

T.49.19.04

# HMCS44C HD44801

## 4-BIT CMOS MCU(Microcomputer Unit)

The HMCS44C is the CMOS 4-bit single chip microcomputer which contains ROM, RAM, I/O and Timer/Event Counter on single chip. The HMCS44C is designed to perform efficient controller function as well as arithmetic function for both binary and BCD data. The CMOS technology of the HMCS44C provides the flexibility of microcomputers for battery powered and battery back-up applications.

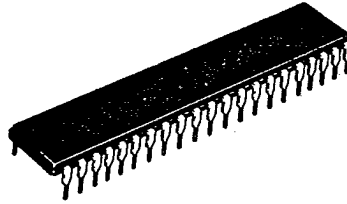
■ FEATURES

- 4-bit Architecture
- 2,048 Words of Program ROM (10 bits/Word)  
128 Words of Pattern ROM (10 bits/Word)
- 160 Digits of Data RAM (4 bits/Digit)
- 32 I/O Lines and 2 External Interrupt Lines
- Timer/Event Counter
- Instruction Cycle Time; HMCS44C: 10μs  
HMCS44CL: 20μs
- All Instructions except One Instruction; Single Word and Single Cycle
- BCD Arithmetic Instructions
- Pattern Generation Instruction  
— Table Look Up Capability —
- Powerful Interrupt Function  
3 Interrupt Sources  
— 2 External Interrupt Lines  
— Timer/Event Counter  
Multiple Interrupt Capability
- Bit Manipulation Instructions for Both RAM and I/O
- Option of I/O Configuration Selectable on Each Pin; Pull Up MOS or CMOS or Open Drain
- Built-in Oscillator
- Built-in Power-on Reset Circuit (HMCS44C only)
- Low Operating Power Dissipation; 2 mW typ.
- Stand-by Mode (Halt Mode); 50 μW max.
- CMOS Technology
- 42-pin Dual-in-line Plastic Package (DP42, DP-42S)

■ TYPE OF PRODUCTS

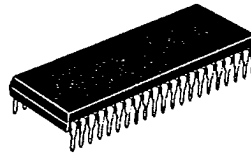
Family Name	Single Power Supply
HMCS44C (HD44801)	4.5 ~ 5.5 V
HMCS44CL (HD44808)	2.5 ~ 5.5 V

HMCS44C, HMCS44CL



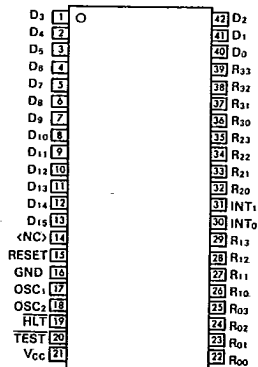
(DP-42)

HMCS44C, HMCS44CL



(DP-42S)

■ PIN ARRANGEMENT



(Top View)

■ BLOCK DIAGRAM

