phyCORE[®]-XScale/PXA270 Development Kit (KPCM-027)

Loading eBoot and a WinCE Image (Adeneo)

This Application Note provides instructions on how to start-up the phyCORE-PXA270 (part # PCM-027-251EXMGRI), mounted on the PHYTEC Carrier Board (PCM-990-P3), and how to download the **eBoot** boot loader and a **WinCE** binary image.

Please refer to the phyCORE-PXA270 and phyCORE-PXA270 Carrier Board Hardware Manual for specific information on such board-level features as jumper configuration, memory mapping, and pinout.

1 System Description

1.1 Hardware Description

The following PHYTEC hardware components are included in the phyCORE-PXA270 Development Kit (part # KPCM-027-LCDTP) and are necessary for completing the instructions in this Application Note:

- phyCORE-PXA270 (part # PCM-027-251EXMGRI)
- Carrier Board for phyCORE-PXA270 (PCM-990-P3)
- Interface Expansion Board (PCM-985)
- LPT–JTAG Adapter (JA-001-PXA)
- AC adapter supplying 12 VDC, 3.3A, center positive
- Parallel cable
- RS-232 null-modem cable
- Cross-over Ethernet cable¹
- Host-PC running Microsoft Windows

All PHYTEC hardware components are included in the phyCORE-PXA270 LCD/Touch Panel Development Kit (part # KPCM-027-LCDTP).

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¹: You may also use a straight Ethernet cable connected to a hub to establish network connection between the phyCORE-PXA270 hardware and the host-PC.

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1.2 Software Description and Requirements

This Application Note for the phyCORE-PXA270 requires a Windows host PC, the use of a terminal program on the host-PC, such as HyperTerminal, together with other tools provided on the PHYTEC Tool CD:

- This Application Note for the phyCORE-PXA270 requires the use of a DHCP server such as the one included on the Tool CD (*pC-PXA270\WinCE\DHCP Server\dhcpsrv.exe*).
- The JFlash (*jflash.exe*) utility, and associated *prog_Adeneo.bat* batch file, required to download the eBoot boot loader. These tools can be found in the *pC-PXA270\WinCE\JFlash_MM* folder on the included the Tools CD.
- The eBoot boot loader used for downloading the WinCE image should be preinstalled on the phyCORE-PXA270. This loader enables easy download of WindowsCE images via Ethernet. This boot loader resides in the on-board Flash memory from address 0 to 0x40000.
- The Microsoft Windows CE Debug Shell, eShell, is a tool for downloading WinCE images with the help of the eBoot loader that is installed on the target hardware.
 eShell is included in the pC-PXA270\WinCE\JFlash_MM folder on the phyCORE-PXA270 Tools CD.

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2 Getting Started

2.1 Interfacing the phyCORE-PXA270 to a Host-PC

- Copy the pC-PXA270 folder from the included Tools CD to your PC. In this Application Note we will use the PHYBasic main folder¹. The remainder of this application note assumes that the pC-PXA270 folder was copied to target PC in the following path: C:\PHYBasic\pC-PXA270.
- Connect the JTAG adapter's 20-pin flat-band cable to the pin connector X29 on the Carrier Board. Please make sure that pin 1 on the connector mates with pin 1 (which is marked red) on the cable.
- Connect the JTAG adapter to the LPT interface on your PC using a parallel cable.
- Connect the RJ-45 socket at X23 on the Carrier Board to the host-PC using a cross-over Ethernet cable².
- Connect the included RS-232 null-modem cable to an available COM port on your Windows PC and DB-9 (P1) of the phyCORE Carrier Board.
- Connect the included 12 VDC power adapter to socket X1 on the Carrier Board.

¹: Future phyCORE-PXA270 Kits will come with an automatic installation wizard using the same PHYBasic folder structure.

²: You may also use a straight Ethernet cable connected to a hub to establish network connection between the phyCORE-PXA270 hardware and the host-PC.

