

Athena II/Hercules II QNX 6.4.0 Software Development Kit Guide

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Thank you for purchasing the Athena II/Hercules II QNX 6.4.0 Software Development Kit (SDK). This SDK provides you with all the information about the tools required for creating and running a QNX 6.4.0 Neutrino based platform image for your Athena II/Hercules II single board computer.

The SDK includes the following two items:

- 512MB flash disk with a bootable evaluation image of QNX 6.4.0 for Athena II/Hercules II SBCs
- Athena II/Hercules II QNX 6.4.0 SDK CD
- QNX Box card which provides a downloadable set of evaluation development tools

What's included on the QNX Athena II/Hercules II flash disk?

The flash disk includes a bootable runtime evaluation Athena II/Hercules II QNX 6.4.0 OS image. In addition to demonstrating QNX operation, the OS image also contains programs that can be used for demonstrating and validating many of Athena II/Hercules II's hardware capabilities. Functions exercised by the bootable QNX 6.4.0 OS image include:

- Ethernet support with local-area network installed.
- HTTP interface and web browser
- PS/2 mouse and keyboard
- USB 1.0-2.0 ports
- Serial ports RS-232/422/485
- IDE storage devices
- Diamond Universal Driver 6.02 for QNX 6.4.0
- Data acquisition demo programs (for A model boards)

NOTE:

This QNX image is an evaluation image, meaning it should be used as a demo image and cannot be freely distributed. For creating licensed, distributable images, please contact QNX Software Systems and obtain the necessary development environment and run-time licenses.

What's Included on the Athena II/Hercules II QNX 6.4.0 SDK CD?

The Athena II/Hercules II SDK CD provides an evaluation board support package for the Athena II/Hercules II SBC's QNX OS. The CD provides all the documentation necessary to create your image on a QNX OS platform. The development tools required for the process can be procured directly from QNX Software Systems.

Specifically, the SDK CD includes:

- Bootable image of the Athena II/Hercules II QNX 6.4.0 board support package (BSP)
- Athena II/Hercules II QNX 6.4.0 Neutrino RTOS supporting the VIA Mark processor
- Device drivers for DP83815 ethernet, USB and serial ports with the BSP
- Step-by-step instructions on using Athena II/Hercules II's BSP and device drivers to customize its QNX platform according to application requirements

QNX Box Card:

The QNX development tool chain called SDP 6.4.0 which includes the QNX Momentics IDE 4.5 development tool and Phindows can be obtained directly from QNX Software Systems. The QNX Box Card offers a downloaded evaluation version of this development environment, providing all the necessary information to obtain the development software and tools for development on the QNX OS.

Getting started

To run the Athena II/Hercules II QNX 6.4.0 OS and demonstrate functionality:

- Install the flashdisk provided in this SDK on the Athena II/Hercules II SBC
- Boot from the flashdisk
- The demo image will run

To build a new QNX 6.4.0 based image for Athena II/Hercules II, start by reading the document entitled "Athena II/Hercules II QNX BSP Manual.pdf" (located on the Athena II/Hercules II QNX 6.4.0 SDK CD), which provides a comprehensive guide to developing new QNX system images and using the provided documentation.

For additional Athena II/Hercules II technical information, visit the Technical Support area of Diamond's website at www.diamondsystems.com/support.