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CTLP1007

CTLP1008

Audio in/out (J20, J23, J54)
PS/2 Keyboard, Mouse (J34)
Serial 1 and 3 (P1)
USB 0 to 3 (J3, J4)
Display Adapter in J11
PCIe (J12, J14, J15)
Reset Switch (SW1)
On/Off Button (SW2)

DC Power Input (J29)
VGA Output (J61)
Ethernet (J63)
CompactFlash (J71)
SATA1 (J67)
SD/MMC (J51)
Mini PCIe (J16, J17)
Maintenance Port (P2)
Power LEDs
Status Display (D36)

What's in the Box?

The development kit includes the following components:
- Catalyst LP Development Kit carrier board with D510 dual-core (finned heat sink, CTLP1007) or N450 single-core (x-shaped heat sink, CTLP1008)
- 10.4-inch SVGA TFT LCD with touch screen and backlight inverter
- Windows® Embedded Standard CompactFlash card.
- Catalyst Module Display Adapter board
- USB key, FreeDOS boot, for BIOS updates
- 12 VDC adapter and AC cord
- Black DB9FF cable (for maintenance port P2 only)
- Stylus and screen cleaning cloth

Preparing the Development Kit

Your development kit has been designed to work out of the box. When handling the system, use a wrist strap and/or ESD mat. Follow these steps to prepare it for use:
1. Ensure display adapter is seated well in socket J11.
2. Connect a keyboard and mouse.
3. Connect the 12 VDC adapter to DC power input J29, then connect the adapter to AC power. LED D27 will illuminate.

Booting the Development Kit

Complete these steps to boot your development kit:
1. Insert the boot card into the CompactFlash socket.
2. Momentarily press the On/Off button (SW2). Power LEDs D25 and D26 light, and the Port 80 Status Display (D36) indicates BIOS boot loader progress. After several seconds, the Eurotech logo appears and the operating system (OS) begins to boot.

Operating System Details

Windows Embedded Standard

- Press CTRL+ALT+DELETE for the login screen.
- User name is "Administrator" with no password.
- To recalibrate the touch panel and enable right-click functionality, run "hwincal.exe" from the C:\ProgramFiles\Tsharc\ window.
- You can find the version of your OS in Control Panel→System→General→Support Information.
- To enter Standby mode, select Stand by from the Start→Shut Down menu. Press On/Off to resume.
- To shut down, press On/Off or select Shut Down from the Start→Shut Down menu. Wait till power LEDs

D25 and D26 turn off before disconnecting power. LED D27 turns off when the adapter is unplugged.
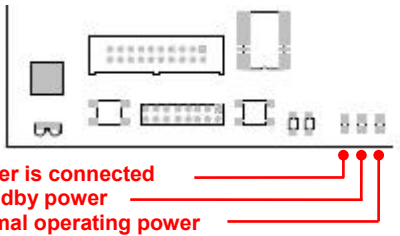
Wind River Linux 3.0

- Release is expected in October 2010. Contact your Eurotech sales representative for updates.

Features

Power LEDs

The following LEDs indicate the status of system power:

D27: Power is connected
D26: Standby power
D25: Normal operating power

Resetting the Development Kit

To reset, press SW1. Press only if there is a catastrophic fault or hang of the OS. User data can be lost and the boot media can be corrupted by an unexpected reset.

Shutting Down the Development Kit

If the shutdown methods provided by the OS are not available, press and hold SW2 for about seven seconds to turn off the system. The same cautions about potential file corruption from a reset apply to this type of shutdown.

Changing BIOS Settings

BIOS defaults have been selected to enable the development kit to operate in a standard configuration. Complete these steps to change the BIOS settings:
1. Connect a keyboard to the development kit.
2. Power up or reset the development kit.
3. Press the F2 key a few times around the time the system reaches POST code "80".
   Within a few seconds, the BIOS setup utility appears.
4. Change the applicable BIOS settings.
5. In the Exit tab, select Exit Saving Changes.
6. Reset the development kit.

Connecting to a Network

Network settings are configured to operate with a DHCP network. To connect to your network, connect your network cable to the Ethernet socket (J63).

Known Issues

The following are known issues at the time of writing:
- Sockets J10 (SDVO/ADD-2) and J52 (SD/MMC1) are not supported. They are only for Catalyst LPs built for backward compatibility with the Catalyst Module XL.
- After a normal system power off, the system may sometimes hang after On/Off has been pressed (POST code 76). Press the reset button to restart.
- In some configurations the LCD backlight may be dim after resuming from standby.
- PCIe bus 3 (J15) may not work with all cards.
- Slower IDE settings in the BIOS will not take effect at the operating system level.
- As shipped, only SATA1 port (J67) is available for use. For dual-SATA operation, select "SATA Only" in the BIOS. "SATA Only" mode disables the CompactFlash port, so be prepared to boot from another medium.

A full list of known issues and errata is posted on the Eurotech support forums.

Important for Catalyst XL Customers

Note that if you currently have a product based on the Catalyst Module or Catalyst Module XL, the Catalyst LP processor module will not boot in your design. The Design-In Guide describes compatibility options.

Troubleshooting

If you are directed to use Maintenance port P2 while working with Eurotech staff, use the black DB9FF cable supplied in this kit. P2 is not for application use and does not follow the EIA-232C standard.

See the support forums for additional tips.

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

Next Steps

For additional information about the Catalyst LP, download the following documents from the support site or contact your local sales representative.

Document	
Catalyst LP Development Kit User Manual	110125-4000
Catalyst LP Design-In Guide	110125-1000
Catalyst Module XL and Catalyst LP Compatibility Application Note	110125-1001