

SM3512

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

DESCRIPTION

The SM3512 is a CMOS 4-bit single-chip microcomputer for databank incorporating data memory RAM, LCD driver, key/switch input circuit, 8-bit parallel I/O port, 2 output ports, external memory control circuit, and buzzer output circuit.

FEATURES

- ROM capacity :

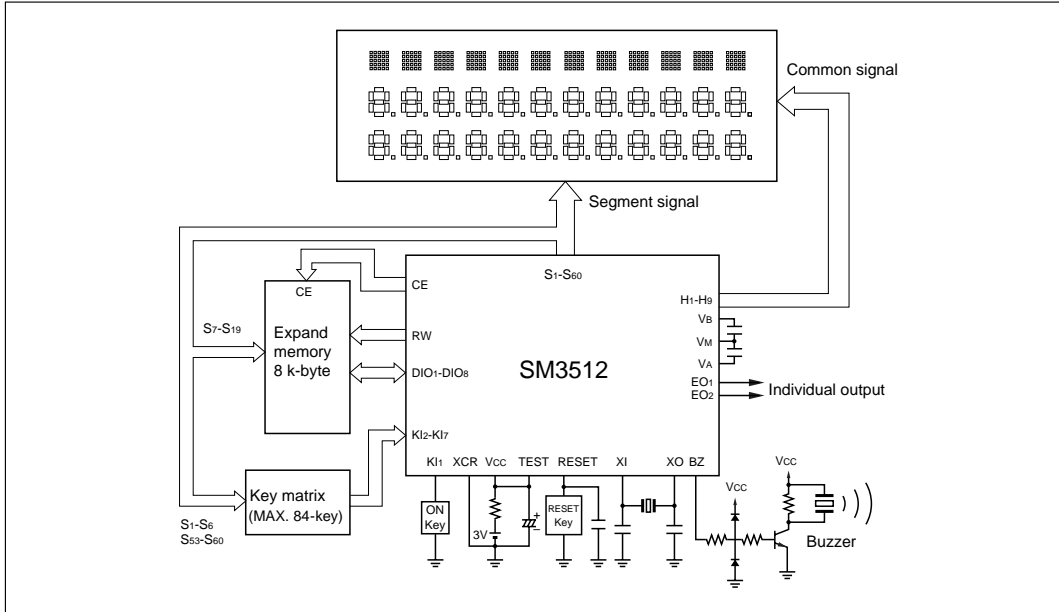
Program ROM	8 k x 23 bits
Character ROM	5 x 9 x 128 bits
Constant ROM	208 x 4 bits
- RAM capacity :

Working RAM	256 x 4 bits
Display RAM	60 x 9 bits
Data RAM	8 k x 8 bits
- Memory expansion (external) : 8 k x 8 bits
- LCD display : 60-segment x 9-common
- I/O ports :

Parallel I/O	8 bits
Input	1 bit
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)	250 kHz
Timer (built-in CR oscillator)	32.8 kHz
(external crystal)	32.768 kHz
- Instruction cycle time : 12 μ s
- Operating temperature : -10 to +60°C
- Supply voltage : 2.5 to 3.4 V
- Package : 100-pin QFP (QFP100-P-1420)

SYSTEM CONFIGURATION EXAMPLE



100 QFP (QFP100-P-1420)

