

Product List

OB39R08A5U10MP

Description

The OB39R08A5 is a 1T (one machine cycle per clock) single-chip 8-bit microcontroller. It has 8K-byte embedded Flash for program, and executes all ASM51 instructions fully compatible with MCS-51.

OB39R08A5 contains 256B on-chip RAM, up to 8 GPIOs (10L package), various serial interfaces and many peripheral functions as described below. It can be programmed via writers. Its on-chip ICE is convenient for users in verification during development stage.

The high performance of OB39R08A5 can achieve complicated manipulation within short time. About one third of the instructions are pure 1T, and the average speed is 8 times of traditional 8051, the fastest one among all the 1T 51-series. Its excellent EMI and ESD characteristics are advantageous for many different applications.

Ordering Information

OB39R08A5ihhkL

YWW

i: process identifier {U = 1.8V ~ 5.5V}

hh: pin count

k: package type postfix {as table below }

L:PB Free identifier

{No text is Non-PB free , "P" is PB free}

Y: Year Code

WW: Week Code (01-52)

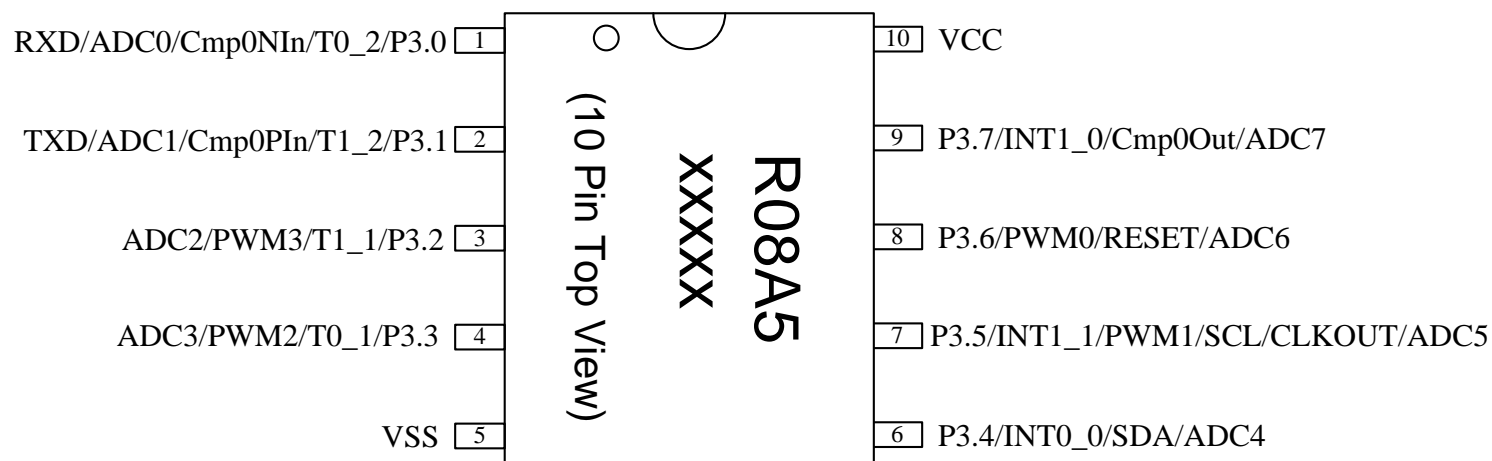
Features

- Operating Voltage: 1.8V ~ 5.5V
- 1~8T modes are software programmable.
- Instruction-set compatible with MCS-51.
- 22.1184MHz Internal RC oscillator, with programmable clock divider
- 8K Bytes on-chip flash program memory.
- 256 bytes RAM as standard 8052,
- One serial peripheral interfaces in full duplex mode.
 - 1.1 Synchronous mode, fixed baud rate,
 - 1.2 8-bit UART mode, variable baud rate.
 - 1.3 9-bit UART mode, fixed baud rate,
 - 1.4 9-bit UART mode, variable baud rate.
- Additional Baud Rate Generator
- Two 16-bit Timer/Counters. (Timer 0, 1)
- 8 GPIOs(10L MSOP)
- Programmable watchdog timer.
- One IIC interface. (Master/Slave mode)
- 10 bit PWM x 4 channel
- 8 channel 10-bit analog-to-digital converter (ADC)
- On-Chip Comparator x 1
- On-chip flash memories support IAP/ICP and EEPROM functions.
- On-Chip in-circuit emulator (ICE) functions with On-Chip Debugger (OCD).
- EMI reduction mode (ALE output inhibited).
- LVI/LVR.
- IO PAD ESD over 4KV.
- Enhance user code protection.
- External interrupt 0, 1 with four priority levels.
- Power management unit for IDLE and power down modes.

Postfix	Package	Pin / Pad Configuration
M	MSOP (118 mil)	Page 4

Pin Configuration

10 Pin MSOP



Notes :

1. The pin Reset/P3.6 factory default is GPIO(P3.6). User can configure it to Reset by a flash programmer.