



PowerBoot
Rel 3.0
for PPMC-270/270SL/275/280
Release Notes

P/N 223379 Revision AD

June, 2004

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Contents of the Deliverable Package

PowerBoot Release 3.0 for PPMC-270/270SL/275/280 boards includes the following components:

- frcPPMC27X_PowerBoot_3_0_No_BlExt.bin
 - Powerboot binary for PPMC270 / 270SL / 275
- Readme.txt

- frcPPMC280_PowerBoot_3_0_No_BlExt.bin
 - Powerboot binary for PPMC280
- Readme.txt

- frcPPMC2XX_PowerBoot_src_3_0.tar
 - Power Boot 3.0 Sources

- 223382 410 000 - Installation Guide

Features Supported in This Release 3.0

The changes or additions implemented in this release include:

- Software Compatibility
The commands should be backward compatible to PMC260
- Processor Initialization
PowerBoot initializes CPU0 (PPMC 270/270SL275/280) and also CPU1 (in PMC280 and PMC270).
- On Board Function Support
Support for all the onboard Serial Ports, Ethernet interfaces (10/ 100/1000 Mbps), ECC checking and correction (IDMA Scrubbing), Routines for erasing/programming user flash memories, Allow read of onboard EEPROM contents, Only PCI bus 0 Enumeration is done by the board in the Monarch Mode.
- ARP / RARP, TFTP, BOOTP Network Protocols Supported
- Miscellaneous Features
Implementation of routines to read/write/modify/display/search/verify memory areas.
Uploading of data from the onboard Ethernet ports to memory.

MAC numbers stored in EEPROM should be used for Onboard Ethernet Driver Initialization.

The PowerBoot must disable MV64360 watchdog timer.

- Boot Options
 - Network boot (TFTP) from all onboard Ethernet devices.
 - Auto-Boot from the onboard user flash memory. This feature has to be independent of the physical memory layout
- Build time and date
 - PowerBoot shall correctly display the date and time of the build during every boot-up.
- PowerBoot shell
 - PowerBoot shell shall support the following two features
backspace key (delete character in the buffer and also clear that character on the console.) and automatic command completion.
- Batch command
- Auto-boot and batch command sequencing
- Debug messages
- Version display
- Deliverables
- Linux Command Line
- PowerBoot console over PCI
- No Writes to boot flash with out end user knowledge
- Boot VxWorks from PowerBoot
- No Memory Scrubbing on Warm Boot
- Baud Rate Change Support
- Setboot – Netload both kernel and ramdisk.
- Single PowerBoot for all Hardware Revisions and Variants
- Ability to change both EEPROM contents
- Change_bootfile command

Revision History

P/N	Revision	Date	Description
223379 410 000	AA	June, 2004	Release 3.0
223379 410 000	AB	June, 2004	Release 3.0 Variant C (TLA No 120047) support
223379 410 000	AC	June, 2004	Release 3.0 (TFTP_BLOCK_OPTION has been disabled, So Default Packet size is 512 bytes)
223379 410 000	AD	June, 2004	Release 3.0 (Sources have been given along with Binaries)

Changes from Release 2.x to 3.0

- Merged Source Base for PMC270/270SL/275/280
- Number of commands that can be executed on the PowerBoot shell is Infinite.
- Fix has been provided for the screen capture in ProComm plus with Powerboot (^H characters eliminated while recording)
- POT Results Stored in Location 0x4000(as default), can be modified using setboot.
- Interrupt registers are cleared before handing over control to Linux
- By Default Data Cache is disabled.
- Display of TLA Numbers (PMC280 only)
- Support for Variant C (TLA No 120047) is provided

Known Problems

Nil

Restrictions

The restrictions in this release are detailed below:

- PCI scan is restricted to scan only Bus 0 (Will not scan beyond bridge).
- Instruction cache L2 is not supported.
- EEPROM are not write protected. If EEPROM at 0xA4 and 0xA6 are reprogrammed the system may become unusable.
- Use vt100 serial protocol, if terminal emulator is not displaying characters properly.

Product Error Report

Product:	Serial No.:
Date Of Purchase:	Originator:
Company:	Point Of Contact:
Tel.:	Ext.:
Address: _____ _____ _____	
Present Date:	
Affected Product: <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Systems	Affected Documentation: <input type="checkbox"/> Hardware <input type="checkbox"/> Software <input type="checkbox"/> Systems
Error Description: _____ _____ _____ _____ _____ _____ _____ _____	
<p>This Area to Be Completed by Force Computers:</p> <p>Date:</p> <p>PR#:</p> <p>Responsible Dept.: <input type="checkbox"/> Marketing <input type="checkbox"/> Production Engineering <input checked="" type="checkbox"/> Board <input type="checkbox"/> Systems</p>	

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