LC6502D, 6505D

c-mos LSI

CIRCUIT DRAWING : No.1011

SINGLE-CHIP 4-BIT MICROCOMPUTER FOR CONTROL-ORIENTED APPLICATIONS

3025B

General Description

The LC6502D, 6505D are microcomputers that are identical with FLT driver-contained microcomputers LD6502B, 6505B in the internal architecture, instruction set but are different from the LC6502B, 6505B in the threshold level of input port A. The improvement in the threshold level of port A makes it possible to reduce the number of external resistors as compared with the LC6502B, 6505B.

Features

- CMOS single-chip microcomputer providing less power dissipation
- Instruction set with 79 instructions common to the LC6502C, 6505B/LC6505C, 6505B
- 2-source, 2-level interrupt function (external interrupt/internal timer interrupt)
- 4-level stack
- On-chip 8-bit programmable timer with 4-bit prescaler.
- Output ports with FLT driver and low-threshold input ports
  - Output ports for digit driver: 10 pcs.
  - Output ports for segment drive: 8 pcs.
  - Output ports of normal voltage: 8 pcs. (4 pcs.: Low-threshold input ports)
  - Input/output ports of normal voltage: 8 pcs.
- ROM, RAM
  - LC6502D ROM: 2048 bytes, RAM: 128 x 4 bits
  - LD6505D Rom: 1024 bytes, RAM: 64 x 4 bits
- Differences between LC6502B/505B and LC6502D/6505D

Item	LC6502B, 6505B	LC6502D, 6505D
FLT driving capability	$V_{OH}=V_{DD}-2.5V$ at $I_{OH}=-10mA$	$V_{OH}=V_{DD}-2.0V$ at $I_{OH}=-10mA$
Port A input threshold level	$V_{IH}=0.7V_{DD}$ to V_{DD} $V_{IL}=V_{DD}-35V$ to $0.3V_{DD}$	$V_{IH}=0.38V_{DD}$ to V_{DD} $V_{IL}=V_{SS}$ to $0.4V$
Port A, B voltage	$V_{DD}-35V$ high voltage	Normal voltage

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