Intel® Quick Start Kit for Linux*
Product Guide Addendum:
CS2C* NeoShine* Linux Desktop 2.0.1 Support

Order Number: D14916-001

Revision History

Revision	Revision History	Date
-001	Final version of the Intel® Quick Start Kit for Linux* Product Guide Addendum: CS2C* NeoShine* Linux Desktop 2.0.1 Support.	February 2005

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 numerique német pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Réglement sur le broullage radioélectrique édicté par le ministére des Communications du Canada.

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The Intel® Desktop Boards may contain design defects or errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are available on request. All products, dates and figures specified are preliminary based on current expectations, provided for planning purposes only, and are subject to change without notice. Availability in different channels may vary.

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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Introduction

The Intel® Quick Start Kit for Linux* enables Intel® Channel partners to design, build, and sell Linux-based desktop PCs. The kit contains updated device drivers, value added tools, documentation, and marketing materials.

The Intel Quick Start Kit for Linux v1.1.1 adds support for China Standard Software, Co., Ltd. (CS2C) NeoShine Linux Desktop 2.0.1. This document describes this added support. For additional information regarding the Intel Quick Start Kit for Linux refer to the user documentation included with the kit:

- Intel Quick Start Kit for Linux Product Guide
- Intel Quick Start Kit for Linux Quick Reference
- Intel Quick Start Kit for Linux Release Notes

Intel continues to enhance our support for Linux-based PCs in the Reseller Channel. Please visit http://www.intel.com/go/linux for further details and updates.

How to Use the Kit

The Intel Quick Start Kit for Linux contains Linux driver software needed for supported Intel desktop boards when combined with supported Linux OS distributions. To get started with the kit's documentation do the following:

1. Place the CD into your system's CDROM drive. The CD should auto-run to display a language selection screen using your local browser. If the CD does not auto-run, navigate to the CD's root level and double-click the file named `Quick_Start.html`.
2. From the language selection page, choose a language by clicking in a general area on the displayed map. For example, for Simplified Chinese, click your mouse in Asia and then select Simplified Chinese.
3. Choose the documentation you wish to view.

Using detailed documentation provided with your Intel desktop board and/or from the Intel Desktop Boards website , first build your motherboard into a basic system by adding a case, power supply, memory, CPU, storage devices, keyboard, mouse, and monitor. The system must be based on supported hardware described in "Hardware Requirements" in the *Intel Quick Start Kit for Linux Product Guide*. Next, be sure you are familiar with the BIOS upgrade process described in the Product Guide. Once you are familiar with this process, check the Intel Desktop Boards website to see if your Intel desktop board is running the latest BIOS. If it isn't, follow the website instructions to update the BIOS to the latest revision.

After ensuring the BIOS is up to date, install the selected Linux OS onto the system using instructions from the Linux distributor. To obtain more information you can go to http://intel.com/go/linux where you can find links to the supported Linux distributions. After a final boot of the system, run the Application Version Compliance (AVC) Tool to be sure all the Basic Office Applications have the correct versions.

Hardware Requirements

The Intel Quick Start Kit for Linux is designed and validated to support the following Intel® desktop boards:

- Intel desktop boards based on the Intel® 845 chipset (Intel® Celeron® processor-based boards)
- Intel desktop boards based on the Intel® 865 chipset (Intel® Pentium® processor-based boards)
- Intel desktop boards based on the Intel® 915 chipset (Intel Pentium processor-based boards)

NOTE

See "Hardware Requirements" in the Intel Quick Start Kit for Linux Product Guide for a detailed list of supported motherboards.

NOTE

Future Intel Quick Start Kit for Linux releases might include support for additional Intel desktop boards. For new updates regarding this support and a list of supported motherboards visit http://www.intel.com/go/linux.

Linux Distributions

The Intel Quick Start Kit for Linux v1.1.1 is validated to support CS2C NeoShine Linux Desktop 2.0.1:

NeoShine Linux Desktop 2.0.1 (China Only) – distributed by China Standard Software Co., Ltd. (CS2C). CS2C develops system software and solutions for government, enterprise, and education customers. CS2C provides value-added software and services based on open standards and Free and Open Source Software (FOSS). For more information on CS2C software see http://www.cs2c.com.cn/products/intel/.

NOTE

See the Intel Quick Start Kit for Linux Product Guide for information regarding additional Linux distributions supported by the Intel Quick Start Kit for Linux.

Device Drivers

CS2C NeoShine Linux Desktop 2.0.1 supplies all drivers (e.g., audio, graphics, and LAN) for devices integrated into the chipset and motherboard of systems built with supported Intel desktop boards. You do not need to install additional drivers for devices integrated into the chipset or onto the board for this product. However, add-in peripheral adapters that can be plugged into available PCI Slots on the board could require vendor-specific drivers.