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 Create a new HyperTerminal session, indicate the correct COM setting for your system and set the parameters as follows: Bits per second = 38400; Data bits = 8; Parity = None; Stop bits = 1; Flow control = None.

| COM2 | Properties | <u>?</u> × |
|--------|------------------------|------------|
| Port S | Settings | |
| | | _ |
| | Bits per second: 39400 | |
| | Data bits: 8 | |
| | Parity: None | |
| | Stop bits: 1 | |
| | Flow control: None | |
| | Restore Defaults | |
| | OK Cancel Ap | ply |

Note: If **eBoot** is already installed on your phyCORE-PXA270, skip the following section and continue with section **2.3** and **2.4** for loading the WinCE image.

2.2 Downloading eBoot

 Browse to and open (double click) the file prog_Adeneo.bat located in: C:\PHYBasic\pC-PXA270\WinCE\JFlash_MM.



• The batch file will invoke the **JFlash** program and show hardware recognition within the MS Command Prompt window.

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• Check to make sure that the **ACT** (Actual) and **EXP** (Expected) values of the recognized PXA270 device are the same and then press <Enter>.

| C:\WINDOWS\System32\cmd.e | xe | <u>_ 🗆 ×</u> |
|--|--|--------------|
| C:\PHYBasic\pC-PXA270\W | linCE\JFlash_MM>jflashmm bulbcx EB00T_Adeneo.nb0 P 0 | PAR |
| JFLASH Version 5.01.003 COPYRIGHT (C) 2000 - 20 | 3)03 Intel Corporation modified by PHYTEC 1 | |
| PLATFORM SELECTION: | | |
| Processor= | PXA27x | |
| Development System= | Mainstone | |
| Data Version= | 1.00.002 | |
| ACT: 0111 1001001001100 | 0101 00000001001 1 | |
| EXP: **** 1001001001100 | 0101 00000001001 1 | |
| | | |
| PXA27x revision ?? | | |
| | | |
| | | |
| | | Ţ |

• Press <Enter> again.

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 The JFlash utility will automatically recognize the Flash type installed on the phyCORE-PXA270. Enter "y" to skip programming of the last 43 percent of the image area.

| C:\WINDOWS\System32\cmd.exe | × |
|--|----------|
| C:\PHYBasic\pC-PXA270\WinCE\JFlash_MM>jflashmm bulbcx EB00T_Adeneo.nb0 P 0 PAR | ^ |
| JFLASH Version 5.01.003 | |
| COPYRIGHT (C) 2000 - 2003 Intel Corporation modified by PHYTEC 1 | |
| PLATFORM SELECTION: | |
| Processor= PXA27x | |
| Development System= Mainstone | |
| Data Version= 1.00.002 | |
| ACT: 0111 1001001001100101 00000001001 1 | |
| EXP: **** 1001001001100101 00000001001 1 | |
| | |
| PXA27x revision ?? | |
| Found flash type: 28F128J3A | |
| The last 43 percent of image file is all zeros | |
| Would you like to save time by not programming that area? [y/n]: | - |

 eBoot download will take approximately 2-3 minutes, when complete the command window will close.



 Upon successful download of the eBoot loader, you may see several verify errors. These errors may be caused by possible timing issues with the JFlash utility and may be ignored. The command prompt window will close automatically when the download is complete.

The **eBoot** loader has now been successfully downloaded and resides in the phyCORE-PXA270 on-board Flash memory.

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2.3 Configuring the DHCP Server

Downloading the WinCE image via Ethernet from a Windows host-PC to the phyCORE-PXA270 / Carrier Board combination (also referred to as target hardware) requires installation and activation of a DHCP server on the host PC.

 Open the dhcpsrv.ini configuration settings file in a text editor (C:\pC-PXA270\WinCE\DHCP Server\dhcpsrv.ini). Change the IP address to match your network settings¹. For example:

| IPPOOL_1=192.168.3.2-200; | the IP pool from which the target IP address |
|---------------------------|--|
| | is taken from |
| IPBIND_1=192.168.3.1; | bind to the IP of your HOST-PC |

- See the **readme.txt** in the same directory for more information on setting up your DHCP server. Save the changes and close the *dhcpsrv.ini* file.
- Start the DHCP server by executing the *dhcpsrv.exe* located in the *pC-PXA270\WinCE\DHCP Server* folder. Click the *Install* button in the DHCP server window². The following window should now appear:

| DHCP Server | | |
|-----------------------------------|-------------|-------------------------|
| Welcome to the DHCP Server V1.5.3 | – Service – | Install |
| 모 | | <u>R</u> emove Start |
| Written by Uwe A. Ruttkamp | Status: | Stop Running |

¹: Contact your network administrator for more information on your network settings and IP address options.

