

i.Core STM32MP1

i.Core STM32MP1 is based on the new STM32MP157 processor from ST® equipped with a dualcore Cortex®-A7 and Cortex-M4. The new module offers very high performance, real-time capabilities, and low-power operation. The wide range of peripherals makes this SOM suitable for many different applications.



FEATURES





HIGHLIGHTS

- Powerful dual core Cortex A7+Cortex M4
- Low Power Consumption
- · Suitable for a fan-less application with high-end

APPLICATIONS













ST® STM32MP157



CORES

Dual-Core Cortex-A7 @650/800MHz and Cortex M4@200MHz



MEMORY

Up to 1GB LPDDR3L



3D GPU: Vivante®-OpenGL® ES2.0 - Up to 26 Mtriangle/s, 133 Mpixel/s LCD-TFT controller, up to 24-bit // RGB888 - up to WXGA (1366x768) @60 fps - Two layers with programmable colour LUT MIPI® DSI data lanes up to 1GHz each



- · LCD-TFT controller, up to 24-bit up to parallel RGB888
- MIPI®DSI 2 data lanes up to 1GHz each
- LVDS Single channel via MIPI-DSI bridge



VIDEO PROCESSING

Up to WXGA (1366x768) @60fps



AUDIO

I²S interface

PRINCE LAN 10/100 Ethernet interfaces



USB

• 1x USB HOST 2.0 1x USB OTG 2.0



MASS

· 512MB expandible Nand Flash



STORAGE

· 4GB eMMC drive soldered on-board



UART, I2C, SPI, CAN Bus, PWM, SDIO i/f, JTAG i/f



POWER SUPPLY

+5V DC



OPERATING

 Linux · Yocto



OPERATING TEMPERATURE*

Industrial and consumer qualified



DIMENSIONS

67,6 x 32,1 mm

* Valid for all components except CPU. Customer shall consider junction temperature for CPU. Temperature will widely depend on application. Specific cooling solutions could be necessary for the final system.





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BLOCK DIAGRAM



