Cree XLamp XM-L LED Kit

Cree has developed the XLamp XM-L LED - the industry's highest performing, single die white lighting-class LED. The XLamp delivers 1000 lumens with 100 lumens per Watt efficacy.

Typical applications for the XM-L LED are high bay and high-output area lighting. The XM-L is also the ideal choice for lighting applications where high light output and maximum efficacy are required, such as outdoor, high and low bay, stadium lighting and high end portable lighting.



For evaluation purposes we have put together an evaluation kit, which consists of:

- XM-L LED on a starboard, in cool white CCT: 8300K 280lm @ 700mA test
- XP LDU2430S 700-WD LED driver, DC-DC, 24W, wired
- LEDIL lenses for spot and wide angle giving you the option of light output depending on application
- Finally to keep it all cool an Aavid Thermalloy heatsink

NOTE: You will need a DC power supply and some soldering is required to operate this kit Ordering Information:

Mftrs. Part Number	Farnell	Newark	element14	Description
XML KIT	2059066	<u>67T1879</u>	<u>2059066</u>	CREE XML LIGHTING KIT

Instructions

• Solder the driver wires to the star board and connect to the power supply as below, the white wire is not needed unless dimming is required.



LDU Connections				
LDU24-WD	Function			
1 (Black)	-Vin: -DC supply			
2 (White)	Control			
8 (Blue)	-Vout: LED cathode connection			
9 (Yellow)	+Vout: LED anode connection			
16 (Red)	+Vin: +DC supply			

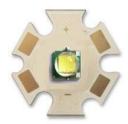
Note for the LDU24-WD: Do not connect Pin 1 (-Vin) to Pin 8 (-Vout).

- Peel back the adhesive pad of the heat sink and attach the star board
- Peel off the adhesive cover from the lens and attach lens to the star board over the top of the led
- · Turn on your power supply and enjoy the light

Cree: XLamp XM-L LEDs

Product Description:

The XLamp XM-L LED is the industry's highest performing, single die white lighting-class LED. The XLamp XM-L is 20% more efficient than the XLamp XP-G at the same current, and can deliver 1000 lumens with 100 lumens per Watt efficacy.



Key Features:

- Maximum drive current: 3000mA
 Low thermal resistance: 2.5°C/W
- Maximum junction temperature: 150°C
- Viewing angle: 125°
- · Available in warm, neutral and cool white
- ANSI-compatible chromaticity bins
- Unlimited floor life at ≤ 30°C/85% RH
- Reflow solderable JEDEC J-STD-020C
- · Electrically neutral thermal path

Applications:

- · LED light bulbs
- · Outdoor lighting and indoor lighting
- Solar-powered lighting

Featured Links:

- Cree on element14
- What's New

Ordering Information:

Mftrs. Part Number	Farnell	Newark	element14	Description
XMLAWT-00-0000-0000T6053-STAR	<u>1876355</u>	<u>25T0885</u>	<u>1876355</u>	LED Module, Star, Cool White, 280LM

XP Power: LDU2430S700-WD LED Driver

The <u>LDU2430S700-WD LED Driver</u> comes with 7V - 30V input voltage, 2V - 28V output voltage, 700mA output current, 95% efficiency and 20W output power.

Key Features:

- Constant current output
- LED drive current up to 700mA
- . LED strings from 2V to 57V
- PWM and analogue dimming control
- High efficiency up to 95%
- Open or short circuit LED protection
- 3 Year Warranty

Featured Links:

XP POWER on element14



Ordering Information:

Mftrs. Part Number	Farnell	Newark	element14	Description
LDU2430S700-WD	<u>1961528</u>	<u>34T4707</u>	<u>1961528</u>	LED Driver, 28V DC, 20W

LEDIL: LED Lenses

The <u>FA11908_CXM_SS: LED lens</u> is designed for the XML-L LED. It is a spot lens - 21.6mm diameter, 13mm height and square style.

The <u>FA11942_CXM_W: LED lens</u> is also designed for the XM-L LED. It is a wide angle - 21.6mm diameter, 13mm height and square style.

Key Features:

- Tape mounting saves board space by eliminating mounting holes
- Convenient peel and stick assembly is quick and clean
- Pin fin array allows omni-directional airflow to maximize heat dissipation



Featured Links:

LEDIL on element14

Ordering Information:

Mftrs. Part Number	Farnell	Newark	element14	Description
FA11908_CXM_SS	<u>1901798</u>	<u>55T6290</u>	<u>1901798</u>	Cree XML, 21mm Optic, Spot, Taped
FA11942_CXM_W	<u>1901804</u>	55T6299	<u>1901804</u>	Cree XML, 21mm Optic, Wide, Taped

374024B00032G: Heatsink

The <u>374024B00032G heatsink</u> comes with 0.50 thermal resistance, acrylic adhesive, white color, aluminium carrier and meets RoHS 9000.

Key Features:

- Tape mounting saves board space by eliminating mounting holes
- Convenient peel and stick assembly is quick and clean
- Pin fin array allows omni-directional airflow to maximize heat dissipation

Ordering Information:

Mftrs. Part Number	Farnell	Newark	element14	Description
374024B00032G	<u>1773310</u>	51R8097	<u>1773310</u>	Heat Sink BGA 23 x 23 x 10 with Pad

