DLP® LightCommander™ Development Kit

DLP LightCommander is a highly versatile and easy-to-use development kit for incorporating DLP technology into light processing applications. The modular architecture includes an optical light engine, industry standard interfaces, and application software to expedite system development requiring high-speed spatial light modulation.

A powerful tool for innovation, DLP LightCommander contains a high performance light engine comprised of a core optical module and an LED illumination module. With solid state visible and infrared light sources provided, this modular light engine allows users to easily integrate DLP technology into a multitude of light processing applications.

At the heart of DLP technology is the Digital Micromirror Device (DMD). DLP LightCommander includes PC-based software to control the DMD micromirror timing for programmable, variable speed spatial light modulation. The user-defined control includes binary patterns, 8-bit gray scale, and video projection mode.

The DLP LightCommander takes DLP development to a new level. The fully self-contained kit benefits developers looking to

DLP LightCommander Development Kit

quickly jump-start their system designs. And the versatility of the modular kit architecture accelerates optical, electronic, and system software development.
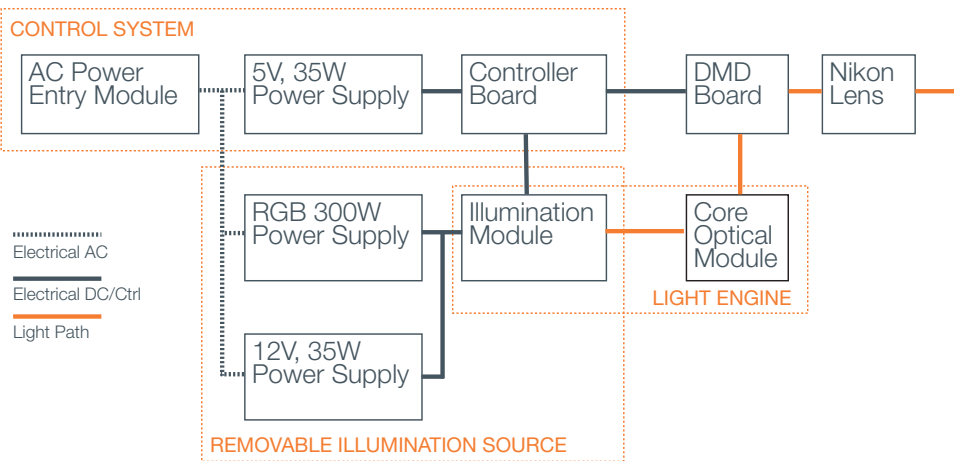
DLP LightCommander is an easy way to explore and create light steering solutions.

DLP LightCommander :: Features:

+ DMD Board
+ Controller Board
+ XGA (1024 x 768) resolution DMD
+ Core DLP optical module
+ Solid state illumination module (RGB LED & IR LED)
+ Nikon AF NIKKOR 50mm f/1.8D lens
+ PC-based control software
+ DLP micromirror control (binary patterns, 8-bit gray scale, & video projection mode)
+ Power supplies included

LOGIC™

DLP® LightCommander™ System Block Diagram

CONTROL SYSTEM

| AC Power Entry Module | → | 5V, 35W Power Supply | → | Controller Board | | DMD Board | | Nikon Lens |

Legend:
- Electrical AC
- Electrical DC/Ctrl
- Light Path

LIGHT ENGINE

RGB 300W Power Supply → Illumination Module → Core Optical Module

12V, 35W Power Supply

REMOVABLE ILLUMINATION SOURCE

DLP LightCommander Development Kit Ordering Information

Model Number	Recommended Resale
DLP-LC-DLP5500-10R	$2499

The DLP LightCommander includes both the DMD Board and Controller Board.

Controller Board Ordering Information

Model Number
DLP-CB-DLPC200-10R

DMD Board Ordering Information

Model Number
DLP-DMD-DLP5500-10R

The Controller Board is available for purchase in production volumes—contact Logic Distributors.
The DMD Board is available through a Support Contract with Logic—contact Logic Sales for details.

Product Features

Modules
+ Core DLP optical module
+ Solid state illumination module

DMD Board Device
+ DLP5500 (0.55 XGA Series 450 DMD)

Controller Board Devices
+ DLPC200 (DLP5500 Controller)
+ DLPA200 (DMD Analog Driver)

Controller Board External Interfaces
+ Three user sync ports
+ HDMI input
+ USB control input

Controller Board Internal Interfaces
+ Parallel RGB 8-bit interface
+ SPI serial interface
+ LED control interface

Optical Interfaces & Mounts
+ Interchangeable lens mount (Nikon F-Mount)
+ Defined illumination interface
+ Flexible optical mount options

Lens
+ Nikon AF NIKKOR 50mm f/1.8D lens

Power
+ Three internal power supplies

Cables
+ USB A to mini-B cable
+ DVI to HDMI cable
+ Power cables

Software
+ PC-based control software

Mechanical
+ 241(w) x 463(l) x 179(h) mm
+ 9.5 kg

RoHS Compliant

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