emPC-A/RPI

Industrial embedded controller
powered by Raspberry 2, Model B

PRODUCT DESCRIPTION

With emPC-A/RPI Janz Tec AG provides a device which uses an original Raspberry Pi 2 model B module insight. This module is mounted on a self-developed main board providing a 24V power supply, an additional CAN interface, a real-time clock, digital inputs and outputs and an additional RS232/RS485 interface. Furthermore the device comes in a robust plastic housing with which it passed a standard EMC certification.

Janz Tec AG optionally provides a microSD storage card and a ready-to-use Raspbian JESSIE light operating system image with pre-installed device drivers for available interfaces and I/Os. In addition a CODESYS environment, a Java virtual machine and some CAN/CANopen tools are available and pre-installed under evaluation licenses.

FEATURES

Processor

- Powered by Raspberry Pi 2, Model B
- Quad-Core CPU based on ARM Cortex-A7 with 900 MHz
- Fanless cooling concept
- Real-time clock, battery buffered

Memory

- System memory 1 GB DDR2 RAM
- External accessible µSD card slot

Power Supply

- Input 9 … 32 V_{DC}

Physical

- Ambient operating temperature 0 °C ... 45°C
- Non-operating temperature -20 °C … 75 °C
- Humidity 5 % ~ 95 %, non-condensing
- Dimensions (w x d x h): 99.8 x 96.7 x 30.0 mm
- Weight approx. 0.2 kg
- Desktop, Wall or DIN rail mounting

Connectors

- 1 x 10/100 MBit/s Ethernet
- 1 x HDMI graphic interface
- 4 x USB (v2.0)
- 1 x 9-pin D-SUB connector for serial debug console (RS232 only with RxD and TxD)
- 1 x I/O connector, providing:
  - 1 x CAN (ISO/DIS 11989-2, opto-isolated, termination settings via jumper, SocketCAN supported)
  - 1 x RS232 (Rx, Tx, RTS, CTS) or switchable to RS485 (half duplex; termination settings via jumper)
  - 4 x digital inputs (24V_{DC})
  - 4 x digital outputs (24V_{DC})

Software

- Raspian JESSIE light operating system
- CODESYS V3 runtime environment
- Oracle Java Embedded
- CANopen protocol stack and tools

ORDERING INFORMATION

Ordering No.	Product Name	Desciption	List Price
SY-EPC-RPI00	emPC-A/RPI	Industrial embedded controller hardware	EUR 230.00
SD-MIC-008GB	Storage medium	8 GB microSD storage medium	EUR 15,00
SO-IMG-00001	Operating system image	Pre-installed Raspian JESSIE light operating system image including emPC-A/RPI device driver package	EUR 35,00
OE-NTW-15W24	Power supply	External power supply unit	EUR 25,00
SO-CDS-SL001	CODESYS V3 Control for Raspberry Pi SL	Software licenses for CODESYS control runtime system and WebVisu. OPC UA server, EtherCAT Master, Profinet Master, Modbus TCP Master and Slave, Modbus RTU Master and Slave, CANopen, EtherNet IP scanner and adapter.	EUR 35,00
SO-JVM-EMB01	Java	Oracle Embedded Java SE Runtime license	on request
SO-SOF-XXXXX	CANopen	CANopen Stack ANSI-C Source code for master/slave, incl. CANopen DeviceDesigner, ready-to-run examples, user- and reference manual and 6 months support	on request
SO-SOF-XXXXX	CANopen-TCP/IP-Gateway	Universal TCP/IP-CANopen-Gateway according to CiA309-3, ASCII command interface to a complete CANopen master, supports main features of CiA309-3	EUR 49,00

RELATED PRODUCTS

emPC-A/iMX6

Fanless and compact embedded system with multi-core ARM CPU and DVI interface

emPC-A500

Fanless and compact embedded system for environmental critically applications based on single-core ARM CPU

emPC-X

Fanless and compact embedded system with multi-core X86 CPU and DVI interface

Edustaja Suomessa:

SKSCONTROL

Martinkyläntie 50, 01720 Vantaa
Puhelin 020 764 61 Faksi 764 6823
www.sks.fi, control@sks.fi

Janz Tec AG
Im Doerener Feld 8
33100 Paderborn
Germany

Phone +49 5251 1550 0
Fax +49 5251 1550 190
E-Mail sales@janztec.com
Web www.janztec.com