



# TEGRA LINUX DRIVER PACKAGE R19.1

RN\_05071-R19 | March 25, 2014  
Advance Information | Subject to Change

## Release Notes



# TABLE OF CONTENTS

<b>1.0</b>	<b>ABOUT THIS RELEASE .....</b>	<b>3</b>
1.1	Login Credentials .....	3
1.2	Software Quality .....	3
1.3	Sources for Included Ubuntu Packages .....	4
<b>2.0</b>	<b>KNOWN ISSUES .....</b>	<b>5</b>
2.1	Reboot Required After Flashing .....	5
2.2	Display Support .....	5
2.3	Connecting and Disconnecting HDMI Causes Unresponsive UI .....	6
2.4	Video Playback Causes Unresponsive UI .....	6
2.5	USB Support.....	6
2.6	Hot Plug Detection on USB Micro AB Port Is Unreliable.....	6
2.7	Observed SMMU Errors .....	6
2.8	Sound Recording Functionality Not Available.....	6
2.9	Sending Interrupt to glxgears Application Hangs System .....	7
2.10	Audio Controls Are Disabled In Ubuntu Desktop GUI .....	7
2.11	Pulse Audio Is Not Launched With Ubuntu Desktop GUI.....	7
2.12	Login Unable to Start Graphical User Interface .....	7
2.13	Errors Logged After Boot.....	7

# 1.0 ABOUT THIS RELEASE

The NVIDIA® Tegra® Linux Driver Package supports development of platforms running:

- ▶ NVIDIA® Tegra® K1 32 Bit series computer-on-a-chip
- ▶ Linux kernel 3.10.24

Git tag for the release: `tegra-l4t-r19.1`



**Note: This release of Tegra Linux Driver Package R19.1 is a release for: Tegra K1 32 Bit device code-named “Jetson TK1”**

## 1.1 LOGIN CREDENTIALS

The default Jetson TK1 login credentials are:

- ▶ Username: `ubuntu`
- ▶ Password: `ubuntu`



**Note: A debug console is available via female-to-female NULL modem cable. The console is not password protected.**

## 1.2 SOFTWARE QUALITY

The Jetson TK1 platform is pre-flashed with a beta release of Linux For Tegra (L4T), which includes known issues. For the latest releases and errata, visit:

<http://developer.nvidia.com/jetson-tk1> (Registered Developer Program membership required.)

## 1.3 SOURCES FOR INCLUDED UBUNTU PACKAGES

Source files for Ubuntu packages included with the release are located in the following directory:

```
./usr/src/
```

## 2.0 KNOWN ISSUES

This section provides details about issues that were discovered during development and QA but not resolved prior to this release of the Tegra Linux Driver Package.

### 2.1 REBOOT REQUIRED AFTER FLASHING

You must hard reboot the Jetson TK1 device after flashing by pressing the RESET button on the Jetson TK1 device. The system soft reboots immediately after a successful installation, displaying a black screen with a warning message. You must hard reboot the device when the black screen with the warning message is displayed. The GUI starts normally after the hard reboot. This hard reboot is only required after the first time re-flashing the system with the root file system provided with the R19.1 L4T release.

### 2.2 DISPLAY SUPPORT

Display support in this release has the following issues:

- ▶ You must connect HDMI prior to booting for subsequent hot plug detection to function
- ▶ Some monitors must be hot plugged after booting the system to function properly. Boot messages are not visible in these configurations.
- ▶ Native resolutions lower than 1080p might not work as expected
- ▶ Hot plugging HDMI, or booting without HDMI connected might result in display of kernel warnings
- ▶ Hot plugging HDMI might result in initially lower display resolution
- ▶ DVI displays connected via HDMI-DVI cable might not synchronize correctly

## 2.3 CONNECTING AND DISCONNECTING HDMI CAUSES UNRESPONSIVE UI

While running the glxgears and glmark2 applications the GUI becomes unresponsive intermittently when the HDMI cable is connected or disconnected.

## 2.4 VIDEO PLAYBACK CAUSES UNRESPONSIVE UI

Playing video with the default player application by double-clicking the video file causes the GUI to become unresponsive intermittently. Other non-default video playback applications do not present the same issue. Restart X to restore GUI functionality.

## 2.5 USB SUPPORT

This release, running on the Jetson TK1 platform, supports USB 2.0. USB 3.0 is planned to be available in a future update.

## 2.6 HOT PLUG DETECTION ON USB MICRO AB PORT IS UNRELIABLE

Hot plug detection on the USB micro AB port is not reliable. Connect any devices intended for this port before booting. Hot plug detection is fully functional on the standard type A USB connector.

## 2.7 OBSERVED SMMU ERRORS

The following SMMU errors are observed:

```
mc-err: [mcerr] (dcb) csr_displayhcb: EMEM decode error on PDE or PTE
entry
mc-err: [mcerr] status = 0x60100011; addr = 0x00010000
mc-err: [mcerr] secure: no, access-type: read, SMMU fault: nr-nw-s
```

## 2.8 SOUND RECORDING FUNCTIONALITY NOT AVAILABLE

Sound recording functionality is not available in this release.

## 2.9 SENDING INTERRUPT TO GLXGEARS APPLICATION HANGS SYSTEM

Sending an interrupt signal (CTRL-C) to the glxgears application causes the system to become non-responsive.

## 2.10 AUDIO CONTROLS ARE DISABLED IN UBUNTU DESKTOP GUI

You can not change audio volume or audio mixer settings from the Ubuntu desktop in this release. This is planned to be fixed in a future release.

## 2.11 PULSE AUDIO IS NOT LAUNCHED WITH UBUNTU DESKTOP GUI

Pulse audio does not explicitly launch with the Ubuntu desktop, preventing changes in pavucontrols.

## 2.12 LOGIN UNABLE TO START GRAPHICAL USER INTERFACE

Logging in to a newly created user account, or a guest account, is intermittently unsuccessful in loading the GUI.

## 2.13 ERRORS LOGGED AFTER BOOT

The system reports errors after booting, primarily when the X server is accessed while in display timeout state.

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