

# AL Pi-Tron CM3+ & AL Pi-Tron CM4 Automation-Line



## Raspbian Linux top-hat rail Computer

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

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*	- 1 GByte 8 GByte/32 GByte	2 GByte optional 1 GByte, 4 GByte, 8 GByte - 16 GByte optional Lite/8 GByte/32 GByte (Lite: without eMMC only with microSD Card)
	SD CARD	CM3+ Lite, 1x microSD-Slot for operating system	CM4 Lite: 1x microSD-Slot for operating system CM4 8/16/32 GB: 1x microSD-Slot only for data
	FRAM EEPROM	16 kbit -	- 32 kbit
COMMUNICATION	ETHERNET USB	2x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG: only for programming eMMC	1x 1 Gbit/s, 1x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG: only for programming eMMC
	SERIAL CAN DIO WLAN/BLUETOOTH®	1x RS232, 1x RS485 1x 2.0 4x DIO (24 V/up to 800 mA) -	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	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	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
	TEMPERATURE RANGE PROTECTION CLASS APPROVALS	0 °C ... +55 °C IP20 FCC and UL61010, CB report	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, Kontron provides secure and innovative applications for a wide variety of industries. As a result, customers benefit from accelerated 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](http://www.kontron.com)

## About Kontron Electronics

Kontron Electronics GmbH is a full-service provider in the field of electronics, development and manufacturing services. Our business portfolio includes proprietary and client-specific products, development and design services for complex electronics components, modules and systems, as well as production and assembly services for entire devices. The company is part of the technology corporation Kontron AG.

For more information please visit: [www.kontron-electronics.com](http://www.kontron-electronics.com)

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