SM3517

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

DESCRIPTION

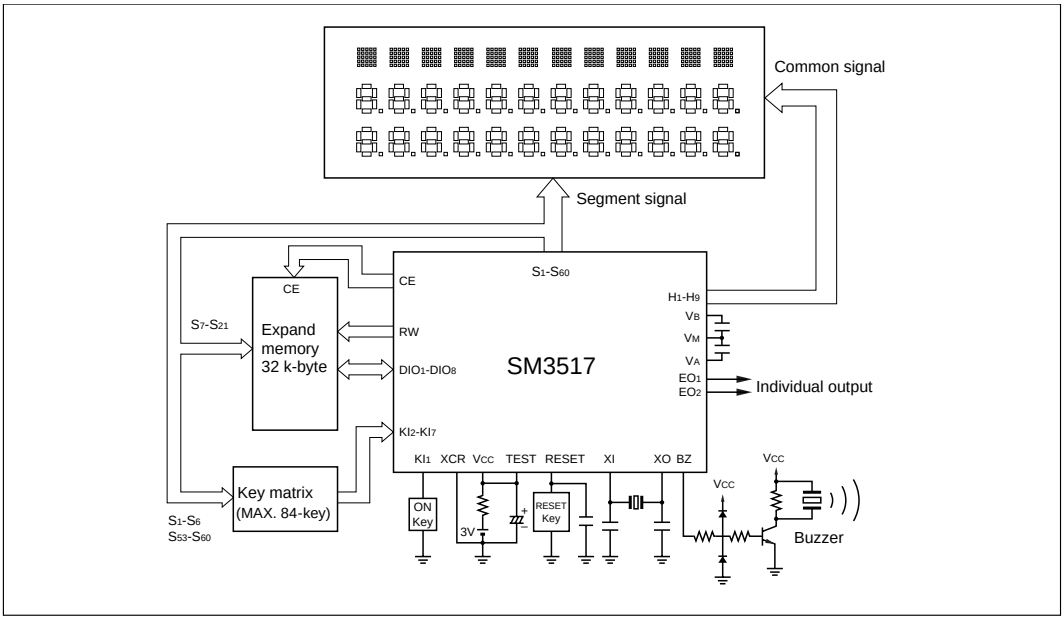
The SM3517 is a CMOS 4-bit single-chip microcomputer for databank incorporating data memory RAM, LCD driver, key/switch input circuit, 8-bit parallel I/O port, 2 output ports, external memory control circuit, and buzzer output circuit.

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 2 k x 8 bits
- Memory expansion (external) : 32 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 µs
- Operating temperature : –10 to +60°C
- Supply voltage : 2.5 to 3.4 V
- Package : 100-pin QFP (QFP100-P-1420)
  [Test Sample only]

In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

SYSTEM COMFIGURATION EXAMPLE



100 QFP (QFP100-P-1420)

