MICROCHIP TECHNOLOGY DEBUTS
THE WORLD’S SMALLEST EEPROM MICROCONTROLLERS

CHANDLER, Ariz., Oct. 20, 1997 [NASDAQ: MCHP] -- Microchip Technology Inc., the world’s leading supplier of 8-bit RISC microcontrollers and a leading supplier of serial EEPROMs and specialty nonvolatile memory products for embedded control applications, today expanded its PICmicro™ family of 8-pin 8-bit microcontrollers with two new devices. The PIC12CE518 and PIC12CE519 contain 16 bytes of on-board EEPROM data memory, making them the world’s smallest EEPROM microcontrollers.

The PIC12CE518 and PIC12CE519 feature 512 words of one-time-programmable (OTP) program memory and 25 bytes of user RAM and 1,024 words of OTP program memory and 41 bytes of user RAM, respectively. With OTP program memory and EEPROM data memory, Microchip delivers a highly flexible microcontroller solution in the space of only .04 square inches.

These devices offer six multiplexed I/O pins with on-chip clock oscillator (4 MHz), 33 single-word instructions, full-speed 1 µs instruction cycle at 4 MHz, eight-level deep hardware stack, 8-bit real time clock/counter with 8-bit programmable prescaler, watchdog timer, direct LED drive, low 3.0-5.5 operating voltage and <2 mA @ 5 volts, 4 MHz low power consumption. The family offers the highest EEPROM data memory endurance of 1 million erase/write cycles. In-Circuit Serial Programming (ICSP™) of the OTP microcontroller offers a true, self-contained intelligent system on a chip. Requiring only 2 I/O pins, Microchip offers the most non-intrusive programming.

- MORE -
ADD ONE – SMALLEST EEPROM MCUs

The PIC12CE518 and PIC12CE519 target applications requiring variable data implementation and where cost has prohibited full-featured microcontrollers from being previously being used. With the high performance RISC architecture, designers now have on-chip EEPROM data memory to inexpensively enable critical system parameter storage for temperature settings, user convenience modes, passwords, phone numbers, serial numbers, identification or even security codes. Typical applications for these devices include remote-keyless-entry keyfobs, remote controls, security systems, cellular telephones, battery chargers, wristwatches, clocks, thermometers, rheostats, thermostats, toys, PC peripherals and sensors.

Microchip’s revolutionary 8-pin microcontrollers allow easy integration of first-time intelligent features into electromechanical designs and compete directly with 4-bit microcontroller products while providing significantly enhanced performance. The company recently began shipping two 8-pin 8-bit microcontroller versions containing advanced analog features include an on-chip analog-to-digital converter and four analog channels. Other family features include one-time-programmable memory technology, various memory sizes, and on-chip 4 MHz clock oscillator.

“The affordable, OTP program memory capabilities offered by the PIC12CE518/519 and the PICmicro architecture solve a range of critical business problems for our customers,” said Damon Chu, strategic marketing manager for Microchip. “Engineering managers can react faster to code changes and reduce the time required to fix bugs or respond to special customer requests for changes. OTP also reduces the design verification cycle, which can be as long as 16 weeks with competitive ROM-based devices. OTP and on-board programming address procurement issues by reducing and limiting WIP liability and facilitating code revision,” Chu explained. “Microchip’s worldwide distributors stock OTP devices, allowing customers to meet any up-side sales opportunities or accommodate engineering changes off the shelf.”

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ADD TWO -- SMALLEST EEPROM MCUs

All 8-pin products are pin-for-pin compatible within the PIC12CXXX family. Each PIC12CXXX device is code compatible with Microchip’s popular larger lead count PICmicro 8-bit OTP microcontroller family, allowing for easy migration of code to higher performance silicon solutions.

Available in 8-pin PDIP, SOIC and ceramic window packages, pricing in 1,000-unit quantities is $1.51 each for the PIC12CE518 and $1.61 for the PIC12CE519 (PDIP, commercial temperature versions). Product samples will be available November 1997 with volume shipments planned for first quarter 1998. Contact any Microchip sales representative or authorized worldwide distributor for more information.

The PIC12CE518 and PIC12CE519 are supported by the PICMASTER®-16D Universal Development System, the industry's most complete, fully-integrated programming development and emulation system. Operating in the Microsoft Windows® environment, the comprehensive PICMASTER-16D is available for $2,490 without the PROMATE® II device programmer ($3,345 with PROMATE II). The development system now features the MPLAB™ Integrated Development Environment, which gives users the flexibility to edit, compile, emulate and program parts all from a single user interface--at no additional cost. A CE-compliant version of PICMASTER is available for European applications.

A low-cost PICmicro MCU development option is PICSTART® Plus, a development software suite and a programmer supported by assembler and simulator software tools. Other support and development tools include a C compiler, programming development support, MPASM microcontroller assembler and MPLAB-SIM software simulator.

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ADD THREE -- SMALLEST EEPROM MCUs

Microchip Technology Inc. manufactures the PICmicro™ family of 8-bit RISC-based microcontrollers--with OTP, Enhanced FLASH, EEPROM and ROM memory technologies; serial EEPROMs and related specialty memory products; and KEELOQ® code hopping devices. These products target thousands of embedded control applications in the consumer, automotive, office automation, communications and industrial markets. Microchip's quality systems are ISO 9001 certified. Headquartered near Phoenix in Chandler, Ariz., Microchip employs approximately 2,060 people worldwide and has sales offices throughout Asia, Europe, Japan and North America.

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