

The first of a third generation of VLSI products.

16-BIT MICROCOMPUTER HMCS68000 SERIES

Advances in Semiconductor Technology have made it possible to place on a single chip a microprocessor an order of magnitude higher in performance and complexity than was previously available.

The HD68000 is one such VLSI microprocessor. It combines state-of-the-art technology and advanced circuit design techniques with computer technology to achieve an architecturally advanced 16-Bit system.

The HD68000 is available for use with High Level Languages like Pascal Compila (Fortran Compila) and Super PL/H Compila for programming.

While development of 16-Bit peripheral products is progressing, it is also possible to use HMCS6800's peripheral LSI's.

MPU (Microprocessing Unit)

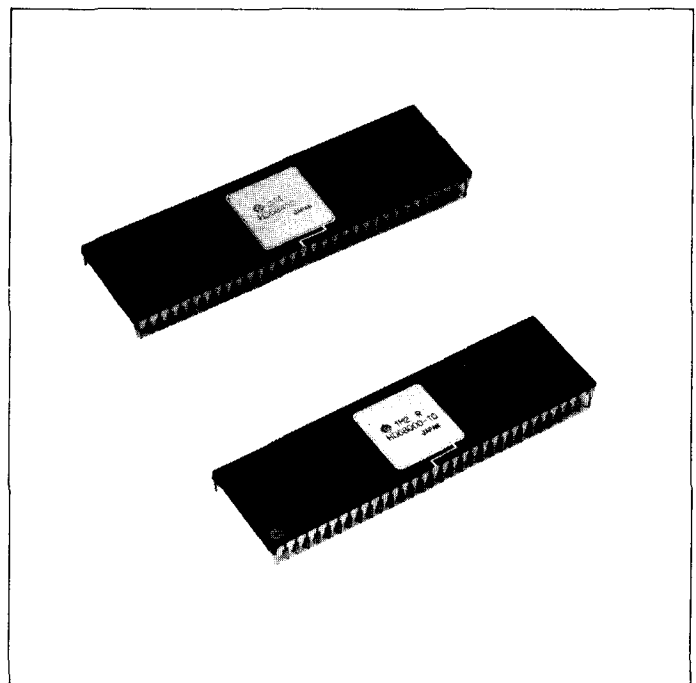
■ FEATURES

- ★ 32-Bit Data and Address Registers.
- ★ 16 Megabyte Direct Addressing Range.
- ★ 56 Powerful Instruction Types.
- ★ Operations of Five Main Data Types (1,4,8, 16, 32 bit).
- ★ Memory Mapped I/O.
- ★ 14 Addressing Modes.
- ★ Direct Interface with HMCS6800 Peripheral LSI.
- ★ Abundant Management Functions for Exceptions.
- ★ 2 Operating Types (Supervisor, User).

DMA (Direct Memory Access) CONTROLLER

■ FEATURES

- ★ Four Independent Channels.
- ★ Full 16M bytes plus 3 Function Code Addressing Range.
- ★ 2M words/sec Maximum Transfer Rate.
- ★ Data Chaining.
- ★ Dynamic Priority Assignment to Each Channel Request.
- ★ Burst/Cycle Steal Mode Data Transfer.
- ★ Memory-Memory Transfer.
- ★ 68000 and 6800 Bus Compatible.
- ★ 64-pin.



■ 16-BIT MICROCOMPUTER HMCS68000 PRODUCTS

Division	Type No.	Function	Compatibility	Package
MPU	HD68000-4	16-Bit Microprocessor	MC68000L4	DC-64
	HD68000-6		MC68000L6	
	HD68000-8		MC68000L8	
	HD68000-10*		MC68000L10	
	HD68000-12*		MC68000L12	
DMAC	HD68450-4*	Direct Memory Access Controller	MC68450L4	DC-64
	HD68450-6*		MC68450L6	
	HD68450-8*		MC68450L8	
CRTC	HD68XXX*	Advanced CRT Controller	—	—
HDC	HD63YYY*	Hard Disk Controller	—	—

*Under Development.