²: The *Install* button is only active the first time you start this DHCP server.

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2.4 Downloading the WinCE Image

- Start eShell by double-clicking on the eshell.exe located in: C:\pC-PXA270\WinCE\JFlash_MM.
- The Select Device dialog box will appear on the screen.

| Select Device | × |
|---------------------------------|--|
| Enter Device Name: | OK |
| Or <u>S</u> elect From the List | Cancel |
| × | Reset devices to automatically put names on the list. |

- Open the HyperTerminal session created in section 2.1.
- Reset the phyCORE-PXA270 module by disconnecting and re-connecting the power adapter to the power socket X1 on the Carrier Board¹. Verify proper execution of the **eBoot** loader by looking at the HyperTerminal window messages.

| 🗞 XScale - HyperTerminal | × |
|---|---|
| Eile Edit View Call Transfer Help | |
| | |
| | |
| 31744 Call BP_ReadData. @=0x80100000 length=0xCE5464 (offset=0x0) System ready! | |
| Preparing for download | |
| Download successful! Jumping to image at 0x80101000 (phINFO: DetectFlashDevice: flash device id is 18. | |
| FMD_INIT : sparesize = 0 dwBaseCommand=0xbab00000 dwBaseAddress=0xbab40000 dw NumBlocks=64 dwNumSectors=32768 Unused=0 | |
| Flash Info : dwBytesPerBlock = 262144 wSectorsPerBlock = 512 dwNumBlocks = 64 wDataBytesPerSector = 512 INFO: DetectFlashDevice: flash device id is 18. | |
| Microsoft Windows CE Ethernet Bootloader Common Library Version 1.1 Built Aug 9 2006 17:17:36 Memory tests initialization succeeded (0xA403FF82) | |
| Wicrosoft Windows CE Ethernet Bootloader 1.8 for the PXA27x-based Platform Built Aug 21 2006 HARD reset detected Dep ones inticipal (a.operroad) | |
| Dor HRUS INITIATIZEA (UXHUUFFUUU) | |
| Press [ENTER] to launch image stored in flash or [SPACE] to cancel. | |
| Initiating image launch in 1 seconds. | |
| Connected 0:02:06 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo | |

 Press <SPACE> to cancel auto launch of any WinCE image that might already be installed and enter the Boot Loader Configuration menu.

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¹: It is recommended to wait about 10 seconds between disconnecting the power adapter and reconnecting it.



• The HyperTerminal window should now show the following messages and ask for a selection:

| 🗞 XScale - HyperTerminal | _ 🗆 🗙 |
|---|-------|
| <u>Eile Edit View Call Iransfer Help</u> | |
| | |
| Press [ENTER] to launch image stored in flash or [SPACE] to cancel. Initiating image launch in 2 seconds. Ethernet Boot Loader Configuration: 0) Set MAC address 1) IP address: 0.0.0.0 2) Subnet mask: 0.0.0.0 3) Boot delay: 3 seconds 4) DHCP: (Enabled) 5) Reset to factory default configuration 6) Launch existing flash resident image at startup 7) Boot device order: SMSC 8) Debug serial port: FFUART 10) Download image now 12) Erase flash F) Full Erase flash Enter your selection: | * |
| Connected 0:03:08 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo | 11. |

• At the *Enter your selection:* line type in "**F**" for "F) Full Erase flash". This will take a couple minutes to complete.

| 🏘 XScale - HyperTerminal | | | | | | | _ 🗆 × |
|---|---|---------------|------|-----|---------|------------|-------|
| Eile Edit View Call Transfer Help | | | | | | | |
| | | | | | | | (|
| B) Debug serial port: FF D) Download image now L Launch existing flash Copy main image to fl E) Erase flash F) Full Erase flash Enter your selection: f FMD_0EMIcControl: enter FMD_DEraseBlock: Erasing FMD_EraseBlock: Erasing | function block 0 block 0 block 2 block 2 block 3 block 3 block 4 block 5 block 5 block 7 block 7 block 10 block 11 block 12 | image no) | W | | | | |
| Connected 0:17:55 ANSIW | 38400 8-N-1 | SCROLL | CAPS | NUM | Capture | Print echo | |
| , j | , | , | , | , | , | , | 11. |

