

# **Intel® Quick Start Kit for Linux\***

## **Quick Reference**

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Order Number: C94155-001

# Revision History

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| Revision | Revision History   | Date          |
|----------|--|---------------|
| -001     | Final version of the Intel® Quick Start Kit for Linux* Quick Reference | November 2004 |

If an FCC declaration of conformity marking is present on the board, the following statement applies:

## FCC Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions related to the EMC performance of this product, contact:

Intel Corporation  
5200 N.E. Elam Young Parkway  
Hillsboro, OR 97124  
1-800-628-8686

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit other than the one to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications to the equipment not expressly approved by Intel Corporation could void the user's authority to use the equipment.

## Canadian Department of Communications Compliance Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an ordering number and are referenced in this document, or other Intel literature, may be obtained from Intel Corporation by going to the World Wide Web site at: <http://www.intel.com/> or by calling 1-800-548-4725.

Hyper-Threading Technology requires a computer system with an Intel® Pentium® 4 processor supporting Hyper-Threading Technology and an HT Technology enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading> for more information including details on which processors support HT Technology.

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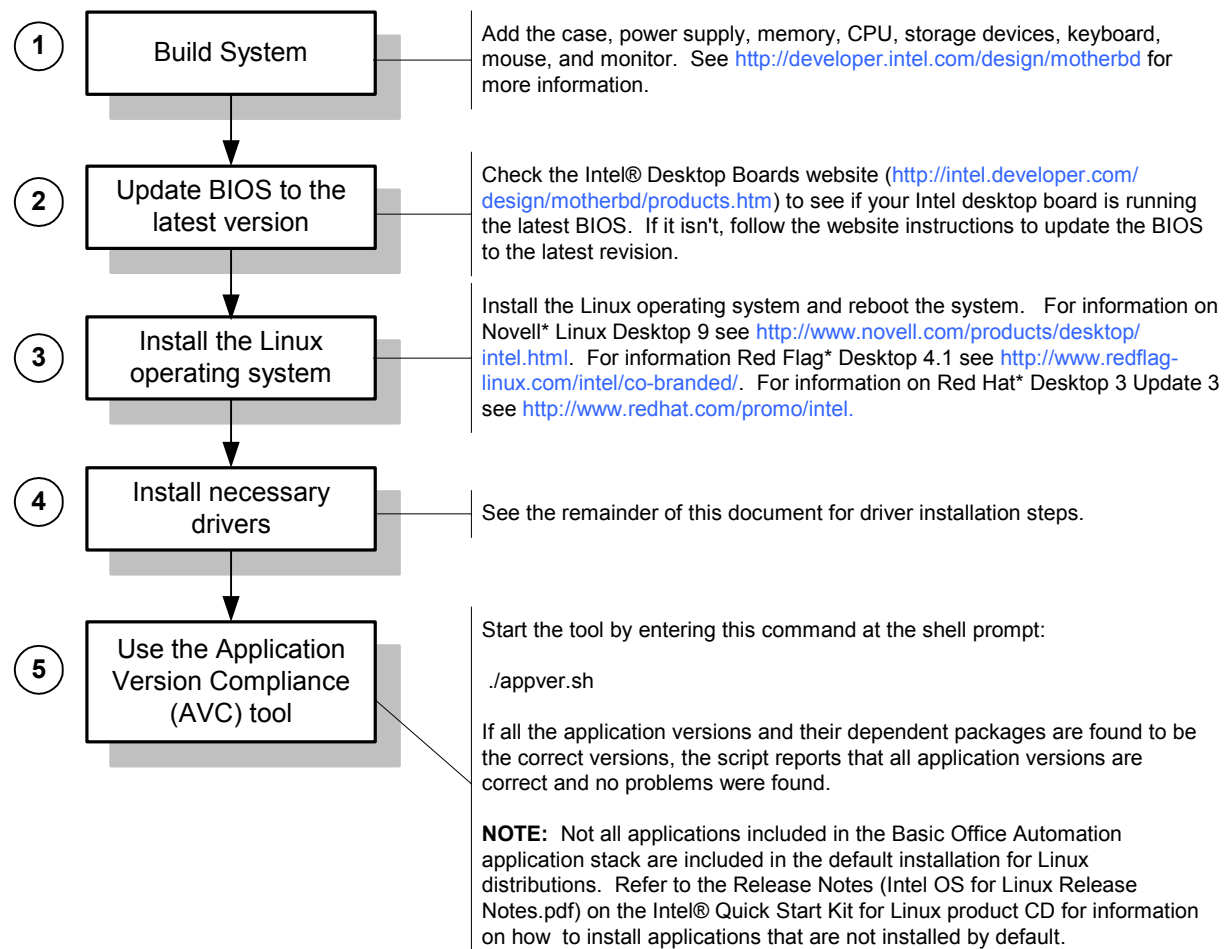
# Intel® Quick Start Kit for Linux\* Overview

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The Intel® Quick Start Kit for Linux\* contains Linux driver software needed for supported Intel® desktop boards when combined with the Linux operating system distributions listed below:

- Novell\* Linux\* Desktop 9
- Red Flag\* Desktop 4.1
- Red Hat\* Desktop 3 Update 3

Use the following steps to get started. Driver installation steps begin on page 6. For more information on the process, see the *Intel® Quick Start Kit for Linux\* Product Guide*.



