

# Discontinuation and Migration of the Processor on the phyCORE-PXA270 (PCM-027)

The information in this document is relevant for deployment of the phyCORE-PXA270 System on Module with root part # PCM-027, as well as corresponding Rapid Development Kits with root part # KPCM-027.

## Overview

The Marvel (formerly Intel) NHPXA270C5520 PXA270 processor used on the phyCORE-PXA270 has been discontinued and is replaced by the Marvell 88AP270MA2-BHE1C520 PXA270M device.

This product change impacts the following PHYTEC System on Modules:

PCM-027-xxx (phyCORE-PXA270)

In contrast to its NHPXA270C5520 predecessor, the 88AP270MA2-BHE1C520 is produced using a 65 nm process. This change in production process has resulted in changes to the SDRAM and LCD driver properties, as well as values of internal chip resistors.

## Required Hardware and Software Modifications

- Depending on deployment of the phyCORE-PXA270 in end applications, the I/O pin drive strength of the SDRAM and LCD values could require reconfiguration via the registers LCDBSCNTR and BSCNTRx. For more information please refer to Specification Clarifications section S1 (“I/O Pin Drive Strength”) in the “Marvell PXA270M Processor Specification Update.”
- The voltage levels and circuitry of peripheral devices connected to the phyCORE-PXA270 could also require modification due to the change of internal resistor values of the processor.

---

© PHYTEC Messtechnik GmbH 2012

Europe: Support Hotline: +49 (6131) 9221-31 • <http://www.phytec.de>

North America: Support Hotline: + 1-800-278-9913 • <http://www.phytec.com>

Please note that adjustment of the driver strength could also impact EMI characteristics of the phyCORE-PXA270 and its external circuitry.

In comparison to the NHPXA270C5520, the 88AP270MA2-BHE1C520 lacks a pull-up resistor at USBHPWR1 / GPIO88. This lack of a resistor can result in malfunction of the USB-Host interface.

Refer to the Marvell web site for additional Specification Updates in regards to the PXA270M processors.

## Referenced Documents

Marvell® PXA270M Processor, Specification Update  
Doc. No. MV-S900957-00 Rev. I, Public Release, April 19, 2010