PhyFLEX-i.MX6 Linux BSP-PD12.0.3 Release Notes

Operating System	Linux
BSP Release Status	RELEASED
Release Date	13 Mar 2013
Repository	
Binaries	ftp://ftp.phytec.com/products/PFL-A-02_phyFLEX-iMX6/Linux/PD13.1.0/
Source Archive	
Release Notes	Click Here

- Introduction
- Versioning
- BSP Download
- Quickstart
- What's Supported
- What's Not Supported
- Fixed in this Release
- New in this Release
- Known Issues
- Upgrade and Compatibility Information
- Dependencies
- Validation Information
- Technical Support

Introduction

This BSP provides a basis for development, deployment and execution of Linux based applications on the phyFLEX-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

Component	Version
Linux Kernel	3.0.35
Barebox	2012.02.0
PTX Distribution	2012.03.0
OSELAS Toolchain	2011.11.1

This Release is compatible with the following hardware:

BSP Release Version	BSP Release Date	SOM PCB Version	FLEX Mapper Board Version	FLEX Baseboard Version
PD13.1.0	March 13th, 2013	1362.1	1367.1	1364.2

BSP Download

Release PD13.1.0 can be downloaded from the link below.

ftp://ftp.phytec.com/products/PFL-A-02_phyFLEX-iMX6/Linux/PD13.1.0/

Quickstart

Release PD13.1.0 should be used in conjunction with Quickstart version PD13.1.0:

- PhyFLEX-i.MX6 Linux Quickstart-PD13.1.0

What’s Supported

This BSP Release supports the following components:

- **i.MX6**: Kernel 3.0
- NAND Flash: Kernel, UBIFS Filesystem
- NOR Flash: Bootloader, Kernel, UBIFS Filesystem (minimal)
- DDRAM: MT41J128M16HA-15E IT DDR3
- UART: UART0; UART1
- USB: USB0 HS OTG; USB1 HS Host
- Ethernet: 10/100/1000 Mbit/s – ETH0 from RGMII
- CAN: CAN0
- SD/MMC: SD0; SD1
- PCIe (card limited)
- SATA
- SPI driver: SPI0, SPI1 enabled
- I2C driver: I2C0, I2C1 enabled
- EEPROM: at24 on I2C1
- PMIC: DA9063 on I2C1
- RTC: RTC-8564 Real-Time Clock on I2C0 (device on carrier board)
- Touch

Resistive: STMPE811 on I2C0 (device on carrier board)Capacitive: FocalTech FT5306 on I2C0

- Display:

Prime View PD050VL1 LVDS (LCD-017-050V)Prime View PM070WL4 LVDS (LCD-017-070W)Prime View PD104SLF LVDS (LCD-017-104S)EDT ETM0700G0DH6 TTL (LCD-018-070-KAP)

- Camera:

VM-006-BWVM-009VM-010-BWUSB-CAM-003H (with UVC Firmware update)USB-CAM-103H (with UVC Firmware update) (without trigger)USB-CAM-051H (with UVC Firmware update)USB-CAM-151H (with UVC Firmware update) (without trigger)

- Audio: Line in, Line out, Mixer, Mic in - not fully tested
- Video decoding
- Graphics: OpenGL
- DVFS

Note: Signal names may change between processor and PCBs. Please refer to phyFLEX-i.MX6 Hardware Manual for signal name mapping.

What’s Not Supported

This BSP Release does not support the following components:

- Video encoder: Streaming, TV

Fixed in this Release

- SD slot 1, eliminated problems with some SD Cards

New in this Release

- PMIC
- Camera (on FLM-A-XL1 Mapper phyCAM-P X5)

VM-006-BWVM-009VM-010-BWUSB-CAM-003H (with UVC Firmware update)USB-CAM-103H (with UVC Firmware update) (without trigger)USB-CAM-051H (with UVC Firmware update)USB-CAM-151H (with UVC Firmware update) (without trigger)

- Sound (working - minimal testing on line out, errors are possible)
- DVFS

Known Issues

- PCIe issues with some cards
- USB-OTG serial gadget - works but unstable
- gplay movie plays only one time

Workaround: To play again, reboot the board.

Upgrade and Compatibility Information

This BSP is not backwards compatible due to a change in PCB pinout, see Modification of the pinout for the phyFLEX-i.MX6 (PLF-A-XL1). The BSP is specific to SOM: 1362.1 and Carrier Board: 1364.2 and will retain compatibility with future released PCB revisions.

Dependencies

N/A

Validation Information

Drivers have been tested with in-house test cases.

Technical Support

For further support please visit PHYTEC's Support Portal