NOTE

See "Hardware Requirements" in the Intel Quick Start Kit for Linux Product Guide for a detailed list of supported motherboards.

NOTE

Add-in peripheral adapters that can be plugged into available PCI Slots on the board could require vendor-specific drivers.

Basic Office Automation Application Stack

The Intel Quick Start Kit for Linux defines a Basic Office Automation application stack that has been validated on desktop systems based on Intel desktop boards, running updated device drivers for the supported Linux distributions. The Basic Office Automation application stack consists of applications that are required in order to conduct business in an office environment. Table 1 lists these applications:

Table 1. Basic Office Automation Applications

Application Type	Description
Office Applications	Set of applications used in an office environment for activities such as Word Processing, Spreadsheet work, Presentation preparation, and Drawing.
Web Browser	Allows you to access and browse the Internet.
Email Tool	Allows you to send and receive email messages.
Desktop	The Desktop* suite and development platform.
Instant Messaging (IM)	A type of communications service that enables you to communicate in real time over the Internet with other Internet users.
PDF Reader	A viewer for Portable Document Format (PDF) files. (These files are also sometimes also called 'Acrobat' files, derived from the name of Adobe's PDF software.)
Flash Player	A plug-in that plays embedded audio and video on various web portals. Macromedia flash player is the most widely used application.
Streaming Audio Video Player	A multi-format audio/video player/organizer that tags, rips, and burns files and integrates with the RealRhapsody music store. Free and paid-for versions exist.
Anti-virus Application	Prevents viruses and other malicious programs from harming the desktop system.

Intel has identified applications that correspond to the above application types for each supported Linux distribution and has performed basic functional validation to ensure that these applications run on desktop systems based on Intel desktop boards. To help you make this determination, Intel provides a tool called Application Version Compliance (AVC) tool with this release. You can run this tool on any Linux desktop system to verify Basic Office Automation application versions. The tool generates a report that identifies any non-compliant application. Should a non-compliant case be identified, the tool also indicates the correct version of the application and the Internet location from which you can download the application.

NOTE

Intel performs limited functional validation of the applications identified in Table 1. This is to ensure that the applications can be installed and run with any updated device drivers that may be needed for the supported distributions. Intel does not perform full functional validation of all features supported by these applications and is not responsible for providing technical support. If you have any questions or need technical support for these applications, please contact the OS and application vendors directly.

NOTE

Intel does not limit or preclude the use of other office productivity applications for Linux. The intent of identifying the above Basic Office Automation applications is to confirm that Intel has expressly performed limited functional validation of these applications successfully and that they work satisfactorily on Intel-based desktop systems.

Table 2 lists the specific applications and application versions validated and supported in the Intel Quick Start Kit for Linux v1.1.1 for CS2C NeoShine Desktop Linux 2.0.1:

Table 2. Validated Applications

Application	CS2C NeoShine Linux Desktop 2.0.1
Office Applications	NeoShine Office* v2.0
Email Tool	Evolution* v1.4.6 CNN
Web Browser	Mozilla* v1.7
Desktop	Gnome* 2.6.1
Instant Messaging	GAIM* v0.8.2.1
PDF Reader	Adobe* Reader* 5.05
Flash Player	Macromedia* Flash v7.0
Streaming Audio/Video	gXINE* 0.3.3
Anti-virus Application	None

NOTES

In future releases, Intel might include additional office productivity applications in the office automation application suite. Intel might also define and validate additional solution stacks based on Linux for other vertical segments. For new updates related to this, please visit http://www.intel.com/go/linux.

Mozilla (Web browser), Evolution (email tool), Gnome (desktop), GAIM & (Instant Messenger) and are open source applications generally bundled in the OS distributions.

Adobe Acrobat Reader and Macromedia Flash Player are third-party software applications that are not open source. These applications are generally available as a free download with appropriate licensing. Further details on these applications and download information are provided at these locations:

- *Adobe Acrobat Reader* – http://www.adobe.com/products/acrobat/readstep2.html
- *Macromedia Flash Player* – http://www.macromedia.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash

Value Added Intel® Tools

The Intel Quick Start Kit for Linux comes with several value added Intel desktop board tools. This section provides a brief explanation of these tools and the links to where you can download these tools and find more information on each tool.

iFlash BIOS Update

Desktop boards manufactured by Intel incorporate the system BIOS in a Flash memory component. Flash BIOS allows easy upgrades without the need to replace an EPROM component. The upgrade utility fits on a floppy diskette and provides the capability to save, verify, and update the system BIOS. Refer to the *Intel Quick Start Kit for Linux Product Guide* for instructions for using the iFlash BIOS Update utility to update your system BIOS.

