LC5800

c-mos LSI

CIRCUIT DRAWING No.1005



SINGLE-CHIP 4-BIT MICROCOMPUTER WITH LCD DRIVER

Hardware features

- Supply voltage: 1.5V or 3.0V (typ.) (mask option)
- Very small current dissipation:

3.0uA typ. (1.5V supply voltage, at watch/ clock operating mode)

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- Built-in crystal oscillator for watch/clock (32.768kHz crystal connected externally)
- Many output pins for LCD panel drive (42 pins)

Drivable LCD panel	Number of drivat
	LCD segments
1/3 bias 1/3 duty	126 segments
1/2 bias 1/3 duty	126 segments
1/2 bias 1/2 duty	84 segments
Static	42 segments

Many input/output pins

Ports for input only: 2 ports/8 pins Input/output common ports: 2 ports/8 pins Control output pins: 4 pins

- Possible to use LCD panel drive output pins as ports for output only (mask option)
- With initial reset pin
- ROM: 2048 x 16 bits
- RAM: 152 x 4 bits
- Cycle time: 244usec. (or 122usec./mask option)
- Built-in step-up circuit, step-down circuit
- Shipping style: Chip (or QIP80)

Software features

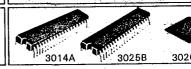
- Powerful instruction set: 121 instructions
- 8-level subroutine nesting (also used for inter-
- External interrupt function
- 15-bit divider for watch/clock
- Built-in counter for 1/100-second chronograph
- Built-in 10-bit programmable timer
- HALT function
- Automatic select of all address (direct addressing type)
- Built-in data pointer

LC6502B,6505B

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CIRCUIT DRAWING

SINGLE-CHIP 4-BIT MICROCOMPUTER FOR USE IN CONTROLLER APPLICATIONS



General Description

■ The LC6502B/05B, being identical with the standard type LC6502C/05C in the internal architecture and instruction set, are capable of interfacing direct with a fluorescent display tube because high voltage input/output ports are provided. Therefore, user's application equipment can be made with fewer parts and at less cost.

Features

- Low power dissipation C MOS single-chip microcomputer
- Instruction set with 79 instructions being common to the LC6502C/6505C
- 2-source, 2-level interrupt (external interrupt/ internal timer interrupt)
- 4-level stack
- 4-bit prescaler-contained 8-bit programmable timer
- Fluorescent display tube driver-contained input/ output ports
 - (1) Digits driving output ports: 10 ports
 - (2) Segments driving output ports: 8 ports
 - (3) High voltage input ports: 8 ports
 - (4) Normal voltage input/output ports: 8 ports
- ROM, RAM

2048 bytes, (1) LC6502B ROM:

128 x 4 bits RAM:

ROM: 1024 bytes, (2) LC6505B

> 64 x 4 bits RAM:

