Freescale: Committed to Your Future

The HCS08 Family extends Freescale’s tradition of industry-leading 8-bit microcontrollers that began with the HC05 Family and continued with the HC08 Family.

As the world’s No. 1 producer of embedded processors, Freescale delivers a comprehensive range of 8-, 16- and 32-bit MCUs with industry-leading design support. We plan to grow the most advanced technology portfolio along with the services that speed your time-to-market. We’re here today—and we’re here to stay—for the design engineer that demands more than just a component from a catalog.

To learn more about Freescale’s microcontrollers or to order a development kit, please visit www.freescale.com/mcu.

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Safe Harbor Statement
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Low Power.
High Performance.

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> Handheld instruments
> Utility meters
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All the Power of Freescale's Advanced Third-Generation 0.18 micron Flash Technology—Today!

In 1994, Motorola (now Freescale Semiconductor, Inc.) was among the first to ship embedded Flash in volume quantities. Today, our third-generation, in-application reprogrammable Flash makes the benefits of Flash even more affordable. Additional features include:

- Up to 100,000 write/erase cycles
- Very robust with 15-year minimum data retention specification, 100 years typical
- Command programming interface designed to eliminate complex programming algorithms
- Flash easily used for data EEPROM storage at no additional cost
- Read down to 1.8V, write down to 2.1V
- Programs 8 bits as fast as 20 µsec for 4 MHz to 20 MHz bus rates
- Efficient instruction set with multiply and accumulate instructions

Development Tools and Support
Freescale's comprehensive portfolio of development tools help make it simple to incorporate HCS08 microcontrollers into your design and to reduce and design to meet. Chose from on-line training, large application note library, reference designs, technical FAQs, and high quality, cost-effective hardware and software tools.

- Metroworks CodeWarrior™ Development Studio for HCS08, Special Edition
- Industry-leading Integrated Development Environment (IDE) that is common across Freescale architectures for easy migration
- Dramatically reduce development time and improve code quality with Processor Expert™ auto-code generator for on-chip peripherals
- Debug and develop software without waiting for target hardware or requiring an evaluation board using full-chip simulation
- Package includes assembler, linker, debugger, 4 KB limited C compiler and Flash programming software
- Order free CD as CDCWSIEHC08 or download from Web
- Additional CodeWarrior developer tool upgrades are available to speed development
- Compiler upgrade to 32 KB or 64 KB memories

Features and Benefits
The first four members of the HCS08 Family are available now. A rich variety of integrated peripherals make the devices versatile enough to work with a wide range of systems.

- High-Performance 8-bit HCS08 CPU
- Object-code compatible with Freescale's H8H/CO5 and H8HC08 architecture for easy migration
- Provides the higher performance required of many 8-bit applications as fast as 50 nsec minimum instruction cycle time at 20 MHz bus
- Allows efficient, compact modular coding in assembly or C with full 16-bit stackpointer and stack-relative addressing
- Efficient instruction set with multiply and divide that is easy to learn and use

Since the announcement of these devices we have added a total of 18 new high-performance HCS08 products to the family. Contact your local distributor or visit our Web site for more details.