AL Pi-Tron CM3+ & AL Pi-Tron CM4

Automation-Line



Raspberry Pi
Design Partner

Powered by
Raspberry Pi

Raspbian Linux top-hat rail Computer

- Compact Box-PC
- Raspbian Linux operating system
- Wide range of interfaces
- Robust chassis
- Flexible top-hat rail assembly

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Technical Information

FUNCTION		STANDARD-EQUIPMENT CM3+	STANDARD-EQUIPMENT CM4
MICROPROCESSOR	CPU	Broadcom BCM2837B0 4x Arm® Cortex®-A53 @1.2 GHz	Broadcom BCM2711 4x Arm® Cortex®-A72 @1.5 GHz, H.265 (HEVC) up to 4Kp60 decode, H.264 up to 1080p decode, 1080p30 encode OpenGL ES 3.0 graphic
MEMORY	LPDDR4-RAM LPDDR2-RAM EMMC* SD CARD FRAM EEPROM	- 1 GByte 8 GByte/32 GByte CM3+ Lite, 1x microSD-Slot for operating system 16 kbit -	2 GByte optional 1 GByte, 4 GByte, 8 GByte - 16 GByte optional Lite/8 GByte/32 GByte (Lite: without eMMC only with microSD Card) CM4 Lite: 1x microSD-Slot for operating system CM4 8/16/32 GB: 1x microSD-Slot only for data - 32 kbit
COMMUNICATION	ETHERNET USB SERIAL CAN DIO WLAN/BLUETOOTH®	2x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG: only for programming eMMC 1x RS232, 1x RS485 1x 2.0 4x DIO (24 V/up to 800 mA) -	1x 1 Gbit/s, 1x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG: only for programming eMMC 1x RS232, 1x RS485 1x CAN 2.0B/FD 4x DIO (24 V/up to 800 mA) Optional 2.4 GHz, 5.0 GHz IEEE 802.11 b/g/n/ac wireless BT 5.0, BLE
DISPLAY/TOUCH	LCD INTERFACE TOUCH	1x Micro-HDMI 1.3a 1080p @30 fps Optional via USB	1x HDMI 2.0 (up to 4Kp60) Optional via USB
OTHER	POWER SUPPLY POWER CONSUMPTION FORM FACTOR TEMPERATURE RANGE PROTECTION CLASS APPROVALS	24 V DC ±20 % 3.4 W... 9.6 W (without periphery) Stainless steel housing 111 x 25 x 76 mm for mounting on 35 mm DIN rail acc. EN 60715 0 °C ... +55 °C IP20 FCC and UL61010, CB report	24 V DC ±20 % 3.4 W ... 9.6 W (without periphery) Stainless steel housing 111 x 25 x 76 mm for mounting on 35 mm DIN rail acc. EN 60715 0 °C ... +55 °C IP20 CE
SOFTWARE	OPERATING SYSTEM RTC-BUFFERING DEBUG	Raspbian Linux (not preinstalled) CR1220 -	Raspbian Linux (not preinstalled) CR2032 1x CONSOLE

* AL Pi-Tron CM4: When using eMMC memory, booting from the SD card is not possible.
AL Pi-Tron CM3+: Versions with eMMC memory do not feature a microSD Card Slot.

Product Highlights

The Internet of Things (IoT) demands ever smaller but nevertheless high-performing controller solutions as standard. They must also provide a wide array of industrial-use interfaces to offer expansion options for various applications.
One special feature of our Automation Line Pi-Tron is that we make the Raspberry Pi processor variants Compute Module CM3+ and CM4 available in a chassis suited for DIN-rail mounting. The Pi-Tron CM4 features an HDMI slot for standard display devices as well as LVDS display connectivity via an adapter board. 24 V power supply ensures easy integration with industrial applications.

Further inputs and outputs can be added easily via multifunctional I/O modules. Communication is via a CAN interface.

Client Benefits

- Small, compact design
- Optional expansion via multifunctional I/O module
- Excellent price/performance ratio
- Large community providing software examples and fully translated program packages.

Applications

- Automation
- IoT Gateways
- Communication
- Edge Computing
- Mechanical Engineering
- M2M (machine-to-machine) Gateway

About Kontron

Kontron is a global leader in IoT/Embedded Computing Technology (ECT) and offers individual solutions in the areas of Internet of Things (IoT) and Industry 4.0 through a combined portfolio of hardware, software and services. With its standard and customized products based on highly reliable state-of-the-art technologies, Kontronprovides secure and innovative applications for a wide variety of industries. As a result, customers benefit from aceerated time-to-market, lower total cost of ownership, extended product lifecycles and the best fully integrated applications.

For more information, please visit: **www.kontron.com**

About Kontron Electronics

Kontron Electronics GmbH is a full-service provider in the electronics industry, offering comprehensive services in development, rapid prototyping, and manufacturing. The company's portfolio includes proprietary and customer-specific products, development and engineering services for complex electronic components, modules, and systems, as well as production and assembly services for complete assemblies. The company is part of the Kontron AG technology group.

For more Information please visit: **www.kontron-electronics.com**

Your Contact

Kontron Electronics GmbH

Max-Planck-Straße 6
72636 Frickenhausen, Germany
Tel.: +49 7022 4057-0
info@kontron-electronics.de

www.kontron-electronics.com

Global Headquarters

Kontron Europe GmbH

Gutenbergstraße 2
85737 Ismaning, Germany
Tel.: +49 821 4086-0
info@kontron.com

www.kontron.com

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