

## February 1999

### **Product List**

MSU2954C16, 16 MHz 16 KB internal memory MCU MSU2954C25, 25 MHz 16 KB internal memory MCU MSU2954C40, 40 MHz 16 KB internal memory MCU

## 8 - Bit Micro-controller

with 16 KB flash embedded

# Description

The MVI MSU2954 series product is an 8 - bit single chip microcontroller with 16 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 16 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**

MSU2954 i hhk

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	-	-	-
P	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
U	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
- 16 K byte internal flash memory
- 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