

HD6303, HD63A03, HD63B03 CMOS MPU (Micro Processing Unit)

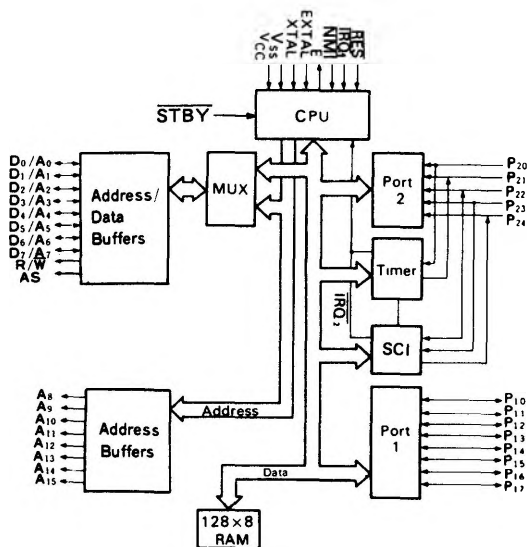
—ADVANCE INFORMATION—

The HD6303 is an 8-bit CMOS micro processing unit which has the completely compatible instruction set with the HD6301V0. 128 bytes RAM, Serial Communication Interface (SCI), parallel I/O terminals as well as three functions of timer on-chip are incorporated in the HD6303. It is bus compatible with HMCS6800 and can be expanded up to 65k words. Like the HMCS6800 family, I/O level is TTL compatible with +5.0V single power supply. As the HD6303 is CMOS MPU, power dissipation is extremely low. And also Sleep Mode and Stand-By Mode which the HD6303 has for low power dissipation make lower power application possible.

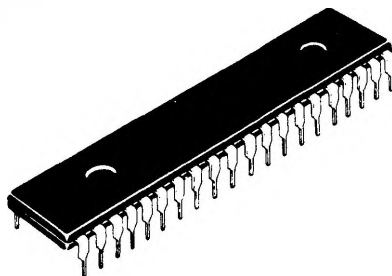
■ FEATURES

- Object Code Upward Compatible with the HD6800, HD6802, HD6801
- Multiplexed Bus ($D_0 \sim D_7/A_0 \sim A_7$)
- Abundant On-Chip Functions Compatible with the HD6301V0; 128 Bytes RAM, 13 Parallel I/O Lines (including Timer, SCI I/O Terminals), 16-bit Timer, Serial Communication Interface (SCI)
- Low Power Consumption Mode; Sleep Mode, Stand-By Mode
- Minimum Instruction Cycle Time
 $1\mu s$ ($f=1\text{MHz}$), $0.67\mu s$ ($f=1.5\text{MHz}$), $0.5\mu s$ ($f=2.0\text{MHz}$)
- Bit Manipulation, Bit Test Instruction
- Error Detecting Function; Address Trap, Op Code Trap
- Up to 65k Words Address Space

■ BLOCK DIAGRAM

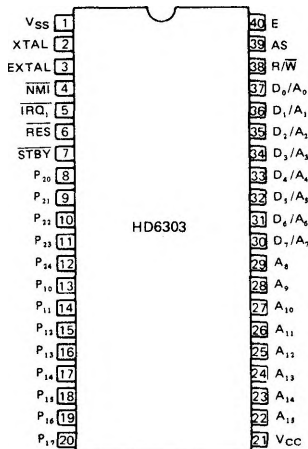


HD6303P
HD63A03P
HD63B03P



(DP-40)

■ PIN ARRANGEMENT



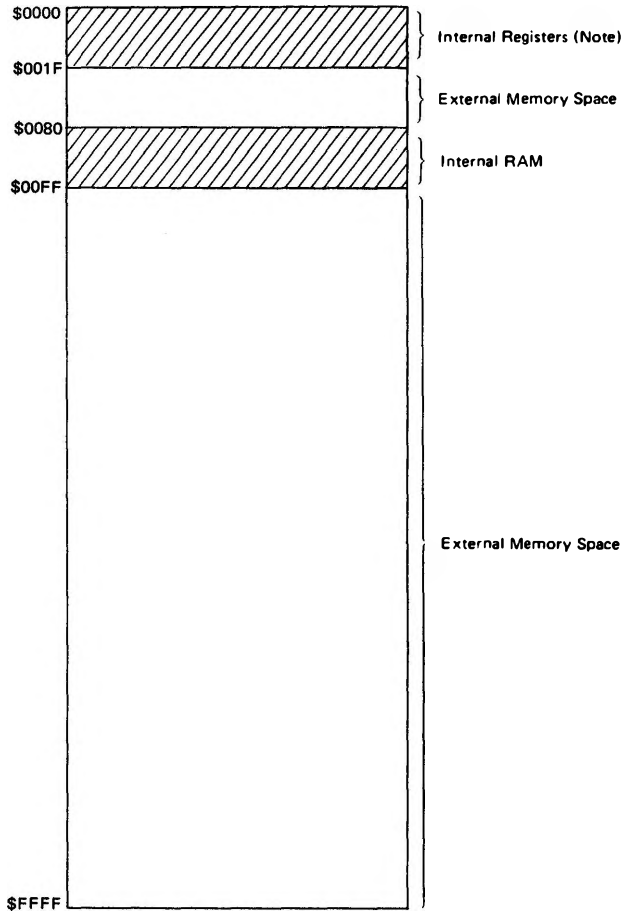
(Top View)

■ TYPE OF PRODUCTS

Type No.	Bus Timing
HD6303	1.0 MHz
HD63A03	1.5 MHz
HD63B03	2.0 MHz

HD6303, HD63A03, HD63B03

■ MEMORY MAP



(Note) \$04, \$05, \$06, \$07, \$0F are external address.