March 1999

8 - Bit Micro-controller

Product List

with 32 KB flash embedded

MSU2959C16, 16 MHz 32 KB internal memory MCU, on-line down-loadable MSU2959C25, 25 MHz 32 KB internal memory MCU, on-line down-loadable MSU2959C40, 40 MHz 32 KB internal memory MCU, on-line down-loadable

Description

The MVI MSU2959 series product is an 8 - bit single chip microcontroller with 32 KB flash embedded. It provides hardware features and a powerful instruction set, necessary to make it a versatile and cost effective controller for those applications demand up to 32 I/O pins or need up to 32 K byte memory either for program or for data or mixed.

To program the flash block, a commercial programmer is capable to do it.

Ordering Information

MSU2959ihhk

i: process identifier {C}.

hh: working clock in MHz {16, 25, 40}. k: package type postfix {as below table}.

| | | Pin/Pad | | Logo Size at |
|---------|----------|---------------|-----------|--------------|
| Postfix | Package | Configuration | Dimension | Top Marking |
| blank | dice | - | | - |
| Р | 40L PDIP | - | - | 5.0 x 4.2 mm |
| J | 44L PLCC | - | • | 4.5 x 3.8 mm |
| Q | 44L PQFP | - | • | 2.8 x 2.4 mm |
| บ | 44L LQFP | - | - | 2.8 x 2.4 mm |

Features

Working voltage: 4.5 V through 5.5 V

Programming voltage: 5 V

General 80C51 family compatible

12 clocks per machine cycle

32 K byte internal flash memory (on-line down-loadable)

256 byte data RAM

Three 16 bit Timers/Counters

Four 8-bit I/O ports

Full duplex serial channel

Bit operation instructions

Page free jumps

8 - bit Unsigned Division

8 - bit Unsigned Multiply

BCD arithmatic

Direct Addressing

Indirect Addressing

Nested Interrupt

Two priority level interrupt

A serial I/O port

Power save modes:

Idle mode and Power down mode

Working at 16/25/40 MHz Clock