Introduction

Tiger City IMX Industrial Computer with Linux OS

The Tiger City IMX minicomputer uses Linux operating systems and is equipped with several communication interfaces such as: Ethernet, USB 2.0, HDMI, GSM, RS232, RS485, 1-Wire and multiple analog-digital inputs and outputs. It can also be configured to include a Wi-Fi module and encryption modules that increase the security of the device. The casing enables installation on the DIN rail. The front panel has switches, an OLED display and a joystick for manual control of the device operation.

Specifications of the device

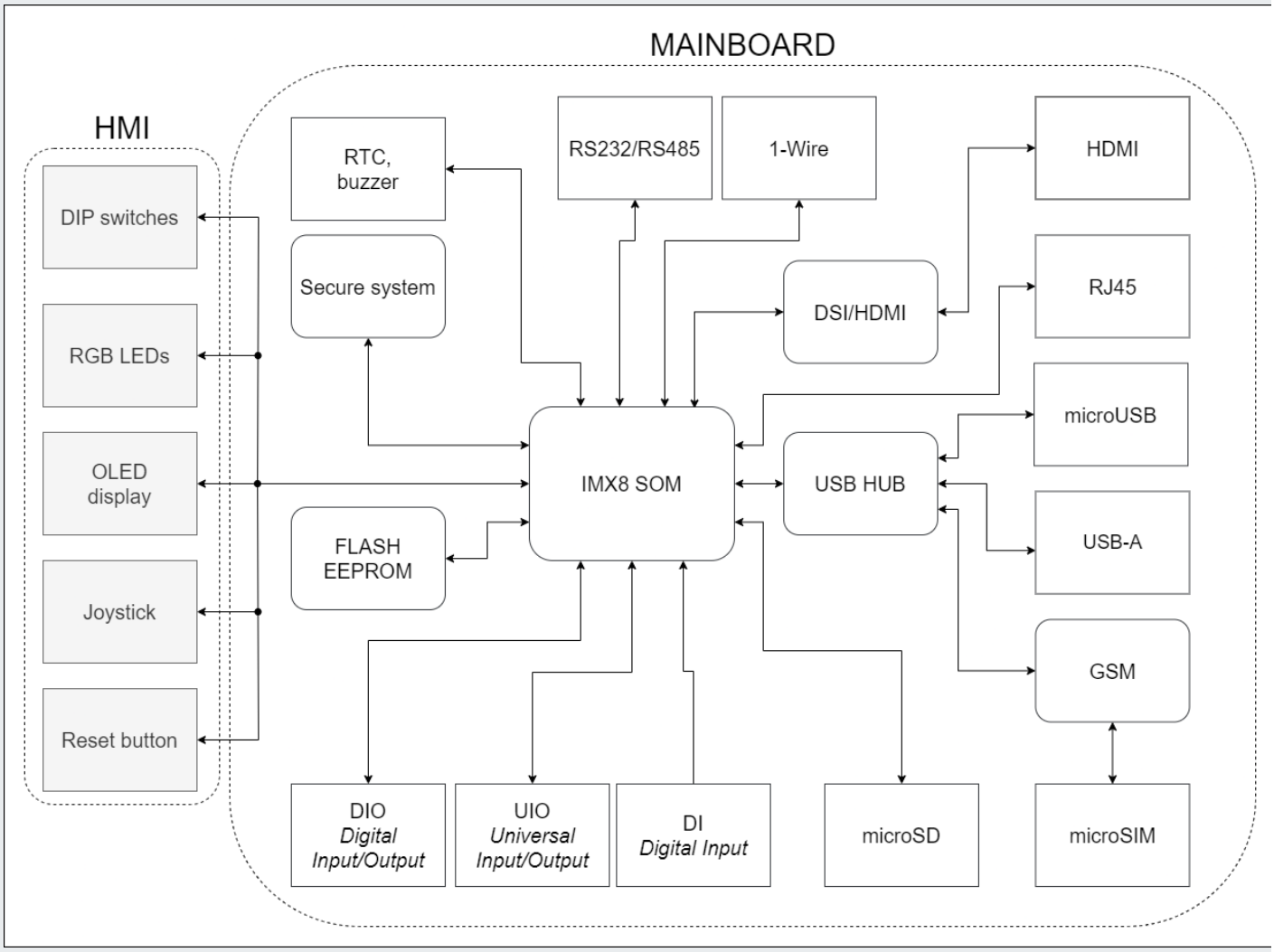
- Power: voltage 12-24 VDC +-20%, maximum power 25 W, reverse polarity protection
- SoM: VAR-SOM-MX8M-MINI
- Core: NXP’s i.MX 8M Mini with 1.6 GHz Quad-core ARM Cortex-A53 and 400 MHz Cortex-M4 real-time processor
- Timing: 1.6 GHz
- RAM: 2 GB DDR4
- Flash eMMC: 16 GB
- 1x microSD connector
- 1x microHDMI 1.3a (optional)
- 1x microUSB 2.0 HOST / OTG, max. 500 mA (optional)
- 1x USB-A 2.0 HOST, max. 1 A
- 1x modem GSM SIM7600E + microSIM (optional)
- 1x 1-Wire (optional)
- 7x DIO - digital input/output, max. 30 V
- 4x UIO - universal analog-digital input/output (temperature measurement with sensors, e.g.: Pt1000, Ni1000, KTY, NTC, current, voltage and resistance sensors), max. 20 V (optional)
- 5x DI - digital input (3 x DI), max. 30 V (optional)
- 2x RS232, baudrate 50-115200 bps
- 2x RS485, baudrate 50-115200 bps (4x optional)
- 1x Ethernet 10/100 Mbps - RJ45 connector
- 1x Wi-Fi® / 2.4G module (optional)

- 1x secure element (optional)
- 1x display OLED 0.87" 128x32 px black&white (optional)
- 1x Joystick (optional)
- RTC (optional), buzzer, EEPROM
- TPM (optional)
- Software watchdog

Dimensions of the device

The space that the device occupies can be approximated to a cube of the following dimensions: 119 mm x 101 mm x 22.5 mm.

Simplified block diagram



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