

Matrix-702



Features

- ATMELOX Cortex-A5 ATSAM5D35 536MHz CPU
- Linux kernel 4.19.x with file system
- Toolchain gcc 8.2.0 + glibc 2.28
- 512MB LPDDR2 SDRAM
- 16GB eMMC Flash
- 1 x Gigabit Ethernet and 1 x 10/100Mbps Ethernet
- 1 x full size miniPCIe socket inside, 1 x Micro-SIM slot inside
- 2 x Antenna through SMA connector holes reserved
- 1 x Micro-SD card inside for data backup

■ H/W Specifications

CPU / Memory

- CPU: ATMELOX ATSAM5D35 536MHz w/MMU
- SDRAM: 512MB, LPDDR2
- Flash: 16GB, eMMC

Network Interface

- Type: 1 x Gigabit and 1 x 10/100Mbps Ethernet
- Protection: 1.5KV magnetic isolation
- Connector Type: RJ45

Console / Debug Ports

- Support microUSB console port
- Serial console port (inside the box)

SD Slot

- 1 x microSD socket, support up to 128G storage capacity
- SD 2.0 compliant, supports SDHC

Expansion

- 1 x miniPCIe Full-size socket
- 1 x micro-SIM card socket
- 2 x SMA type Antenna holes reserved

Power Requirement

- Input Voltage: +9V~+48Vdc (terminal block)
- DC+12VDC (DC Jack)

General

- Real-time clock(RTC): Yes
- Watchdog: Yes
- Dimensions (W x H x D): 89 x 109.6 x 30mm (3.5 x 4.3 x 1.18in)
- Operating Temperature: 0~70°C (32~158°F)
- Regulation: CE Class A, FCC Class A

■ S/W Specifications

Operation System

- Linux kernel 4.19.x
- Support bootup from eMMC or SD card
- Boot Loader : BareBox
- File System : ETX4

Software Development

- Toolchain: gcc 8.2.0 + glibc 2.28
- Supports in-place C/C++ code compilation

Package Management

- Package repository: Artila self-maintained repository
- Command: Using standard apt-get command

Popular Packages

- Web server: Apache/Nginx/Lighttpd
- Database: MySQL/SQLite3/PostgreSQL
- Script Language: PHP/Python/Perl/NodeJS
- Text editor: vim/nano/sed
- Administration: Webmin

■ Ordering Information

Matrix-702

- Linux-ready Cortex-A5 800MHz Industrial IoT Gateway
- with 512MB SDRAM, 16GB eMMC Flash

CB-PHDF9-050 (91-PHDF9-050)

- Console Cable (Wafer Box to DB9 Female, 50cm)

DK-35A (36-DK35A-000)

- DIN RAIL Mounting Kit

PWR-12V-1A (31-62100-000)

- 110~240VAC to 12VDC 1A Power Adapter