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 After eBoot completes the Full Erase, reset the board by disconnecting and reconnecting power. Wait until the boot loader has finished the Flash formatting process. Several "FMD_EraseBlock:" messages will display in the HyperTe rminal window as eBoot formats the Flash memory blocks for the WinCE image and Flash space for file and application storage. This process will take approximately 2 minutes, during which the following messages will appear in the HyperTerminal window:

| 🌯 XScale - HyperTerminal |
|---|
| Elle Edit View Call Transfer Help |
| |
| C) Copy main image to flash (FALSE) E) Erase flash F) Full Erase flash |
| Enter your selection: INFO: DetectFlashDevice: flash device id is 18. FMD_INIT : sparesize = 0 dwBaseCommand=0xbab00000 dwBaseAddress=0xbab40000 dw NumBlocks=64 dmNumSectors=32768 Unused=0 Flash Info : dwBytesPerBlock = 262144 wSectorsPerBlock = 512 dwNumBlocks = 64 wDataBytesPerBector = 512 FMD_EraseBlock: Erasing block 0 FMD_EraseBlock: Erasing block 1 FMD_EraseBlock: Erasing block 2 FMD_EraseBlock: Erasing block 3 FMD_EraseBlock: Erasing block 4 FMD_EraseBlock: Erasing block 5 FMD_EraseBlock: Erasing block 6 FMD_EraseBlock: Erasing block 7 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 7 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 7 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 9 FMD_EraseBlock: Erasing block 7 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing block 9 FMD_EraseBlock: Erasing block 8 FMD_EraseBlock: Erasing Block 8 |
| FMD_EraseBlock: Erasing block 9 FMD_EraseBlock: Erasing block 10 FMD_EraseBlock: Erasing block 11 FMD_EraseBlock: Erasing block 12 |
| Connected 0:09:29 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo |
| |
| |
| & XScale - HyperTerminal |
| XScale - HyperTerminal _ [] X Elle Edit View Call Iransfer Help _ [] X |
| * Xscale - HyperTerminal _ I × File Edit View Call Transfer Help _ I × Image: Image |
| * XScale - HyperTerminal _ I × File Edit View Call Transfer Help _ I × Image: State of the State of t |
| * XScale - HyperTerminal X File Edit View Call Transfer Help X FMD_EraseBlock: Erasing block 0 X Resetting factory default configuration X INF0: DetectFlashDevice: flash device id is 18. X |
| XScale - HyperTerminal X File Edit View Call Transfer Help X FMD_EraseBlock: Erasing block 0 X Resetting factory default configuration INF0: DetectFlashDevice: flash device id is 18. Microsoft Windows CE Ethernet Bootloader Common Library Version 1.1 Built Aug 9 X |
| XScale - HyperTerminal File Edt View Call Transfer Help Image: State - HyperTerminal I |
| XScale - HyperTerminal File Edit View Call Transfer Help FMD_EraseBlock: Erasing block 0 Resetting factory default configuration INFO: DetectFlashDevice: flash device id is 18. Microsoft Windows CE Ethernet Bootloader Common Library Version 1.1 Built Aug 9 2006 17:17:36 Memory tests initialization succeeded (0xA403FF82) Microsoft Windows CE Ethernet Bootloader 1.8 for the PXA27x-based Platform Built Aug 21 2006 HARD reset detected BSP RAGS initialized (0xA00FF000) Press [ENLER] to launch image stored in flash or [SPACE] to cancel |
| <pre> XScale - HyperTerminal Ple Edt View Call Transfer Help FMD_EraseBlock: Erasing block 0 Resetting factory default configuration INFO: DetectFlashDevice: flash device id is 18. Microsoft Windows CE Ethernet Bootloader Common Library Version 1.1 Built Aug 9 2006 17:17:36 Memory tests initialization succeeded (0xA403FF82) Microsoft Windows CE Ethernet Bootloader 1.8 for the PXA27x-based Platform Built Aug 21 2006 HRRD reset detected BSP ARGS initialized (0xA00FF000) Press [ENIER] to launch image stored in flash or [SPACE] to cancel. Initiating image launch in 0 seconds. ReadKernelRegionFromSIRATAFLASH: partition info for boot settings : 2 1 1 0 32 1 0 0 512 512 INFO: Loading kernel image from strataflash (address=0x80100000, length=0xF80000 launch address=0x80101000) FMD_EraseBlock: Erasing block 2 FMD_EraseBlock: Erasing block 4 FMD_EraseBlock: Erasing block 5 </pre> |
| EVE E |