## Device Driver Installation Steps

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Perform these steps to install device drivers. For complete information on installing drivers, see the *Intel® Quick Start Kit for Linux\* Product Guide* shipped on the Intel® Quick Start Kit for Linux\* CD.

1. Determine which kernel your system is running by entering the following command. Systems running a kernel that support more than one processor might require a different set of drivers as compared to systems using a single processor (e.g., Intel® Pentium® 4 processor supporting Hyper-Threading Technology).

```
# uname -r
```

2. Install the audio driver. Refer to Table 1 through Table 4 to determine which driver to install and for the steps used to install the driver.
3. Install the graphics driver. Refer to Table 1 through Table 4 to determine if you need to install a driver, which driver to install, and for the steps used to install the driver.
4. Install the LAN driver. Refer to Table 1 through Table 4 to determine if you need to install a driver, which driver to install, and for the steps used to install the driver.

**Table 1. Driver Upgrade Procedures for the Red Hat Linux Desktop v3 u3 Distribution on Intel Desktop Boards Based on the Intel® 865 Chipset**

| Driver              | Procedure  |
|---------------------|--|
| AC '97 Audio Driver | <ol style="list-style-type: none"> <li>1. Load the Intel Quick Start Kit for Linux product CD into your system's CDROM drive.</li> <li>2. Log onto the system as root.</li> <li>3. At the Linux shell prompt, change directory to<br/> <code>&lt;cdrom_drive&gt;/drivers/audio/RH</code></li> <li>4. Run the sound installation and configuration script <code>./audio_install</code></li> <li>5. Remove the CD from the CD ROM drive.</li> <li>6. Reboot the system.</li> </ol> |
| Graphics Driver     | No update required.  |
| LAN Driver          | No update required.  |

**Table 2. Driver Upgrade Procedures for the Novell Linux Desktop 9 Distribution on the Intel Desktop Boards Based on the Intel® 915 Chipset**

| Driver                                | Procedure  |
|---------------------------------------|--|
| Intel® High Definition Audio Driver   | <ol style="list-style-type: none"> <li>1. Load the Intel Quick Start Kit for Linux product CD into your system's CDROM drive.</li> <li>2. Log onto the system as root.</li> <li>3. At the Linux shell prompt, change directory to the following, where <i>cdrom_drive</i> could be /media/cdrom, /media/cdrecorder, /media/dvd, or /media/dvdrecorder, depending on the type of drive in your system.<br/><br/> <code>&lt;cdrom_drive&gt;/drivers/audio/NLD</code></li> <li>4. Run the sound installation and configuration script <code>./audio_install</code></li> <li>5. Reboot the system.</li> </ol>  |
| Intel® Graphics Media Accelerator 900 | <ol style="list-style-type: none"> <li>1. Log into the system as root.</li> <li>2. Copy <code>i915Graphics-1.0-0.i386.rpm</code> from the Intel Quick Start Kit for Linux product CD (<code>&lt;cdrom_drive&gt;/drivers/graphics/NLD</code>) to your system's root partition.</li> <li>3. Make sure X11 is not running by bringing up a shell prompt and typing "init 3".</li> <li>4. Switch to console 1 by typing Ctrl+Alt+1 and then logging into the system again as root.</li> <li>5. Verify that you are in the root directory ("/).</li> <li>6. Enter the following command to install the RPM:<br/><br/> <code>rpm -ihv i915Graphics-20041021_2133-0.i386.rpm</code></li> <li>7. Reboot the system.</li> <li>8. Log into the system as root.</li> <li>9. Run your distribution-specific display configuration utility. For NLD 9, you do this from "yast2."</li> <li>10. Select the i915 G driver and turn on Accelerated Graphics.</li> <li>11. Reboot the system.</li> </ol> |
| Marvell* Yukon Gigabit Driver         | <ol style="list-style-type: none"> <li>1. Load the Intel Quick Start Kit for Linux product CD into your system's CDROM drive.</li> <li>2. Log onto the system as root.</li> <li>3. At the Linux shell prompt, change directory to<br/> <code>&lt;cdrom_drive&gt;/drivers/network/NLD</code></li> <li>4. Install the driver. Depending on the name of the driver, use one of the following two commands:<br/><br/> <code>rpm -ivh sk98lin-7_08-nld9-2.6.5-7.111.1586.rpm</code><br/> <code>rpm -ivh sk98lin-7_08-nld9-2.6.5-7.111-smp.1586.rpm</code></li> <li>5. Reboot the system.</li> </ol>   |

