

DLP® Products Technical Advisory

DLP LightCrafter™ USB Connectivity Solutions

Reference Documents:

- [DLPR003](#) DLP LightCrafter™ System Board Schematic
- v1.1 DLP LightCrafter™ Software and Firmware Package

Kit and Circuit Card assemblies affected:

- DLP LightCrafter™ evaluation module

Technical Advisory Description:

TI determined the cause of connectivity problems on the DLP LightCrafter™ with the USB interface.

The USB port transient suppressor (U26) IC used for ESD protection in the DLP LightCrafter™ design is specified for USB 1.1 full speed operations.

But the current software on DLP LightCrafter™ enumerates the USB connection as USB 2.0. Meaning the operating system tries to negotiate a USB 2.0 high speed connection with the DLP LightCrafter™. However, the DLP LightCrafter™ is designed to enumerate as USB 1.1.

Considerable testing of various hardware and operating system combinations revealed that USB connection was successfully established in most of the cases but failures were reported on few USB ports.

TI Actions:

1. TI will update firmware to properly enumerate the DLP LightCrafter™ as a USB 1.1 device.

Customer Actions Requested:

1. It is strongly recommended that the customer upgrade the DLP LightCrafter™ module with new firmware. The instructions for installing the new versions are provided in ReadMe file of the DLP LightCrafter™ Software and Firmware package v1.1. This software release also includes additional features comprising of extended pattern sequences, run pattern sequence once, configurable IP address and more. See release notes for a complete list of features and improvements.

For any questions, contact us at: <http://e2e.ti.com/>

Post your questions in DLP & MEMS Section of TI E2E Forum.

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