

FEATURES

- ROM Capacity
 - Program ROM 12K × 23-bits
 - Character ROM 6 × 8 × 256-bits
 - Constant ROM 1K × 4-bits
- RAM capacity
 - Working RAM 256 × 4-bits
 - Display RAM 74 × 16-bits
 - Data RAM 3K × 8-bits
- Memory Expansion (External) 1M × 8-bits × 3
- LCD Display 74 Segment × 16 Common
- I/O Ports
 - Parallel I/O 8-bits
 - Input 2-bits
 - Output 2-bits
 - Buzzer Output 1-bit (4 kHz)
 - Key Input 6-bits
- Standby Release 2 Events
 - 2 Hz Signal
 - Key Input

- Built-in Oscillator
 - System Clock (Built-in CR Oscillator) 1 kHz
 - System Clock (External Crystal) 1 kHz
 - Timer (Built-in CR Oscillator) 32.8 kHz
 - Timer (External Crystal) 32.768 kHz
- Instruction Cycle Time 3 μs
- Operating Temperature -10°C to +60°C
- Supply Voltage 2.5 V to 5.5 V
- 128-pin QFP Package (QFP128-P-0828)
(Test Sample only)

DESCRIPTION

The SM3518 is a CMOS 4-bit single-chip microcomputer for data bank use incorporating data memory RAM, LCD driver (the output is adjustable in 16 steps for various contrast), key/switch input circuit, 8-bit parallel I/O port, 2 output ports, and buzzer output circuit. The chip also has memory expansion controlling feature. One of two ports contains special output circuit for infrared (IR) communication. By connecting an external crystal, a 1 Hz timer interrupt is made possible for easier clock function.

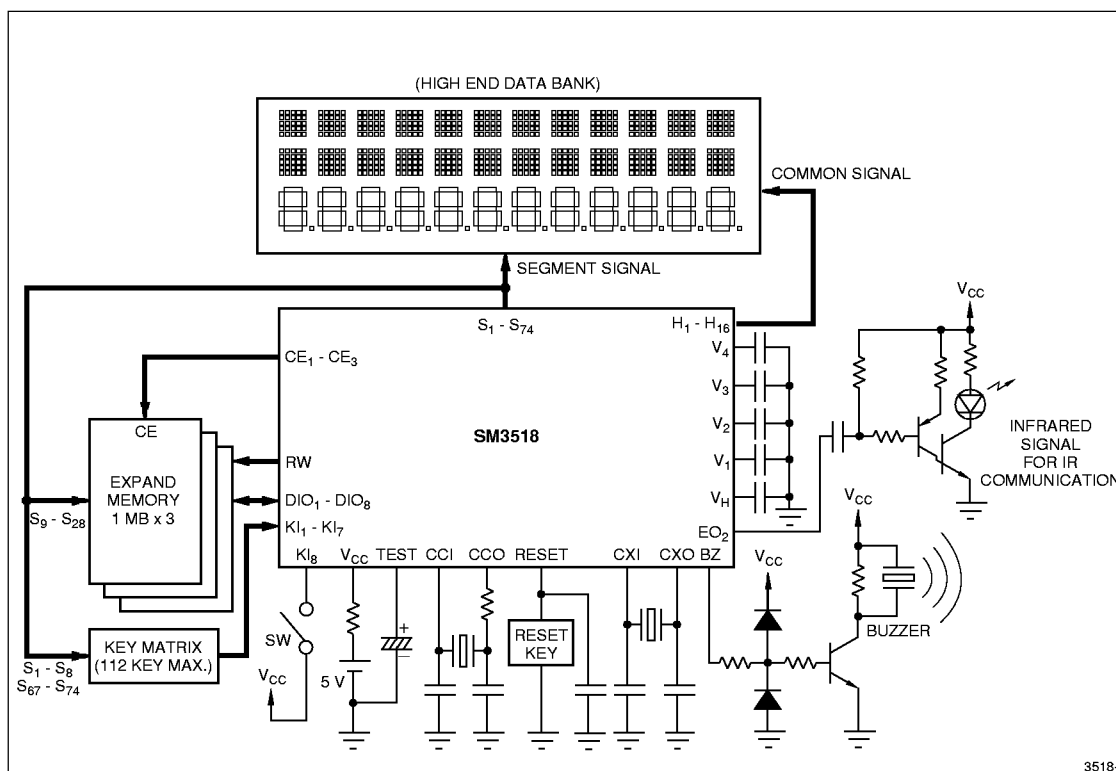


Figure 1. System Configuration Example

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