BSP Yocto Yogurt i.MX6 PD16.1.0 Release Notes

Operating System	Linux
BSP Release Status	RELEASED
Release Date	24 Jan 2017
Repository	PHYTEC Germany Public Repos
Binaries	ftp://ftp.phytec.de/pub/Software/Linux/BSP-Yocto-i.MX6/BSP-Yocto-i.MX6-PD16.1.0/images/
Kernel Source	https://git.phytec.de/linux-mainline/tree/?h=v4.1.36-phy3
Quickstart Guide	BSP Yocto i.MX6 Manual PD16.1.x

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

Introduction

This BSP provides a basis for development, deployment and execution of Linux based applications on the i.MX6 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	v4.1.36
Yocto	2.1.2 (Krogoth)
Qt	5.6.2
Barebox	2016.11.0
Host OS	Tested on 64-bit Ubuntu 14.04 LTS

Tested Image	phytec-qt5demo-image

Supported Hardware

- phyFLEX-i.MX6 SOM and Kit (Quad, DualLite, and Solo)
- Single Board Computers:

    - phyBOARD-Mira (Quad, Quad Plus, DualLite, Solo)
    - phyBOARD-Subra

BSP Download

Prebuilt images of PD16.1.0 can be downloaded from the link below:

ftp://ftp.phytec.de/pub/Software/Linux/BSP-Yocto-i.MX6/BSP-Yocto-i.MX6-PD16.1.0/images/

Quickstart

Quickstarts for Yocto i.MX6: BSP Yocto i.MX6 Manual PD16.1.x

Fixed In This Release

- **Kernel**

    - i.MX6 DualLite/Solo Stability Issue at 396 Mhz.

        - Linux kernel patch "ARM: dts: imx6dl: Fix the VDD_ARM_CAP voltage for 396MHz operation".
        - Fixes Phytec's LPN-226e_1.
    - Fix phyCORE-i.MX6 stability (PMIC buckets)
    - Fix Micrel Ethernet PHY link detection issues at -30°C
    - Fix VM-010-BW and VM-010-COL for phyBOARD-SUBRA

New In This Release

- **Kernel**
    - Update to Kernel v4.1.36 (v4.1 is an LTS kernel). Updated from v4.1.18.
    - Implement DA9062 and DA9063 Watchdog and reboot handler for phyFLEX and phyCORE in kernel and barebox (watchdog is not enabled by default)
    - Enable double vm-buffering in i.MX6 OpenGL Library and Qt
    - VM-012 support (vita1300)
    - RS485 Support
    - Kernel and device tree are now stored in static UBI volumes

    > ⚠ Method for updating the kernel, device tree, and rootfs has changed in this release. The kernel and device tree are now placed in a static UBI volume inside the rootfs partition.

- **Barebox**
    - Updated version to 2016.11.0
    - updated NAND partitioning
    - Refactored barebox environment (More details?)
    - nv variables are saved automatically on shutdown
    - Implement DA9062 and DA9063 Watchdog and reboot handler for phyFLEX and phyCORE in kernel and barebox (watchdog is not enabled by default)

- **Yocto (meta-phytec, meta-yogurt)**
    - Updated version to 2.1.2 (Krogoth)

- meta-qt5 updated to Qt5.6.2 (Krogoth)
  - New phyBOARD-Mira machine configurations
  - Update vivante GPU library for i.MX6 QuadPLus

    - Galcore version 5.0.11.41671 from NXP kernel tag rel_imx_4.1.15_1.2.0_ga
  - gstreamer

    - add kmssink
    - add v4l2 encoder for i.MX6 VPU
    - add bayer2rgb-neon
  - tuxracer recipe in meta-yogurt
  - bvtest: crop support

Not Supported

N/A

Known Issues

PHYTEC Known Issues

- **Kernel**
  - CAN does not work with 10Kbaud (This was also an issue in previous releases)
  - QuadPlus:
    - Display and HDMI do not work

Technical Support

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