

DuraCOR LiveUSB Development Kit Quick Start

DRCR4400



What's in the Box?

The development kit includes the following components:

- DuraCOR 1400
- Cable for M1 (95000063)
- Cable for M2 (950000064)
- Cellular antenna
- Wi-Fi antenna
- GPS antenna
- 12V power supply, connected to M1 cable
- Wind River Linux LiveUSB flash drive, 16 GB, for booting a PC
- Utiliboot USB flash drive, 4 GB, for booting the DuraCOR
- FreeDOS bootable USB flash drive for updating DuraCOR firmware

Preparing the Development Kit

To prepare your kit for use, follow these steps:

- 1. Connect the cables to M1 and M2.
- 2. Connect the RJ45 socket on the M1 cable to the Ethernet cable of your network.

Three Target Run-Time Options

Your kit can be configured to boot any of the following three Linux distributions:

- Wind River LiveUSB Linux Image (as shipped)
- Wind River Linux with Eurotech layers
- Wind River Linux with Eurotech layers and ESF (Eurotech's Everyware Software Framework)

Running the LiveUSB Evaluation

As initially shipped, your DuraCOR boots the LiveUSB runtime evaluation, which is quick to set up.

To begin, connect both the DuraCOR and the development PC to an Ethernet network that is connected to the Internet. Boot the PC with the supplied LiveUSB flash drive.

For full details, see the Wind River Linux and Eurotech DuraCOR LiveUSB Evaluation Getting Started Guide.

The Wind River LiveUSB flash drive includes the following:

- Instructions to set up your Wind River evaluation on the DuraCOR Development Kit
- Details about how to activate your free, 30-day license for the Wind River Workbench development suite
- Audio-visual guides that lead you through the Wind River Linux evaluation
- All the source code for Wind River Linux and the Eurotech Product layers
- Hardware documentation in the "Eurotech DuraCOR" folder on the desktop

Using the Eurotech Product Run-Times

The Eurotech Product Run-Times are customized Wind River Linux images that have been configured to include additional features not present in the DuraCOR BSP:

- Ethernet is automatically configured using DHCP.
- sshd is started automatically.
- X Windows is included. Use "startx" to start it.

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- Device drivers and network features have been enabled to support Wi-Fi, Bluetooth and wireless modem devices, NAT, NTP, etc.
- The root account password is "IsiTech".

This run-time image is ready for deployment as a product platform and is the base run-time used by Eurotech's ESF.

Installation

- 1. Insert the bootable Utiliboot USB flash drive into a USB port on the cable connected to M2.
- Remove the service panel on the DuraCOR. Attach a PS/2 keyboard and VGA display. Press the switch on the cable connected to M1 to power on the system. If the system does not boot, you may need to press F12 to enter the BIOS Boot Device menu to select the USB flash drive.
- 3. Log in on the console using the root account with the password "IsiTech".
- 4. Determine which storage device is the internal 4 GB CompactFlash card (e.g. "mount" or "grep sd /var/log/messages" may show that it is /dev/sda1). You'll be given a chance to confirm the manufacturer and drive capacity during the installation process. Don't overwrite the Utiliboot drive (typically /dev/sdc)!
- 5. Install the Eurotech Product Run-Time by following the process described in one of the following files:
 - README.txt-WRL-ONLY (WRL only)
 - README.txt-WRL-ESF (WRL with Eurotech ESF) Use the CompactFlash device found in Step 4 as the DEVICE parameter (e.g. "/dev/sda"). The load process takes four to ten minutes.

You can optionally run "make-media.sh -h" to display the options not used in the README files.

Everyware[™] Software Framework

Information about Eurotech's ESF is available at <u>http://esf.eurotech.com/</u>

Eurotech Technical Support

For hardware support and issues relating to the Eurotech Product Run-Time, use the Eurotech support site. It includes errata reports, the latest releases of documents, and developer's forums. These resources are available to registered developers at

http://support.eurotech-inc.com/

Further Reading

For additional information about the DuraCOR, download the latest releases of documents from <u>www.eurotech.com</u>.

Hardware Features

Service Panel



The service panel, secured to the front panel using two Torx T10 screws, covers features used during the LiveUSB run-time evaluation. This panel has been removed on your kit to provide access to these features.

Indicator LEDs

The system has six LEDs on the front panel with the following assignments:

LED	Description

1 Power Present 2 Power On



3-6 User Configurable

Updating Your Development System

- To install the Eurotech Product Run-Time, use the Utiliboot key as described above.
- To re-install the Wind River Linux LiveUSB run-time, follow the instructions in Appendix A of the *Wind River Linux and Eurotech DuraCOR LiveUSB Evaluation Getting Started Guide.*
- To update the BIOS, contact Eurotech Support for BIOS update files and utilities. You will install these files on the bootable USB flash drive.

Wind River Technical Support

For Wind River Workbench licensing issues, see Appendix B of the getting started guide.

For Wind River Linux and LiveUSB support, contact http://www.windriver.com/support/

Contact Us

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