BSP Yocto Yogurt i.MX6UL PD17.2.0 Release Notes

Operating System	Linux - Mainline
BSP Release Status	RELEASED
Release Date	17 Oct 2017
Repository	PHYTEC Germany Public Repos
Binaries	ftp://ftp.phytec.de/pub/Software/Linux/BSP-Yocto-i.MX6/BSP-Yocto-phyBOARD-Segin-PD17.2.0/images/
Source Archive	
Release Notes	Click Here

This software release is maintained by www.phytec.de.

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Introduction

This BSP provides a basis for development, deployment and execution of Linux based applications on the i.MX6UL 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

Software

Component	Version
Linux Kernel	4.12.4 (Based on stable kernel v4.12.4)
Yocto	2.2.2 (Morty)
Barebox	2017.04.0
Qt	5.7.1
Host OS	Tested on 64-bit Ubuntu 16.04 LTS

Supported Hardware

See machines.txt.

BSP Download

Prebuilt images of PD17.2.0 can be downloaded from the link below:

ftp://ftp.phytec.de/pub/Software/Linux/BSP-Yocto-i.MX6/BSP-Yocto-phyBOARD-Segin-PD17.2.0/images/

Quickstart

Quickstart for phyCORE-i.MX6UL-PD17.2.0:

BSP Yocto i.MX6UL Manual PD17.1.x

New In This Release

- Added support for machines:
  - phyboard-segin-imx6ul-2 (phyBOARD-Segin full featured)
  - phyboard-segin-imx6ul-3 (phyBOARD-Segin low cost)
  - phyboard-segin-imx6ul-4 (phyBOARD-Segin full featured with RS485)
- Added new features:
  - Mainline kernel based on v4.12.4
  - Support for displays:
    - AC158 (7" capacitive)
    - AC156 (7" resistive)
    - AC103 (5.7" capacitive)
    - AC102 (4.3" capacitive)
    - AC167 (3.5" capacitive)
  - Resistive touch
  - Booting barebox from NAND
  - Support USB_Host in barebox
  - QT5 (5.7.1) support, QT5 Demo 1.1 working with limited functionality (see Known Issues)
  - RS485 support (kernel)
  - 2x Ethernet ports (kernel)
  - Support for Wireless LAN Module PEB-WLBT-01 (WiFi only, no Bluetooth)

Not Supported

- Removed support for machine:
  - phyboard-segin-imx6ul-1

Known Issues

PHYTEC Known Issues

- The 696 MHz operating point of the phyCORE-i.MX 6UL is not supported.
- The DVFS pin to switch VDD_ARM_SOC from 1.4 V to 1.3 V on phyCORE-i.MX 6UL/6ULL is already included in the device tree but not yet supported in the kernel. But DVFS with internal LDOs is already supported.
- When booting from MMC, sometimes (about 5 in 1000) barebox and kernel fail to attach the NAND devices.
- ADC provides uncalibrated values.
- Booting the root filesystem over NFS is not possible.
- TFTP in kernel is slow, but UDP in general is not affected.
- Multimedia page is removed from QT5 Demo.
- QT5 Demo is only working correctly on the 7" displays, smaller displays need adaptation.
- Starting and stopping the QT5 demo influences the consoleblank parameter.
- When returning from suspend to RAM (mem or standby) the display might not work correctly.
- Suspend to RAM (freeze) does not work correctly.
- RS485 is only working correctly in raw mode (stty -F /dev/ttymxc4 raw echo -echoe -echok -echoctl -echoke).
- The TiwiBLE chip sometimes requests a restart of the firmware which leads to a backtrace dump. The connection is reestablished afterwards and transfers continued.

Technical Support

For further information or to report any problems, visit the PHYTEC Support Portal