**Table 3. Driver Upgrade Procedures for the Red Flag Desktop 4.1 Distribution on the Intel Desktop Boards Based on the Intel 915 Chipset**

| Driver                               | Procedure  |
|--------------------------------------|--|
| Intel High Definition Audio Driver   | <ol style="list-style-type: none"> <li>1. Load the Intel Quick Start Kit for Linux product CD into your system's CDROM drive.</li> <li>2. Log into the system as root.</li> <li>3. At the Linux shell prompt, change directory to<br/> <code>&lt;cdrom_drive&gt;/drivers/audio/RF</code></li> <li>4. Run the sound installation and configuration script <code>./audio_install</code></li> <li>5. Reboot the system.</li> </ol>  |
| Intel Graphics Media Accelerator 900 | <ol style="list-style-type: none"> <li>1. Log into the system as root.</li> <li>2. Make sure X11 is not running by bringing up a shell prompt and typing "init 3". You might have to re-login to the system after running init 3.</li> <li>3. At a Linux shell prompt, change directory to<br/> <code>&lt;cdrom_drive&gt;/drivers/graphics/RF</code></li> <li>4. Enter the following command to Install the RPM:<br/> <code>rpm -ihv i915Graphics-1.0-0.i386.rpm</code></li> <li>5. Reboot the system to run level 3.</li> <li>6. Log into the system as root.</li> <li>7. Run Xconfigurator.</li> <li>8. Select the i915 G driver and turn on Accelerated Graphics. <b>NOTE:</b> If you use USB mouse, Xconfigurator might not pass the "starting X test" step. If this is the case, skip this step and run mouseconfig to configure the mouse later.</li> <li>9. Run your distribution-specific display configuration utility.</li> <li>10. Select the i915 G driver and turn on Accelerated Graphics.</li> <li>11. Reboot the system</li> </ol> |
| LAN Driver                           | No update required.  |



**Table 4. Driver Upgrade Procedures for the Red Hat Linux Desktop v3 u3 Distribution on Intel Desktop Boards Based on the Intel 915 Chipset**

| Driver                           | Procedure  |
|----------------------------------|--|
| Intel High Definition Audio      | <ol style="list-style-type: none"> <li>1. Load the Intel Quick Start Kit for Linux product CD into your system's CDROM drive.</li> <li>2. Log onto the system as root.</li> <li>3. At the Linux shell prompt, change directory to<br/> <code>&lt;cdrom_drive&gt;/drivers/audio/RH</code></li> <li>4. Run the sound installation and configuration script <code>./audio_install</code></li> <li>5. Reboot the system.</li> </ol>  |
| Intel Graphics Media Accelerator | <ol style="list-style-type: none"> <li>1. Log in as root.</li> <li>2. Insert the Intel Quick Start Kit for Linux product CD into your system's CDROM drive. The CD should automatically mount to <code>/mnt/cdrom</code> or, in the case where you insert the CD into a second CDROM drive, to <code>/mnt/cdrom1</code>.</li> <li>3. Make sure X11 is not running by bringing up a shell prompt and typing "init 3".</li> <li>4. Be sure you are in the <code>&lt;cdrom_drive&gt;/drivers/graphics/RH</code> directory.</li> <li>5. Enter the following command to install the RPM:<br/> <code>rpm -ihv i915Graphics-1.0-0.i386.rpm</code></li> <li>6. Reboot the system.</li> <li>7. Log into the system as root.</li> <li>8. Run your distribution-specific display configuration utility. For Red Hat, you do this from the <code>redhat-config-xfree86</code> command.</li> <li>9. Select the i915 G driver and turn on Accelerated Graphics.</li> <li>10. Reboot the system.</li> </ol> |
| GbE LAN Driver                   | <ol style="list-style-type: none"> <li>1. Load the Intel Quick Start Kit for Linux product CD into your system's CDROM drive.</li> <li>2. Log onto the system as root.</li> <li>3. At a Linux shell prompt, change directory to<br/> <code>&lt;cdrom_drive&gt;/drivers/network/RH</code></li> <li>11. Install the driver. Use the first command for SMP systems. For UP (non-SMP) systems, use the second command.<br/> <code>rpm -ihv sk98lin-7_08-rh3-2.4.21-20.EL.i386.rpm</code><br/> <code>rpm -ihv sk98lin-7_08-rh3-2.4.21-20.EL.i386.rpm</code></li> <li>5. Reboot the system.</li> <li>6. Once the system reboots, it should detect the LAN adaptor hardware. A prompt appears asking you for configuration details. Most configurations use the DHCP option. For more details on LAN configurations, refer to the Linux OS documentation.</li> </ol>  |