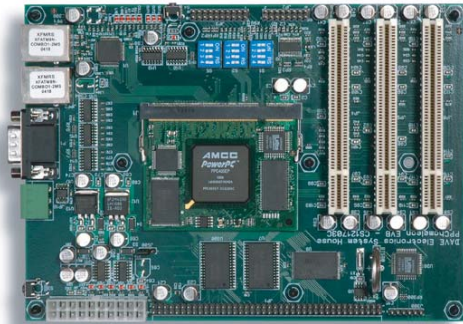


PPCHAMELEON

PowerPC 405EP[®] Evaluation Board & Development Kit



- CPU module based on PowerPC 405EP
- PCI host bus + Expansion Bus fully available
- NAND Flash on-board (option) + JFFS2 filing system
- Ready for Linux 2.4.20 + native component drivers
- Evaluation Board available with exhaustive development kit
- DDR 200 SODIMM compact form factor, inexpensive connector
- Development Kit available in GNU environment
- ITE & ISM approvals
- Ready For IBM Technology



PPC HAMELEON Evaluation Board & Development Kit supports ready-to-use CPU module based on IBM PowerPC 405EP PPC HAMELEON . All native buses and interfaces of the microprocessor are on the board or routed to separate connectors. Therefore users may perform full on-boards tests or think flexible design integrations. A complete software suite named PELK (PowerPC Embedded Linux Kit) is provided with PPC HAMELEON Evaluation Board. This software not only allows a straightforward use of GNU toolchain, but is also continuously up to date and maintained with new peripherals, applications and drivers.

PPCHAMELEON

Evaluation Board is a flexible and complete system where users can test their own applications or add their own expansion boards:

- ATX PSU
- SODIMM connector for PPChameleon Module
- NAND + CPLD bus adaptation
- SRAM for bootcode debugging
- PCI clocking circuitry
- JTAG and TRACE interfaces
- Bootstrapping circuitry (FLASH or SRAM)
- 3 PCI slots
- Expansion Bus connector
- RTC with back-up battery
- 2nd PHY 10/100 + 2 RJ45 including magnetics
- RS485 + full RS232



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10 Clever Lane • Tewksbury, MA 01876
Tel: 978-455-3383 • Fax: 978-926-3091
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CPU Module

PPC-BA	PPC Module @133MHz, 4MB Flash, 32MB SDRAM
PPC-ME	PPC Module @266MHz, 4MB Flash, 32MB SDRAM, 32MB NAND
PPC-HI	PPC Module @333MHz, 4MB Flash, 32MB SDRAM, 128MB NAND

Memory

Flash NAND	32 Mbytes
SRAM	512K x 16 Bytes

Others

CPLD	for various NAND driving
RTC	via I2C bus + backup lithium battery
PCI	PCI skew-controlled clock distribution, spread spectrum

Interfaces

Ethernet	nr.2 RJ45
UART	nr.1 full (5+3)
RS485	nr.1
I ² C	Master/slave/multimaster 400kHz
External Bus	16-bit / 29 Address Bits -5 direct Chip Select; bus speed < 66MHz
PCI	nr.3 slots 5V host (version 2.2), arbiter supporting 3 devices
I/O Controller	yes, number tbd

Debug Interfaces

CPU	JTAG IEEE 1149.1 Test Access Port
CPU	IBM TRACE
CPLD	JTAG IEEE 1149.1 Test Access Port (precharged)

Mechanical

Connectors	200 pin DDR SO-DIMM (JEDEC MO-224) <i>double height</i> format
Physical	140 (w) x 195 (l) x 31 (h) mm ³
PCB	6 layers
Material	FR4
Technology	SMT
Temperature	0 70 °C operational temperature

PSU

Generator	ATX standard
Connector	20 pins Minifit
Start	Pushbutton

Agency approvals

CE Mark	ITE & ISM EN 55022, EN 55011, EN 55024
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Email: info@ultsol.com