Assembly of Optics

The BL-4000 optic holders are designed to be inserted into the four corner holes in Lamina's EZ-Connect board. The EZ-Connect board is designed to align the optic to the center of the light engine and allow the optic to rest on the light engine surface.

Attachment of the optic holder to the EZ-Connect board is performed using epoxy or a silicone based adhesive. Recommended epoxy is Loc-Tite OM-50/81501 two-part, room temperature curing epoxy, or an equivalent. Adhesive should be applied to the optic holder legs and/or to the heat sink surface, below the holes in the EZ-Connect board. Care should be taken to prevent adhesive from coming in contact with the clear optic surfaces. In addition, to prevent damage to the LED light engine, avoid contact or pressure on the light engine domes. More information on attachment of the lens to the light engine can be found in the optic attachment application note on Lamina's web or pres

To see how you can realize all these design benefits, to request a sample, or to speak with an engineer about your design, contact Lamina at 800.808.5822 or 609.265.1401 or visit www.laminaceramics.com.