SHARP

SM3514

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4-Bit Single-Chip Microcomputer (For Data Bank Use)

DESCRIPTION

The SM3514 is a CMOS 4-bit single-chip microcomputer for databank incorporating data memory RAM, LCD driver, key input circuits and buzzer output circuit. By connecting an external crystal, a 1 Hz timer interrupt is made possible for easier clock function.

FEATURES

• ROM capacity:

Program ROM 8 k x 23 bits
Character ROM 5 x 8 x 128 bits

• RAM capacity:

Working RAM 256 x 4 bits
Display RAM 60 x 8 bits
Data RAM 512 x 8 bits

• LCD display: 60 - segment x 8 - common

• I/O ports :

Buzzer output 1 bit (4 kHz) Key input 7 bits

• Standby release: 2 events (2 Hz signal, key input)

· Built-in oscillator :

System clock (built-in CR oscillator) 300 kHz
Timer (built-in CR oscillator) 32.8 kHz
(external crystal) 32.768 kHz

• Instruction cycle time: 10 µs

• Operating temperature : -10 to +60°C

Supply voltage: 2.5 to 3.4 V

• Package: 100-pin QFP (QFP100-P-1420)

SYSTEM COMFIGURATION EXAMPLE



