BL Pi-Tron CM4
Board-Line

Powered by
Raspberry Pi
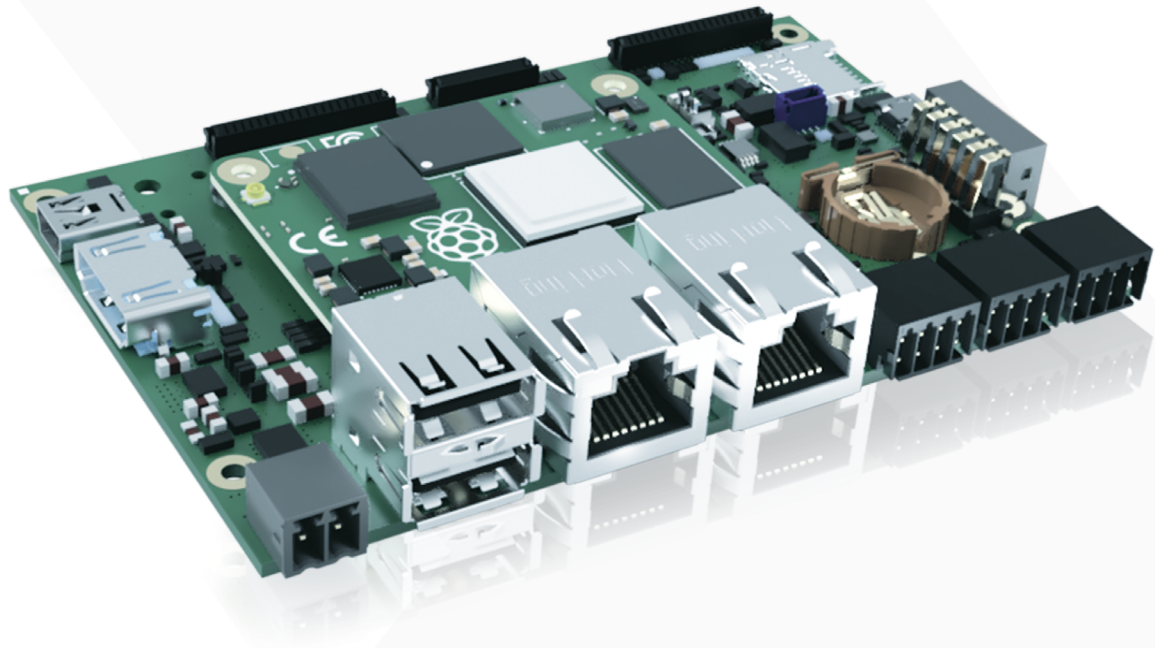
Raspberry Pi Compute Module 4: your performance boost

> 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

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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 3.0 Graphic
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) 32 kbit 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 1x Gbit's, 1x 10/100 Mbit/s 1x 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-DSIO 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) optional 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 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 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 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**

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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