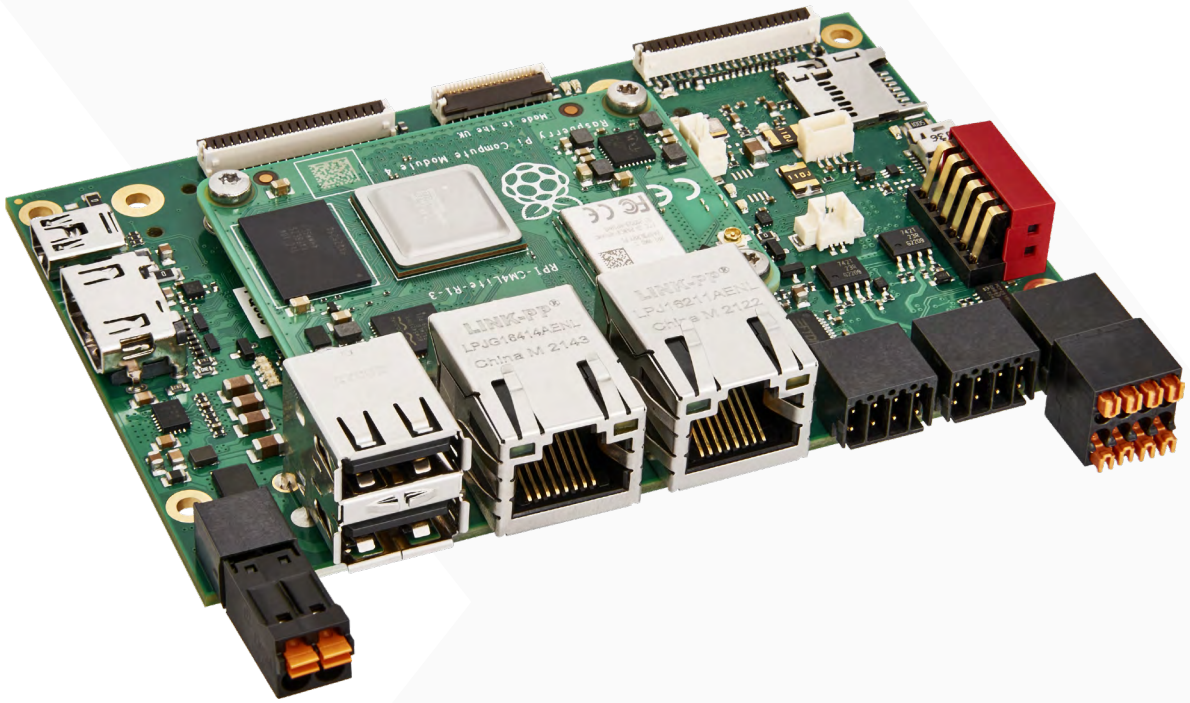
BL Pi-Tron CM4

Board-Line



Powered by Raspberry Pi

Raspberry Pi Design Partner

Raspberry Pi Compute Module 4: your performance boost

- Highly scalable computing power
- Optional pre-certified WLAN/Bluetooth® connectivity
- M.2 B key slot with PCIe connectivity
- Rapid migration from Raspberry Pi prototype to series product
- High-performance interfaces for harsh industrial applications

kontron
The Power of IoT

Technical Information

MICROPROCESSOR	CPU	Broadcom BCM2711 BCM2711, Quad Core Cortex®-A72, 64-bit SoC @1.5 GHz H.265 (HEVC) up to 4Kp60 decode, H.264 up to 1080p decode, 1080p30 encode OpenGL ES 3.1, Vulkan 1.0
MEMORY	LPDDR4-RAM eMMC EEPROM SD CARD	2 GByte optional 1 GByte, 4 GByte, 8 GByte 16 GByte optional Lite/8 GByte/32 GByte (lite: without eMMC only with microSD Card) 4 kB CM4 Lite: 1x microSD Card Slot for Operating System, CM4 8/16/32 GByte: 1x microSD Card Slot for data
COMMUNICATION	ETHERNET USB I/O DIO SERIAL CAN WLAN/BLUETOOTH	1x 1 Gbit's, 1x 10/100 Mbit/s 2x 2.0 Host, 1x 2.0 OTG: only to program eMMC 28x GPIO, supports up to 5x UART, 5x I²C, 5x SPI, 2x PWM, 1x SDIO (4 Bit), M.2 B-KEY 3042 (PCIe 1-lane Host, Gen 2 (5 Gbps)) 4x DIO (24 V/up to 800 mA) 1x RS232, 1x RS485 (Modbus-capable) 1x CAN 2.0B/FD Optional 2.4 GHz/5.0 GHz IEEE 802.11b/g/n/ac wireless BT 5.0, BLE
DISPLAY/TOUCH	LCD INTERFACE TOUCH CAMERA INTERFACE	1x DSI 2-lane (up to 1 Gbit/s per lane - Rpi-DSI0 22 pol. 1x DSI 4-lane (up to 1 Gbit/s per lane - DSI1 40 pol. FFC 1x HDMI 2.0 (up to 4Kp60 - HDMI0) 1x HDMI (HDMI1 - 40 pol. FFC) via I²C or USB 1x CSI 2-lane (MIPI Rpi-CSI0 22 pol.)
OTHER	POWER SUPPLY POWER CONSUMPTION TEMPERATURE RANGE OPERATING SYSTEM FORM FACTOR EXTERNAL RTC RTC BUFFERING DEBUG EXPANSION PLUGS APPROVALS	24 V DC ±20 % 3.4 W...9.6 W 0 °C ... +55 °C - without condensation Raspbian Linux (not preinstalled) 105.5 x 69.6 mm (4.3") 1x on Baseboard CR2032 1x Console 1x M.2, Raspberry Pi GPIO Header 40-Pin CE

* When using eMMC memory, booting from SD card is not possible.

Product Highlights

The trump card of our new Pi-Tron CM4 is the high-power Compute Module 4 by the Raspberry Pi Foundation. And an added benefit of all Raspberry Pi products is the extensive Pi community, which provides a wide range of software samples and fully translated program packages for free download.

The new Pi-Tron CM4 boasts a much faster processor and supports up to 8 GB RAM. Via an M.2 slot and a PCIe connection, various modules with the respective interface can be attached. Custom AI solutions can be implemented e.g. by using Google's Coral AI Chip or high-performance Hailo AI modules.

An FD-enabled CAN-Bus interface guarantees greater efficiency and a higher data transmission rate. Optionally, an LVDS display can be connected via an adapter board, and a Raspberry Pi standard 40-PIN GPIO header is available for expansion. The Pi-Tron CM4 also features an HDMI port for standard display devices.

Client Benefits

- Industrial-use interfaces, customizable
- Ready for custom AI solutions
- Fast prototype construction
- Large community through open source software
- Short time to market
- Good value for money

Applications

- Human-machine interface
- Industrial communication
- M2M (machine-to-machine) Gateway
- Automation
- POS/POI displays
- Infotainment/Entertainment
- Portable systems

About Kontron

Kontron AG is a leading IoT technology company. For more than 20 years, Kontron has been supporting companies from a wide range of industries to achieve their business goals with intelligent solutions. From automated industrial operations, smarter and safer transport to advanced communications, connectivity, medical, and energy solutions, the company delivers technologies that add value for its customers. With the acquisition of Katek SE in early 2024, Kontron significantly strengthens its portfolio with the new GreenTec division, focusing on solar energy and eMobility, and grows to around 8,000 employees in over 20 countries worldwide. Kontron is listed on the SDAX® and TecDAX® of the German Stock Exchange.

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**

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