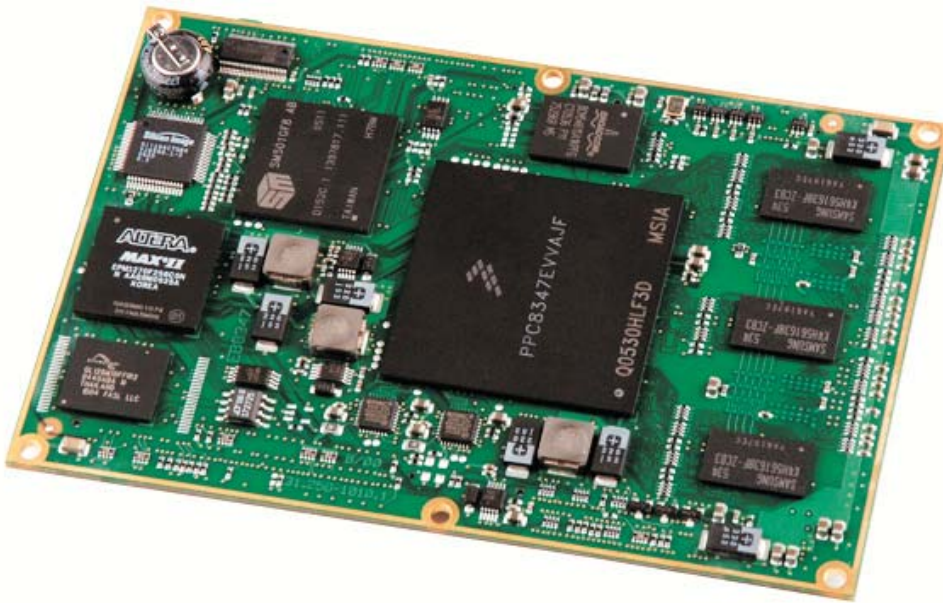


➤ **EB8347** **MPC8347 PowerPC**



WIND RIVER 

PARTNER

E²BRAIN
INTEREST GROUP

E²BRAIN *the intelligent module*

➤ **Performance meets Versatility**

The EB8347 combines high performance with a comprehensive feature set tailored for demanding embedded control applications.

➤ **Graphics enabled**

A graphics controller, USB interfaces and AC97 audio make the module an ideal choice for embedded systems with integrated graphical user interface.

➤ **Open standard**

Take advantage of the open E²Brain standard assuring compatibility, upgradability and easy deployment.

If it's Embedded, it's Kontron.



Product Overview

Combining high CPU performance at lowest power consumption with graphics and a comprehensive set of I/O interfaces is hard to accomplish. The EB8347 is the answer !

Performance meets versatility

Utilizing the Freescale MPC8347(E) PowerPC processor, the EB8347 delivers impressive CPU performance at extraordinary low power consumption. Equipped with fast DDR-SDRAM, GigaBit Ethernet, a graphics controller and 2 USB interfaces, the EB8347 provides an unparalleled combination of computing performance and I/O flexibility.

Feature rich to the max

Industrial control applications demand a lot in terms of I/O, networking and graphics. A lot of different interfaces need to be served, high amounts of data must be transferred and displayed. A graphics interface, dual Gigabit Ethernet with intergrated hardware security engine, four serial ports, AC97, I²C, SPI, PCI, LPC and CompactFlash together with a real time clock and watchdog cover the needs of the most demanding systems.

Open Standard

Based on an open standard, E²Brain Computer-on-Modules offer advantages like scalability and upgradability, thus enabling shorter time-to market for all kind of embedded computing appliances.

Ordering Information

Product	Description	Order No.
EB8347	E ² Brain PowerPC module with Freescale MPC8347E @ 533MHz, 128MB DDR-SDRAM, 16MB Flash, 4 serial ports, graphics, USB	31214
EB8347	E ² Brain PowerPC module with Freescale MPC8347 @ 533MHz, 64MB DDR-SDRAM, 8MB Flash, 2 serial ports, USB	31215
EB8347-E2	E ² Brain PowerPC module with Freescale MPC8347E @ 533MHz, 128MB DDR-SDRAM, 16MB Flash, 4 serial ports, graphics, USB	31216
KIT-EB8347	EB8347 documentation on CD-R ¹	31217
VXW-BSP-EB8347	VxWorks Board Support Package for WindRiver workbench	31218
LIN-BSP-EB8347	Linux Board Support Package (including tool chain and source file system, distribution independent)	31219
EB8347-EVALKIT	Evaluation kit for EB8347, contains EB8347 (Order No. 31214), evaluation carrier board, power supply, cabling, pre-installed Linux BSP, CD-ROM with documentation and Linux software	31220
1) KIT-EB8347 downloadable from the Internet free of charge		

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Our worldwide sales representatives and partners can be found on our websites.

Processor
Integrated Freescale PowerPC microprocessor MPC8347E @ 533 MHz Integrated hardware security engine for encryption/decryption (e.g. AEA, DES, 3DES, SH1, PKEU, RNG, RC-4): MPCxxE version 1008 Dhystone (2.1) MIPS at 533 MHz
Memory
Up to 256 MB DDR-SDRAM (266 MHz) Up to 64 MB soldered Flash, 64 kBit EEPROM for user settings
Additional onboard devices
SM501 graphics controller, real time clock w. backup by auxiliary power supply, watchdog, temperature sensor, configurable GPIO (24)/parallel bus logic
System interface
PCI Master interface, 32 bit address/data, 33/66 MHz, LPC (Low Pin Count) interface (no DMA) for I/O extensions, I ² C, SPI, JTAG/BDM interface, 2 terminal ports (Rx/Tx), utility port (LEDs, Reset, Abort), CompactFlash (IDE) interface, USB 2.0 Master interface, USB 2.0 Master/Device interface (high speed), AC97 audio interface, DVI graphics interface
I/O interface
1 GigaBit Ethernet Interface with autosensing, MDIO (with PHY) 1 GigaBit Ethernet GMII interface (PHY on baseboard required) 2 high-speed serial ports (16550 compatible) 24 GPIO pins, configurable as parallel I/O bus 3 PWM outputs, TTL panel signals, ZV (zoom video) input
Software support
Operating system independent boot loader with network support VxWorks board support package Linux board support packages
Power consumption
typ. 6W at 3,3V (533 MHz, 16 MB Flash, 128 MB DDR-SDRAM)
Common
Mechanical Conformance: E ² Brain Module Specification Rev. 0.2 Dimension: 115 mm x 75 mm (E ² Brain card size) Temperature Ranges: 0 °C to + 70 °C (standard) -40 °C to +85 °C (extended) Operation Humidity Range: 93% RH at 40 °C, non-condensing (acc. to IEC 60068-2-78) Weight: 65 g MTBF: tbd. (acc. MIL-HDBK-217F)