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| XScale - HyperTerminal |
|---|
| Eile Edit View Call Iransfer Help |
| |
| <pre>FMD_EraseBlock: Erasing block 52 FMD_EraseBlock: Erasing block 53 FMD_EraseBlock: Erasing block 53 FMD_EraseBlock: Erasing block 55 FMD_EraseBlock: Erasing block 56 FMD_EraseBlock: Erasing block 58 FMD_EraseBlock: Erasing block 60 FMD_EraseBlock: Erasing block 61 FMD_EraseBlock: Erasing block 62 FMD_EraseBlock: Erasing block 63 FMD_EraseBlock: Erasing block 60 FMD_EraseBlock: Erasing block 61 FMD_EraseBlock: Erasing block 62 FMD_EraseBlock: Erasing block 63 FMD_EraseBlock: Erasing block 64 FMD_EraseBlock: Erasing blo</pre> |
| Connected 0:11:37 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo |

- When the Flash formatting is complete you will see "Download successful! Jumping to image at 0x801000 (physical 0xA0101000)...)".
- Reset the phyCORE-PXA270 module by disconnecting and re-connecting power and press <SPACE> to enter the Boot Loader Configuration menu.
- At the *Enter your selection:* line type in "**C**" to change the Boot Loader Configuration to show "C) Copy main image to flash (True)".

| XScale - HyperTerminal | . <mark></mark> |
|--|-----------------|
| | |
| Enter your selection: c | |
| 0) Set MAC address 1) IP address: 0.0.0.0 2) Subnet mask: 0.0.0.0 3) Boot delay: 3 seconds 4) DHCP: (Enabled) 5) Reset to factory default configuration 6) Launch existing flash resident image at startup 7) Boot device order: SMSC 8) Debug serial port: FFURRT 1) Download image now L) Launch existing flash resident image now C) Copy main image to flash (TRUE) E) Erase flash F) Full Erase flash Enter your selection: | |
| Connected 0:13:16 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo | |



• Enter **D** to "Download image now".

| 🗞 XScale - HyperTerminal | '× |
|--|----|
| <u>Eile Edit View Call Transfer Help</u> | |
| | |
| F) Full Erase flash Enter your selection: d INFO: Trying to initialize the built-in SMSC NIC LAN91Cxxx: Chip Id 9 Revision 2 INFO: MRC address: 0-50-C2-5A-73-98 System ready! Preparing for download INFO: Using device name: 'phyCore-PX29592' InitDHCP():: Calling ProcessDHCP() ProcessDHCP(): DHCP_INIT Got Response from DHCP server, IP address: 192.168.3.182 ProcessDHCP()::DHCP IP Address Resolved as 192.168.3.182, netmask: 255.255.255.05 Lease time: 43200 seconds Got Response from DHCP server, IP address: 192.168.3.182 No ARP response in 2 seconds, assuming ownership of 192.168.3.182 +EbootSendBootmeAndWaitForfftp Sent B00TME to 255.255.255.255 - | |
| Connected 0:19:06 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo | |

• Switch back to the "Select Device" dialog box in your **eShell** window. The name of the new module detected by the software will now appear in the dialog window. This may take several seconds to appear. Select the new name and confirm with the **OK** button.

| Select Device | × |
|---------------------------------|---|
| Enter Device Name: | ОК |
| phyCore-PX29592 | Canad |
| Or <u>S</u> elect From the List | Cancer |
| phyCore-FX29592 | Reset devices to automatically put names on the list. |

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Select NK_Adeneo.bin in the following window and click Open. The WinCE image is located in:

