Category:Display hardware components

Contents

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Category:Display hardware components

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This category groups together all articles related to the **display** hardware components used on the STM32 MPUs boards, and for which additional software information is needed.

Pages in category "Display hardware components"

The following 3 pages are in this category, out of 3 total.

- Display bridges hardware components
- Display panels hardware components
- Touchscreen hardware components

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Contents

1 Article purpose

The purpose of this article is to:

- List the display bridge hardware components that might be integrated in the different boards.
- Link these components to the corresponding software framework(s).
- Point to the appropriate component datasheets.
- Explain, when necessary, how to configure these components.

2 Software frameworks

Domain	Peripheral	Software frameworks			Comment
Cortex-A7 secure (OP-TEE)	Cortex-A7 non-secure (Linux)	Cortex-M4 (STM32Cube)			
Visual	Silab sil9022		DRM/KMS framework		HDMI transmitter

3 Silab sil9022

The SiI9022A HDMI transmitter supports the HDMI® Specification on a wide range of mobile products.

For details and the datasheet please contact the SiI9022A HDMI transmitter provider.

3.1 Linux driver

Bindings: Documentation/devicetree/bindings/display/bridge/sii902x.txt

Sources: drivers/gpu/drm/bridge/sii902x.c

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High-Definition Multimedia Interface (HDMI standard)

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Contents

1 Article purpose

The purpose of this article is to:

- List the display panel hardware components that might be integrated in the different boards.
- Link these components to the corresponding software framework(s).
- Point to the appropriate component datasheets.
- Explain, when necessary, how to configure these components.

2 Software frameworks

Domain	Peripheral	Software frameworks			Comment
Cortex-A7 secure (OP-TEE)	Cortex-A7 non-secure (Linux)	Cortex-M4 (STM32Cube)			
Visual	Raydium RM68200		DRM/KMS framework		DSI panel driver
Visual	Orise Tech OTM8009a		DRM/KMS framework		DSI panel driver

3 Raydium RM68200

The Raydium RM68200 is a single-chip solution for a-Si TFT LCD that incorporates gate drivers and is capable of driving different panel resolutions. It supports MIPI®DSI Interface.

For details and the datasheet please contact the RM68200 driver provider.

3.1 Linux driver

Bindings: Documentation/devicetree/bindings/display/panel/raydium,rm68200.yaml

Sources: drivers/gpu/drm/panel/panel-raydium-rm68200.c

3.2 U-Boot driver

Bindings: drivers/video/raydium-rm68200.c

4 Orise Tech OTM8009a

The Orise Tech OTM8009a is a MIPI®DSI panel driver.

For details and the datasheet please contact the OTM8009a driver provider.

4.1 Linux driver

Bindings: Documentation/devicetree/bindings/display/panel/orisetech,otm8009a.yaml

Sources: drivers/gpu/drm/panel/panel-orisetech-otm8009a.c

4.2 U-Boot driver

Bindings: drivers/video/orisetech_otm8009a.c

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Display Serial Interface (MIPI® Alliance standard)

Mobile Industry Processor Interface, open membership organization that includes leading companies in the mobile industry that share the objective of defining and promoting open specifications for interfaces inside mobile terminals, see MIPI® Alliance standard web site https://www.mipi.org

Das U-Boot -- the Universal Boot Loader (see U-Boot_overview)

Stable: 19.10.2020 - 12:44 / Revision: 19.10.2020 - 12:43

A quality version of this page, approved on *19 October 2020*, was based off this revision.

Contents

1 Article purpose

The purpose of this article is to:

- list the touchscreen hardware components that might be integrated in the different boards
- link these components to the corresponding software framework(s)
- point to the datasheet(s) of these components
- explain, when necessary, how to configure these components

2 Software frameworks

Domain	Peripheral	Software frameworks			Comment
Cortex-A7 secure (OP-TEE)	Cortex-A7 non-secure (Linux)	Cortex-M4 (STM32Cube)			
Visual and Inputs	Goodix GT9147		Inputs framework[1]		Touchscreen input driver
Visual and Inputs	FocalTech FT6236		Inputs framework[1]		Touchscreen input driver

3 Goodix GT9147

The Goodix GT9147 is a single-layer multi-touch capacitive touch controller driver.

For details and the datasheet please contact the GT9147 driver provider.

3.1 Linux driver

Bindings: Documentation/devicetree/bindings/input/touchscreen/goodix.txt

Sources: drivers/input/touchscreen/goodix.c

4 FocalTech FT6236

The FocalTech FT6236 is a self-capacitive touch panel controller driver.

For details and the datasheet please contact the FT6236 driver provider.

4.1 Linux driver

Bindings: Documentation/devicetree/bindings/input/touchscreen/edt-ft5x06.txt

Sources: drivers/input/touchscreen/edt-ft5x06.c

5 References

- 1.01.1 Linux Input Subsystem kernel API and userspace API

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