

DLP Digital Micromirror Device 3.3V 150kHz 419-Pin BGA

Bulk



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: BGA-419

Product Type: Drivers

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The DLPC350 digital controller is required for reliable operation of the DLP4500 or DLP4500NIR digital micromirror device (DMD). The DLPC350 controller provides a convenient, multi-functional interface between user electronics and the DMD, enabling high-speed pattern rates, along with LED control and data formatting for multiple input formats.

The DLPC350 controller provides input and output trigger signals for synchronizing displayed patterns with a camera, sensor, or other peripherals. The controller enables integration into small-form-factor and low-cost light steering applications. Applications include 3D scanning or metrology systems, spectrometers, interactive displays, chemical analyzers, medical instruments, and other end equipment that requires spatial light modulation (light steering and patterning).

The DLPC350 controller is the data formatting and DMD controlling ASIC for either the visible or near-infrared (NIR) version of the DLP4500. For further details, please see the DLPR350 firmware homepage, the DLP4500 data sheet, and the DLP4500NIR data sheet.

Key Features

Required for Reliable Operation of the DLP4500 and DLP4500NIR DMDs

High Speed Pattern Display Mode
1-Bit Binary Pattern Rates to 4225 Hz

8-Bit Grayscale Pattern Rates to 120 Hz

1-to-1 Input Mapping to Micromirrors

Multiple Bit Depths and LEDs in Pattern Sequences

Easy Synchronization with Cameras and Sensors
Two Configurable Input Triggers

Two Configurable Output Triggers

14 Fully Programmable GPIO Signals

64 Mb Internal RAM
Stores up to 48 1-Bit Patterns

No External Volatile Memory Required

Supports up to 32 MB External Parallel Flash for Increased Pattern Storage

Multiple Configuration Interfaces
One USB 1.1 SlavePort

Two I²C Ports

LED PWM Generators

Video Display Mode of Operation
10- to 120-Hz Full Color Frame Rates

YUV, YCrCb, or RGB Input Data Formats

Integrated Micromirror Drivers

Integrated Clock Generation

Recommended For You

DLP9500UVFLN

Texas Instruments, Inc

DLP-TYPEA.9-355

DLP2000AFQC

Texas Instruments, Inc

CLGA(FQC)

DLP3010AFQK

Texas Instruments, Inc

CLGA57

DLPA200PPF

Texas Instruments, Inc

HTQFP-80

DLP4500AFQE

Texas Instruments, Inc

CLGA-80

DLP4710FQL

Texas Instruments, Inc

CLGA-100

DLP6500FLQ

Texas Instruments, Inc
CLGA203

DLP4500FQE

Texas Instruments, Inc
DLP

DLP9500BFLN

Texas Instruments, Inc
LCCC355

DLP6500BFYE

Texas Instruments, Inc
DLP-S600-350

DLPC410ZYR

Texas Instruments, Inc
BGA

DLP7000BFLP

Texas Instruments, Inc
CLGA(FLP)

DLPC3478CZEZ

Texas Instruments, Inc
NFBGA201

DLP3000FQB

Texas Instruments, Inc
LCCC50

DLP7000FLP

Texas Instruments, Inc
203-LCCC