



## What's in the Box?

The development kit includes the following components:

- Helios platform with VGA expansion board
- Null modem cable (6 foot, DB9FF)
- 12 VDC adapter and regional AC power cord
- GPS antenna
- Tool for USB Bay fasteners
- Ethernet crossover cable (optional)

## Preparing the Development Kit

Your development kit has been designed to work out of the box. Follow these steps to prepare it for use:

1. Connect a VGA display to the VGA output socket. The display must be connected before power.
2. Connect a USB mouse and USB keyboard.
3. Connect the Helios Ethernet to a network with a DHCP server. An Ethernet crossover cable may be included in the kit for direct connection to a host PC (e.g. to a laptop during field service).
4. Connect the 12 VDC adapter to the DC power input and to AC power. The power LED lights green when the adapter is connected.

## Operating System Details

### Wind River Linux 3.0 (CPDK4510)

- This release is based on Linux 2.6.27.35.
- The default kernel console is connected to the VGA display and keyboard (tty1).
- You can log in from the console or remotely via SSH. The root password is "root".
- When logging in via SSH, use the IP address displayed on the console during boot.
- If you do not have a display connected, this release displays the device's Ethernet address on the serial port (ttyUSB0, 9600 8N1). To disable this feature, move /sbin/ifup-local to /sbin/ifup-local.orig.
- By default, the grub menu is not presented. To change this configuration, edit /boot/grub/menu.lst.
- For revision A or later systems, you can change the console to ttyUSB0 from the grub menu and enable login on ttyUSB0 by editing /etc/inittab.
- To start an X Window session, run "startx".
- Shut down the system before disconnecting power. To shut down, enter "poweroff" at a shell prompt.
- This release supports VGA, LCD, CompactFlash, Ethernet, USB 2.0, serial ports, GPS, and RTC. It does not support audio, SATA, or SDIO.

## Windows Embedded Standard (CPDK 7500)

- Several seconds after power is applied, WES boots and the login screen appears on the VGA display.
- Press CTRL+ALT+DELETE for the login screen.
- Log in with user name “Administrator” and no password.
- Shut down the system before disconnecting power. To shut down, click Start→Shut Down, then select Shut Down from the OS menu.

## Features

### USB Bay

- To open the hinged USB Bay cover, remove the two screws using the supplied tool.
- Do not forcibly pull on the USB devices to disconnect. The USB ports in the USB Bay use sockets with locking latches. Raise the latch on the socket to remove the device.

### Indicator LEDs

The system has eight red/green/yellow LEDs with the following assignments depending on the revision of the Helios system:

LED	Description (Rev 1)	Description (Rev A)
1	Serial activity	Power
2	Power	Software-definable, SMBus
3	Software-definable, SMBus	Software-definable, SMBus
4	Software-definable, SMBus	Software-definable, SMBus
5	Software-definable, SMBus	Software-definable, SMBus
6	SATA activity	Software-definable, SMBus
7	Software-definable, I <sup>2</sup> C bus	Software-definable, SMBus
8	SD card activity	Software-definable, I <sup>2</sup> C bus

Note: The indicator LEDs are brighter on revision A systems than on revision 1 systems.

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## Everyware™ Software Framework

The Helios platform is available with the Everyware Software Framework (ESF). Information about ESF is available at:

<http://esf.eurotech.com/>

## Technical Support

The Eurotech support site 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/>

## Ethernet

Network settings are configured to operate with a DHCP server. To connect to your network, connect your network cable to the Ethernet socket.

## Switch

The system includes a momentary push-button switch accessible through a small hole on the rear panel. This switch generates an interrupt to the processor and is software-definable.

## Options

### Optional Hardware

The Helios platform's flexible design supports several options, enabling many possible combinations to meet your system requirements. Your development kit may include one or more of the following optional functions:

- ZigBee
- Cellular modem with antenna connector
- WiFi with antenna connector
- GPS antenna
- EIA-485 serial port
- Vehicle-rated power input

### Memory Storage Options

Five types of memory provide mass storage and boot options for the Helios platform. Your development kit includes one or more of the following mass storage devices:

- CF card
- On-board PATA flash
- SATA drive
- USB disk drive
- SD card (future option)

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## Next Steps

For additional information about the Helios platform, download the Helios Platform Hardware Reference Manual (Eurotech document #110124-3000) from the support site or contact your local sales representative.

## Contact Us

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