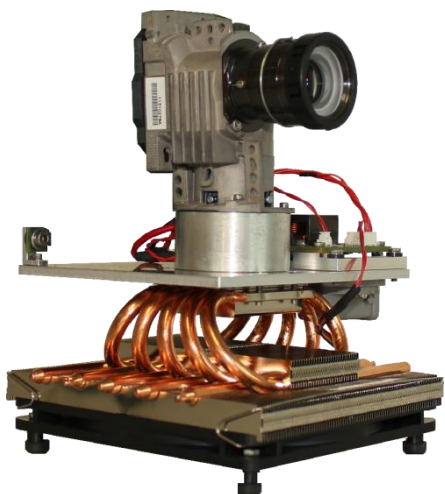


STAR-065 EVM

Monochrome LED light engines



The STAR-065 EVM monochrome LED light engines are designed for use with DLP® LightCrafter™6500 evaluation modules from Texas Instruments.

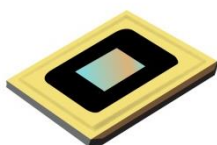
The DLP6500 chipset features a 1080p DLP chip and the DLPC900 controller which is basically different from the high-performance Discovery™4100 products. The application potential of DLPC900 is focused on two typical use cases:

- video mode: streaming data from a video source (DVI port) at video rate
- pattern mode: display of a static set of preloaded patterns

ViALUX offers two monochrome LED light engines. Both units are accessories for the DLP® LightCrafter™6500 EVMs:

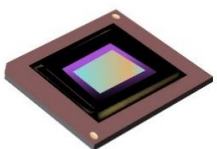
- STAR-065 EVM Type A for use with DLP®LightCrafter™6500 Type A
- STAR-065 EVM s600 for use with DLP®LightCrafter™6500 s600

The two light engines differ in the DMD package and mounting concept.



The Type A package is equivalent to the Discovery™ chipset package and enables

- UV operation at 405 nm
- Light power densities up to 25W/cm²
- Stable mechanical mount for metrology use



The s600 package is a cost-efficient model for visible use at >420 nm wavelength and for moderate light power density.

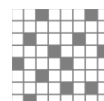
The STAR-065 EVM monochrome LED light engines are based upon the STAR CORE optics and integrate a high-power BigChip™ LED including the ViALUX digital LED driver for up to 24 A.

Following wavelength selection is available:

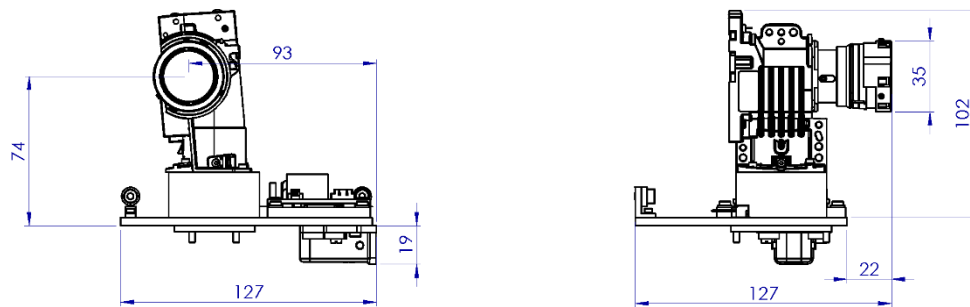
- λ [nm] = 462 / 528 / 613 - 624 / white
- λ [nm] = 405 for Type A package only

The ViALUX LED driver of the STAR-065 EVM is controlled by I²C commands for setting the LED current and reading the LED thermistor output. Sample script files are provided for instant use with the DLP® LightCrafter™ 6500 GUI.

The light output is typically 35% less compared to the STAR-07 due to the smaller active mirror area of the 0.65" DMD with 16:9 aspect ratio. Please compare STAR-07 specifications.



Dimensions of STAR-065 EVM [mm] (without cooler)



Power supply of STAR-065 EVM

STAR-065 EVM comes with its own power supply designed for the ViALUX LED driver with a maximum output of 24A DC.

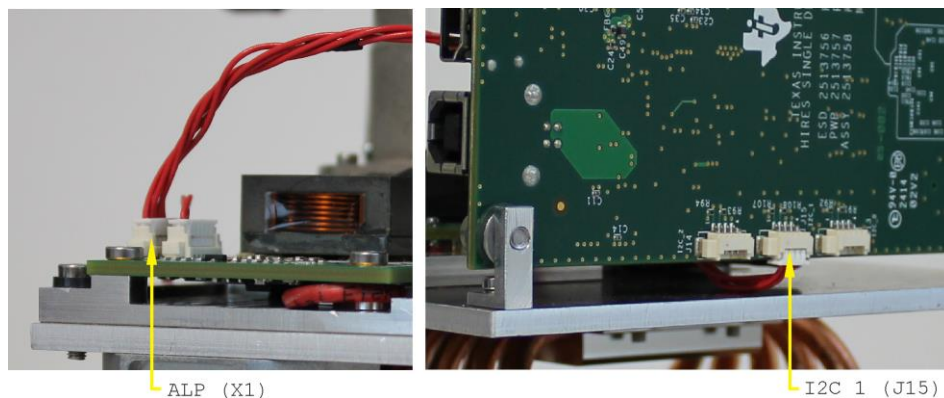
Specifications: Input 100-240V ~ 2A, 50-60Hz
Output 19V / 7.89A

Connecting STAR-065 EVM

STAR-065 EVM is prepared for attaching the Texas Instruments DLP® LightCrafter™ 6500 evaluation module both mechanically and electrically. The only electrical connection is the I²C control cable included in the delivery. It connects the ALP (X1) connector of the LED driver with the I2C_1 (J15) connector on the main board of the LightCrafter™ evaluation module.

LED driver

LightCrafter™ evaluation module



Controlling LED Power

STAR-065 EVM LED power can be controlled using the LightCrafter™ evaluation module GUI. Corresponding Script Files are provided.

Please download from: www.vialux.de/support/download/STAR-065_HLD_Scripts.zip

