



# PHY framework

**From:** Kishon Vijay Abraham I <kishon@ti.com>  
**To:** <gregkh@linuxfoundation.org>, <kyungmin.park@samsung.com>, <balbi@ti.com>, <kishon@ti.com>, <jg1.han@samsung.com>, <s.nawrocki@samsung.com>, <kgene.kim@samsung.com>  
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**Message-ID:** <1374129984-765-1-git-send-email-kishon@ti.com>  
**Cc:** <grant.likely@linaro.org>, <tony@atomide.com>, <arnd@arndb.de>, <swarren@nvidia.com>, <devicetree-discuss@lists.ozlabs.org>, <linux-doc@vger.kernel.org>, <linux-kernel@vger.kernel.org>, <linux-arm-kernel@lists.infradead.org>, <linux-samsung-soc@vger.kernel.org>, <linux-omap@vger.kernel.org>, <linux-usb@vger.kernel.org>, <linux-media@vger.kernel.org>, <linux-fbdev@vger.kernel.org>, <akpm@linux-foundation.org>, <balajitk@ti.com>, <george.cherian@ti.com>, <nsekhar@ti.com>

**Archive-link:** [Article](#)

Added a generic PHY framework that provides a set of APIs for the PHY drivers to create/destroy a PHY and APIs for the PHY users to obtain a reference to the PHY with or without using phandle.

This framework will be of use only to devices that uses external PHY (PHY functionality is not embedded within the controller).

The intention of creating this framework is to bring the phy drivers spread all over the Linux kernel to drivers/phy to increase code re-use and to increase code maintainability.

Comments to make PHY as bus wasn't done because PHY devices can be part of other bus and making a same device attached to multiple bus leads to bad design.

If the PHY driver has to send notification on connect/disconnect, the PHY driver should make use of the extcon framework. Using this subsystem to use extcon framework will have to be analysed.

Exynos MIPI CSIS/DSIM PHY and Displayport PHY have started using this framework. Have included those patches also in this series.

twl4030-usb and omap-usb2 have also been adapted to this framework.

These patches are also available @  
[git://gitorious.org/linuxphy/linuxphy.git](https://gitorious.org/linuxphy/linuxphy.git) tags/phy-for-v3.12

Jingoo Han (3):  
 phy: Add driver for Exynos DP PHY  
 video: exynos\_dp: remove non-DT support for Exynos Display Port  
 video: exynos\_dp: Use the generic PHY driver

Kishon Vijay Abraham I (8):  
 drivers: phy: add generic PHY framework  
 usb: phy: omap-usb2: use the new generic PHY framework  
 usb: phy: twl4030: use the new generic PHY framework  
 ARM: OMAP: USB: Add phy binding information

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ARM: dts: omap: update usb_otg_hs data
usb: musb: omap2430: use the new generic PHY framework
usb: phy: omap-usb2: remove *set_suspend* callback from omap-usb2
usb: phy: twl4030-usb: remove *set_suspend* and *phy_init* ops

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Sylwester Nawrocki (4):

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phy: Add driver for Exynos MIPI CSIS/DSIM DPHYS
video: exynos_mipi_dsim: Use the generic PHY driver
exynos4-is: Use the generic MIPI CSIS PHY driver
ARM: Samsung: Remove the MIPI PHY setup code

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.../devicetree/bindings/phy/phy-bindings.txt | 66 +++
.../devicetree/bindings/phy/samsung-phy.txt | 22 +
Documentation/devicetree/bindings/usb/omap-usb.txt | 5 +
Documentation/devicetree/bindings/usb/usb-phy.txt | 6 +
.../devicetree/bindings/video/exynos_dp.txt | 18 +-
Documentation/phy.txt | 129 +++++
MAINTAINERS | 7 +
arch/arm/boot/dts/omap3-beagle-xm.dts | 2 +
arch/arm/boot/dts/omap3-evm.dts | 2 +
arch/arm/boot/dts/omap3-overo.dtsi | 2 +
arch/arm/boot/dts/omap4.dtsi | 3 +
arch/arm/boot/dts/twl4030.dtsi | 1 +
arch/arm/mach-exynos/include/mach/regs-pmu.h | 5 -
arch/arm/mach-omap2/usb-musb.c | 3 +
arch/arm/mach-s5pv210/include/mach/regs-clock.h | 4 -
arch/arm/plat-samsung/Kconfig | 5 -
arch/arm/plat-samsung/Makefile | 1 -
arch/arm/plat-samsung/setup-mipiphy.c | 60 ---
drivers/Kconfig | 2 +
drivers/Makefile | 2 +
drivers/media/platform/exynos4-is/mipi-csis.c | 16 +-
drivers/phy/Kconfig | 28 +
drivers/phy/Makefile | 7 +
drivers/phy/phy-core.c | 544 +++++
drivers/phy/phy-exynos-dp-video.c | 111 ++++
drivers/phy/phy-exynos-mipi-video.c | 169 ++++++
drivers/usb/musb/Kconfig | 1 +
drivers/usb/musb/musb_core.c | 1 +
drivers/usb/musb/musb_core.h | 3 +
drivers/usb/musb/omap2430.c | 26 +-
drivers/usb/phy/Kconfig | 1 +
drivers/usb/phy/phy-omap-usb2.c | 60 ++-
drivers/usb/phy/phy-twl4030-usb.c | 63 +-
drivers/video/exynos/Kconfig | 2 +-
drivers/video/exynos/exynos_dp_core.c | 132 +-
drivers/video/exynos/exynos_dp_core.h | 110 ++++
drivers/video/exynos/exynos_dp_reg.c | 2 -
drivers/video/exynos/exynos_mipi_dsi.c | 19 +-
include/linux/phy/phy.h | 344 +++++
include/linux/platform_data/mipi-csis.h | 11 +-
include/linux/usb/musb.h | 3 +
include/video/exynos_dp.h | 131 -----
include/video/exynos_mipi_dsim.h | 6 +-
43 files changed, 1746 insertions(+), 389 deletions(-)
create mode 100644 Documentation/devicetree/bindings/phy/phy-bindings.txt
create mode 100644 Documentation/devicetree/bindings/phy/samsung-phy.txt
create mode 100644 Documentation/phy.txt
delete mode 100644 arch/arm/plat-samsung/setup-mipiphy.c
create mode 100644 drivers/phy/Kconfig
create mode 100644 drivers/phy/Makefile
create mode 100644 drivers/phy/phy-core.c
create mode 100644 drivers/phy/phy-exynos-dp-video.c
create mode 100644 drivers/phy/phy-exynos-mipi-video.c
create mode 100644 include/linux/phy/phy.h
delete mode 100644 include/video/exynos_dp.h

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1.7.10.4

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