C:\PHYBasic\pC-PXA270\WinCE\JFlash_MM

| Open | | | | | ? × |
|--|--|-----------------------|---|-----------|--------------|
| Look <u>i</u> n: | 🔁 JFlash_MM | | • | 🗢 🗈 💣 🎟 • | |
| My Recent Documents Desktop My Documents My Computer | iveio_instal Source DM.bin NK.bin NK_Adeneo. NK_J3D.bin u-boot270.bi | l Din in bin | | | |
| My Network | File <u>n</u> ame: | NK_Adeneo.bin | | • | <u>O</u> pen |
| | Files of type: | NK Images (*.bin) | | • | Cancel |

• **eBoot** will display several "FMD_EraseBlock:" messages while writing the WinCE image to memory. The dowload process takes approximately 2 minutes. The status is displayed in the HyperTerminal window.

| 🗞 XScale - HyperTerminal | |
|---|-------------|
| Eile Edit View Call Transfer Help | |
| | |
| | |
| Download BIN file information: | |
| <pre>[0]: Base Address=0x80100000 Length=0x12CE124 ****** 0EMVerifyMemory checking physical range [0xA0100000 ==> 0xA13CE123] ****** RAM address ******</pre> | |
| <pre>rom_offset=0x0. ROMHDR at Address 80100044h Download successful! Jumping to image at 0x80101000 (physical 0xA0101000) Copy image downloaded to flash WriteRegionsIoStrataflash: enter the function. WriteRegionsIoStrataflash: size 19718436 OK , going to format 41985Sect with s ctor= 512 WriteRegionsIoStrataflash: partition info for btldr settings : 2 1 1 0 32 1 0 0 512 512 WriteRegionsIoStrataflash: partition info for image: 2 2 1 0 33 83 0 0 1024 419 4 INF0: WriteRegionsIoStrataflash: dwRegionStart=0x80100000, CACHED_TO_UNCACHED_O FSET=0x0. 0S_RMM_IMAGE_BSE=0x80100000). FSET=0x0. 0S_RMM_IMAGE_BSE=0x80100000). FMD_EraseBlock: Erasing block 2 FMD_EraseBlock: Erasing block 3 FMD_EraseBlock: Erasing block 4</pre> | e 8 F |
| Connected 0:20:44 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo | //, |

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• When complete, the following will appear:

| 🗞 XScale - HyperTerminal 📃 🗌 🗙 | 1 |
|---|---|
| Eile Edit View Call Transfer Help | |
| | |
| | 1 |
| FMD_EraseBlock: Erasing block 60 | |
| HU]_EraseBlock: Erasing block 61 | |
| EMD FraseBlock: Frasing block 63 | |
| FMD EraseBlock: Erasing block 64 | |
| FMD_EraseBlock: Erasing block 65 | |
| HMD_EraseBlock: Erasing block 66 | |
| FMD_EraseBlock: Erasing block 68 | |
| FMD EraseBlock: Erasing block 69 | |
| EMD_EraseBlock: Erasing block 70 | |
| HMD_EraseBlock: Erasing block /1 | |
| FMU_LTASEDLOCK: ETASING DLOCK /2 | |
| FMD ErdseBlock: Erdsing block 74 | |
| FMD_EraseBlock: Erasing block 75 | |
| FMD_EraseBlock: Erasing block 76 | |
| HuiteRagionsTastratiflack: Sattings for image: duStareOffcat=0x0, duPagionStart= | |
| m reference of the second s | |
| Writing image to flash complete. | |
| FMD_EraseBlock: Erasing block 1 | |
| Cot EDBC_CMD_C0MPIMG | |
| | |
| Connected 0:22:20 ANSIW 38400 8-N-1 SCROLL CAPS NUM Capture Print echo | |
| | 9 |

 The "Got EDBG_CMD_CON" message will be displayed in HyperTerminal as shown above. It will then take about 2-3 minutes to finish reformatting the Flash and boot up. Once this is complete the WinCE 5.0 desktop will be displayed on the Sharp LCD screen mounted on the back of the phyCORE-PXA270 Carrier Board. The WinCE 5.0 boot procedure will only take this long after the initial image download. Subsequent start up will only take 15 to 20 seconds.

Congratulations! You have successfully downloaded the WinCE demo image to the phyCORE-PXA270 over Ethernet. PHYTEC also offers Full Adeneo WinCE 5.0 BSP as source or binary. For more information please contact PHYTEC or your local PHYTEC representative.

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