





INDUSTRIAL RASPBERRY PL

Raspberry Pi is one of the best known embedded Linux computers in the world. Its success began in the maker community, but it has long become an industry favorite. The software pool created and maintained by a highly active community is an ideal basis for creating rapid-prototyping applications, and plenty of how-to videos on project implementation are available.

Based on the Raspberry Pi Compute Module, Kontron Electronics has developed a solution tailored to your requirements, equipped with numerous industrial interfaces and functions. Touch displays can be connected directly via DSI or micro-HDMI, and 24V power supply facilitates integration with industry applications.

These features give you a tool for rapid and secure development and testing of your applications. As an optional service, we can adapt the evaluation board to your specific needs. Where required, we develop an entirely new board to achieve minimum serial production costs and optimal dimensions. Make the BL Pi-Tron CM3+ baseboard your companion in the industrial Raspberry Pi world!

FEATURES

- ► Highly scalable computing power
- Standard Technology
- ► Possible Customization
- Rapid migration from PI prototype to series product
- ► High-performance interfaces for harsh industrial applications
- ▶ 24V power supply

CLIENT BENEFITS

- ► Industrial interfaces
- ► Fast prototype construction
- ► Adaptable on demand (cutting, form factor, housing)
- ► Large community through open source software
- ► Short Time to Market
- ► Good value for money

APPLICATIONS

- ► Human-Machine Interface
- ► Industrial Communication
- ► M2M (machine-to-machine)
- Building Automation
- ► POS displays
- ► Infotainment/Entertainment
- ► Portable Systems

TECHNICAL DATA

FUNCTION	STANDARD-EQUIPMENT
MICROPROCESSOR	
CPU	Broadcom BCM2837B0 4x Arm® Cortex®-A53 @1.2 GHz, 3D Video Engine
MEMORY	
LPDDR2-RAM	1 GB
eMMC*	Compute module CM3+ 8 GB/16 GB/32 GB
SD-Card	Compute module CM3+ Lite, 1x micro-SD card slot for operating system
FRAM	16 kbit
COMMUNICATION	
Ethernet	2x 10/100 Mbit/s
USB	2x 2.0 Host
1/0	2x UART, 2x I ² C, 2x SPI, 28x GPIO, 2x PWM, 1x SDIO (4 Bit)
DIO	4x DIO (24V/up to 800mA)
Serial	1x RS232, 1x RS485
CAN	1x 2.0
DISPLAY/TOUCH	
LCD Interface	1x 2-lane DSI Display Interface (up to 1 Gbit/s per lane) (DSI 1) 1x micro-HDMI 1.3a 1080p@30fps
Touch	1x I ² C, 1x USB
Camera Interface	1x 2-lane CSI Camera Interface (CSI 1)
OTHER	
Power supply	24V DC ±20%
Power consumption	3,4W9,6W (without peripherals)
Temperature range	0°C+55°C
Operating system	Raspbian Linux
Form factor	105,5 x 67mm (4,3")
External RTC	1x on Baseboard
RTC buffering	Batterie on Baseboard CR1220
Debug	1x Console
Expansion plugs	Raspberry PI GPIO Header 40Pin

^{*} Versions with eMMC memory do not feature an SD card slot







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Art.-Nr.:58099_037_00-61_EN