LM6402A, 6405A

n channel e/d mos LSI

CIRCUIT DRAWING No.1001





4-BIT SINGLE-CHIP MICROCOMPUTER

Features

LM6402A/6405A are 4-bit microcomputers fabricated on single chips using N channel MOS technology. They are designed for use in controller applications and contains ROM (2048 bytes (2K bytes) max.), RAM (128x4 bits max.), ALU, I/O ports, timer, clock generator, PLA, etc. in a single chip. 35 pins are available for I/O ports.

Features in hardware (Reduction in external parts)

- Single 5V supply, N channel E/D MOS
- C MOS, TTL compatible
- LED driver-contained output ports (2 ports/ 8 pins)
- 24-character PLA
- Input/output common ports (7 ports/27 pins)
- Flexible output circuit (Open drain/pull-up resistor attached)
- Clock generator (Ceramic resonator external-

ly attached)

- Cycle time 10µs
- LM6402A and LM6405A are identical in all functions except ROM, RAM capacity.
- Input threshold voltage selectable (Normal/ high threshold)
- Initial reset and external interrupt input pins containing Schmitt gate

Features in software (Effective use of ROM capacity)

- 4-level subroutine nesting
- Interrupt function (External/internal)
- Programmable timer with wide setting range (Timer, pulse count, pulse width measure)
- Powerful instruction set of 82 instructions
- Automatic page select
- LM6402A/LM6405A instructions compatible

LM6402H, 6405H

n channel e/d mos LSI

CIRCUIT DRAWING No.1001





4-BIT SINGLE CHIP MICROCOMPUTER

Features

LM6402H/6405H are 4-bit microcomputers fabricated on single chips using N channel MOS technology. They are designed for use in controller applications and contains ROM (2048 bytes (2K bytes) max.), RAM (128x4 bits max.), ALU, I/O ports, timer, clock generator, PLA, etc. in a single chip. 35 pins are available for I/O ports. A rather fast cycle time of 5µs enables high-grade control.

Features in hardware (Reduction in external parts)

- Single 5V supply, N channel E/D MOS
- C MOS, TTL compatible
- LED driver-contained output ports (2 ports/8 pins)
- 24-character PLA
- Input/output common ports (7 ports/27 pins)
- Flexible output circuit (Open drain/pull-up resistor attached)

- Clock generator (Ceramic resonator externally attached)
- Cycle time 5µs
- LM6402H and LM6405H are identical in all functions except ROM, RAM capacity.
- Input threshold voltage selectable (Normal/ high threshold)
- Initial reset and external interrupt input pins containing Schmitt gate

Features in software (Effective use of ROM capacity)

- 4-level subroutine nesting
- Interrupt function (External/internal)
- Programmable timer with wide setting range (Timer, pulse count, pulse width measure)
- Powerful instruction set of 82 instructions
- Automatic page select
- LM6402H/LM6405H instructions compatible