PhyCORE-Vybrid MQX BSP-PD13.2.0 Release Notes

Operating System	MQX
BSP Release Status	RELEASED
Release Date	07 Aug 2013
Repository	
Binaries	ftp://ftp.phytec.com/products/PCM-052_phyCORE-Vybrid/MQX/PD13.2.0
Source Archive	
Release Notes	Click Here

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Introduction

This BSP provides a basis for development, deployment and execution of MQX based applications on the phyCORE-Vybrid System on Module (SOM). For detailed information on the various software components included in the release and how to use them, please refer to the Quickstart.

Versioning

Component	Version			
MQX RTOS	4.0.1			
ARM DS-5	5.14			
Linux Kernel	3.0			
u-boot	2011.12			

This Release is compatible with the following hardware:

BSP Release Version	BSP Release Date	SOM PCB Version	CB PCB Version
PD13.2.0	8/7/2013	1374.0	1375.2

BSP Download

Release PD13.2.0 can be downloaded from the link below.

ftp://ftp.phytec.com/products/PCM-052_phyCORE-Vybrid/MQX/PD13.2.0

Quickstart

Release PD13.2.0 should be used in conjunction with Quickstart version QS1.0:

PhyCORE-Vybrid_Quickstart-QS1.0

What's Supported

This BSP Release supports the following components:

- UART: RS-232 via SCI_1; RS-232 via SCI_2
- USB: USB_0 in Host Mode mass storage device, keyboard, mouse; USB_1 in Host Mode mass storage device, keyboard, mouse
- Ethernet: RMII0; RMII1

Note:

The Ethernet PHY supported on this BSP is KSZ8051RNLI. Due to EOL this part has been replaced with KSZ8081RNBIA. SOMs with part number PCM-052-1210321CI.A3 will be populated with KSZ8081RNBIA. Ethernet functionality is the same for SOMs populated with the KSZ8051RNLI or KSZ8081RNBIA. The KSZ8081RNBIA PHY has a different model number that will be added to the software in the next BSP release.

- SPI: DSPI0 not tested
- I2C driver: I2C_2 enabled
 - o EEPROM: at24 on I2C_2
 - Light sensor: on I2C_2
- Display: Prime View PM070WL4 LVDS (LCD-017-070W) no demo available/not tested
- Watchdog
- High Speed Timer
- MCC: Cortex-A5 (Linux) and Cortex-M4 (MQX)

What's Not Supported

This BSP Release does not support the following components:

- NAND Flash
- SPI NOR Flash
- CAN: CAN_0; CAN_1
- RTC: RV-4162-C7 on I2C_2
- TSC: STMPE811 on I2C_2
- Power Management: Suspend to RAM

Fixed in this Release

• Ethernet 1 support in the BSP

New in this Release

- Cortex-A5 support
- RS-232 via SCI_2
- USB_0 in Host Mode mass storage device, keyboard, mouse
- USB_1 in Host Mode mass storage device, keyboard, mouse
- SPI
- Light Sensor
- ADC
- Watchdog
- High Speed Timer

Known Issues

Only one ADC channel can be enabled at a time, ADC0 or ADC1

Workaround: Apply the patch available here: ftp://ftp.phytec.com/products/PCM-052_phyCORE-Vybrid/MQX/PD13.2.0/0002-pcm052-bug-fix-for-lwadc.patch

• USB0 and USB1 mouse example works for mouse clicks only

Upgrade and Compatibility Information

To upgrade to a new BSP release, simply delete the old release and extract the new release in its place.

Dependencies

N/A

Validation Information

Drivers have been tested with in-house test cases.

Technical Support

For further information or to report any problems, contact $\ensuremath{\mathsf{PHYTEC}}$ Technical Support.