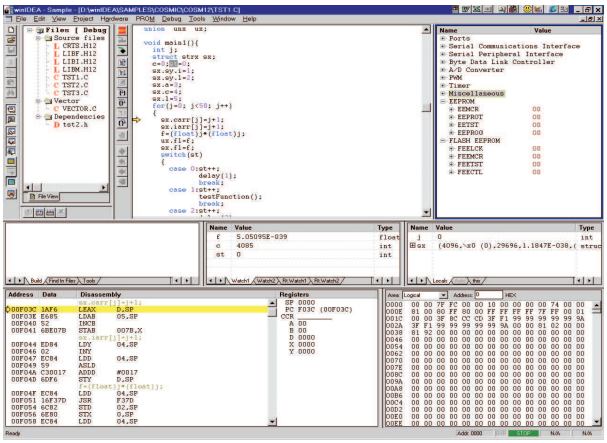
iC1000

The universal 8-bit Development System

The iC1000 PowerEmulator™ is the ultimate tool for all 8-bit microcontroller based embedded applications. It incorporates major innovation in a compact package, covering the widest variety of development environments.

The iC1000 provides embedded system debug with comprehensive, real-time high-speed in-circuit emulation up to 50ns target memory access time using iSYSTEM's unique PowerPOD™ technology.

The new "swap the Pod" technology preserves the investment in the iC1000 unit while providing adaptability to a wide range of target MCUs and debug methodologies.



The iC1000 is driven with winIDEA, an integrated development environment.

iC1000 - the flexible emulator

The iC1000 PowerEmulator is the latest in a long line of universal development tools from iSYSTEM. Utilizing SMD technology and highly integrated FPGAs, the iC1000 packs plenty of powerful innovations in a small, compact package. It is the ideal solution for mobile applications and desktop use as well.

iC1000 PowerEmulator Features:

- Overlay memory 1MB
- HW breakpoints 1M
- Real-time in-circuit emulation up to 50ns
- Real-time Watch (MC specific)
- 4- or 8-bit data bus / 32-bit address bus
- Multiple voltage support (3V & 5V)
- Background INT/DMA- Mode
- Waveform generator
- Integrated PowerTrace
- Variable clock speed
- High speed communication (USB/10BaseT)
- High-integration SMD technology
- Power supply 90 - 240 V AC
- Compact size
- Driven with winIDEA™ Integrated Development Environment
- Source level debugging for C and ASM

iSYSTEM
www.isystem.com

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For its power supply, the iC1000 accepts direct input of DC 5V, or AC power from 90V - 240V with the supplied external auto sensing power supply. High speed communication to the host PC is essential for effective development. The iC1000 is equipped with a high-speed RS232C serial interface (COM) communicating at 115kbps and a very fast parallel interface (LPT) supporting standard, bi-directional and EPP/EPC interface configuration. An Universal Serial Bus (USB) interface operating at 12MHz and an Ethernet IEEE 802.3 interface (RJ45 / 10Mbps) supporting the TCP/IP protocol is also available. To maximize flexibility in communicating with the target system, the iC1000 includes an universal POD interface, which connects the iC1000 with any supported 4- and 8-bit PowerPOD™ for full in-circuit emulation.

PowerPOD™ - for high-speed in-circuit emulation

The iC1000 PowerEmulator provides real-time high-speed in-circuit emulation up to 50 ns target memory access time. The dramatic increase in embedded systems bus speeds has created new challenges for real-time emulation. iSYSTEM has met the challenge by developing iC1000 based on latest FPGA technology, which brings the emulation hardware much closer together. All critical functions such as overlay memory, break, trace and trigger logic reside in a few high-speed RAM-based FPGAs at the iC1000. This very high integration assures optimized timings for all necessary transactions. The PowerPOD is connected to the iC1000 emulator by two high density flat cables clean and simple. Additional features like the 8 channels wave form generator, the programmable clock generator, the call stack monitor and Bank switching support make the emulator complete.

iC1000 PowerTrace

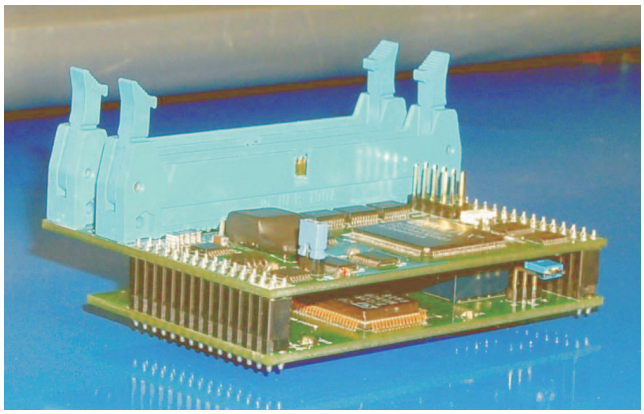
The PowerTrace is part of the iC1000.
The PowerAnalyzer has a 16K*128bit trace buffer. Equipped with high-speed RAM the trace collects information about the target MCU in real-time. It gives the user the powerful possibility to review the program flow under certain conditions in real-time and without any influence on the target microcontroller to track down hardware and/or software based problems fast. In addition the PowerTrace can be used for program profiling, code/data coverage and very complex break pointing. In conjunction with the additional LogicPOD the PowerTrace can be used as a 32 channels logic analyzer.

IC1000 PowerEmulator and winIDEA - the adaptable team

The iC1000 PowerEmulator is a universal and adaptable emulator solution for high speed 4- and 8-bit applications. By swapping the PowerPOD, the system is reconfigured for an alternate target microcontroller, preserving your investment in the base iC1000 system. Likewise, the software interface to the iC1000 is also adaptable. The winIDEA integrated development environment includes project management, integration of all popular compilers/assembers, make & build, and debugger. One easy-to-use interface for all your embedded development needs.

iC1000 Device Support

The iC1000 currently supports the following micro-controller families by PowerPODs supporting in-circuit emulation. Check our web site for the most recent information on device support.



68HC05	8051	ST7
68HC08	80251	Z80
6809	8085	Z180
68HC11	C500	

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