For more information about the iFlash BIOS Update utility see http://developer.intel.com/design/motherbd/standardbios.htm.

Intel® Integrator Toolkit

This comprehensive solution for PC OEMs and professional system integrators allows your business to run smoother and more efficiently. With this kit you can more easily streamline manufacturing floor processes, which saves time and labor costs; increase quality and reduce human error through automation; and reduce support costs by allowing sensitive BIOS settings to be made tamper resistant. In addition, you can promote your brand using the Flex Module technology, optimize system settings for stability and performance, and replicate and verify customized system configuration across multiple systems.

For general information on the Intel® Integrator Toolkit see http://www.intel.com/design/motherbd/itk.htm.

For information on how to use this toolkit, see the detailed training course at http://www.intel.com/design/motherbd/software/itk/accesslevel02/.

Application Version Compliance (AVC) Tool

Intel validates a Basic Office Automation application stack with this release of Intel Quick Start Kit. You can use the AVC Tool to ensure that the versions of applications installed on a desktop system are the same versions that have been validated for supported distributions with respect to each desktop board.

You can also use this tool to supply technical support to system integrators and OEMs. For example, if a problem is reported with any application contained in the Basic Office Automation application suite, you can use the tool to rule out the possibility of an unsupported version of the application on the system.

Refer to the *Intel Quick Start Kit for Linux Product Guide* for instructions for using the AVC Tool.

For more information on the Intel® Application Version Compliance (AVC) tool see http://www.intel.com/go/linux.

Documentation

The Intel Quick Start Kit for Linux contains the following end-user documentation:

- **Product Guide** – This guide provides a detailed description of the various components of the kit. The guide describes the supported motherboards, Linux OS distributions, device drivers with installation steps, and various value-added tools. This guide also describes the Basic Office Automation stack that has been validated with this Quick Start Kit. The guide also details how to obtain technical support.
- **Product Guide Addendum: CS2C NeoShine Linux Desktop 2.0.1 Support** – The document you are reading. This document describes the support for CS2C NeoShine Linux Desktop 2.0.1 provided with Intel Quick Start Kit for Linux v1.1.1.
- **Quick Reference** – A short document that provides a quick reference for Intel Quick Start Kit for Linux product release.
- **Release Notes** – A document that details known issues, bugs, and items scheduled for the next release. Release notes describe the steps performed during Basic Office Automation applications validation as well as known issues and bugs.
- **Marketing Brochure** – A marketing document providing a high-level overview of the Intel Quick Start Kit for Linux release. This document has the necessary contact information for technical support and marketing queries.

Technical Support

For technical issues relating to the basic system build using the Intel Quick Start Kit for Linux, including support for the supplemental Device drivers provided in this kit, see http://www.intel.com/go/Linux/.

For operating system specific issues relating to CS2C NeoShine Linux Desktop 2.0.1 see http://www.cs2c.com.cn.

Frequently Asked Questions (FAQ)

This chapter lists frequently asked questions and their answers.

- **What is the state of the system before using the Intel Quick Start Kit for Linux Release CD. For example, should the hardware be installed with the operating system installed and successfully booted?**

  You should have all the hardware installed, the OS installed, and the system successfully booted.
- **Where can I find information on the Internet about driver updates and bug fixes?**

Please visit: http://www.intel.com/go/Linux

Release Notes

This chapter describes known issues in the Intel Quick Start Kit for Linux running on Intel desktop boards under CS2C NeoShine Linux Desktop 2.0.1.

Audio Issues

- **Some audio control sliders are missing when audio volume control applications are run on D915 motherboards:** In gnome-volume-control only the "Volume" and "In-gain"audio control sliders are presented to the user. Other control sliders (e.g. PCM, Speaker, Line-in, Microphone) are missing. This issue is also observed with the GStreamer application.
- **Right / left balance audio controls are not working correctly:** When the "Right / Left Balance" audio control sliders used in the GStreamer application are released the output of the right and left channels becomes the same level.
- **Microphone does not record any sound on D915 motherboards:** Microphone recording is not supported on Intel desktop boards based on the Intel 915 chipset. There is no workaround for this issue. A fix is currently under investigation.

Graphics Issues

- **X windows does not display properly with 8-bit color depth:** When X windows is configured to run with 8-bit color depth and 800x600 resolution the screen is not displayed properly. To work around this problem, change the color depth to 16-bit or higher. A permanent fix for this issue is currently under investigation.

General Issues

- **AVC should be run under X Windows:** On NeoShine Linux Desktop 2.0.1 the Application Version Compliance (AVC) tool cannot obtain information about NeoShine Office if running in console mode. For and accurate check, please run AVC under a terminal window from within X Windows.