

## ABOV 16MHz, 8-bit Core(8051 Compatible) Microcontrollers

The MC96F1206 is an advanced CMOS 8-bit microcontroller with 6Kbytes of FLASH. This is powerful microcontroller which provides a highly flexible and cost effective solution to many embedded control applications. This provides the following features : 6Kbytes of FLASH, 256bytes of SRAM, 16-bit timer/counter/PWM, Watchdog timer with WDTOSC, 12-bit ADC with LDO, On-chip POR, BOD and LVR, Internal RC-Oscillator, Internal WDT-Oscillator and clock circuitry. The MC96F1206 also supports Power saving modes to reduce Power Consumption.



MC96F1206 16 pin SOPN

### Key Benefits and Features

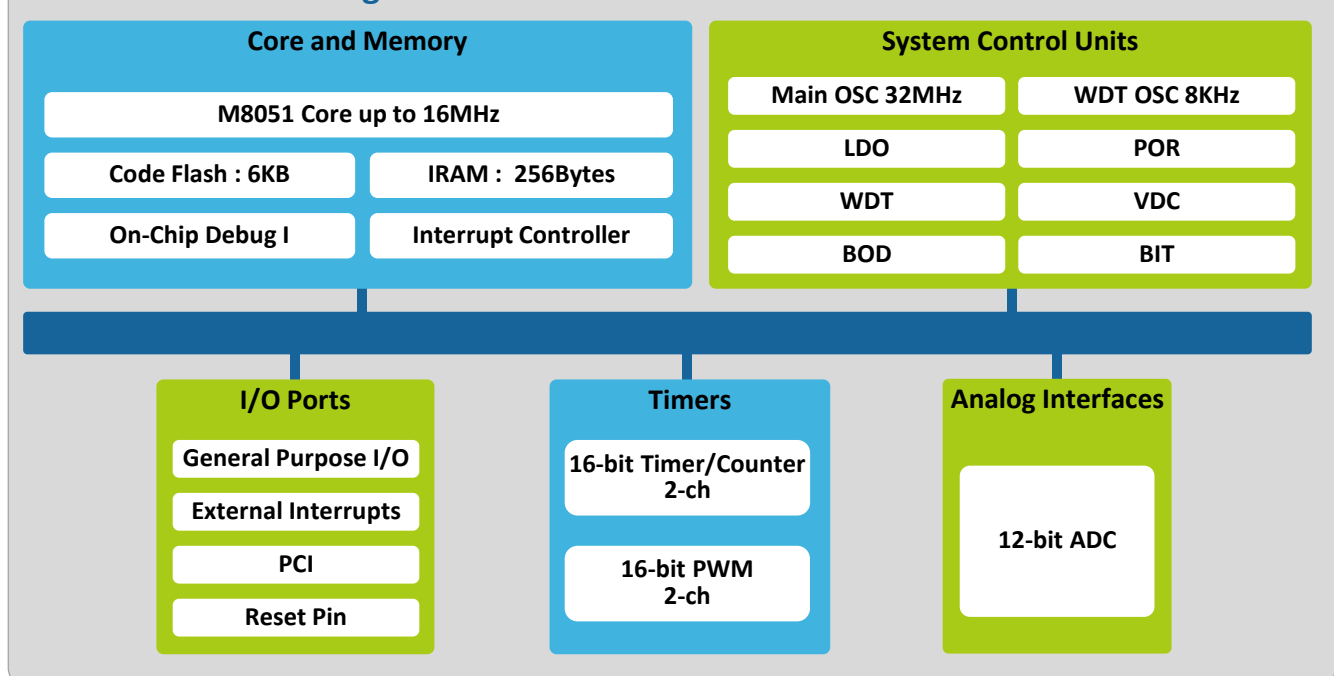
- M8051 (8051 Compatible, 2 clock per cycle)
- Internal 6KB Flash ROM
  - Self read/write capability
  - On chip debug and ISP (In-system programming)
- 256 Bytes IRAM
- 8-bit Basic Interval Timer
- 8-bit Watch-Dog Timer
  - 8KHz Internal RC Oscillator
- Timer/Counters
  - 2-ch 16-bit timer/counters
- PWM (16-bit 2-ch, Using Timer0, 1)
  - PWM0 up to 32MHz
- 12-bit A/D Converter (14-ch input, 1-ch internal ref.)
- 2.5V LDO for ADC reference
- Power-On Reset
- Low Voltage Reset
- Brown-Out Detector
- Power Down Mode
  - IDLE, STOP1, STOP2 mode
- Power Supply 2.2 to 5.5V
- Temperature Range -40 to +85°C
- 20-QFN, 20-TSSOP, 16-SOPN Packages

Device	Core	Speed	Flash	SRAM	UART	SPI	I2C	PWM	ADC	I/O Ports	Op. Voltage	Op. Temp.	Package	Availability
MC96F1206U	8-bit CISC	16MHz	6KB	256B	-	-	-	2-ch	15-ch	18	2.2~5.5V	-40~+85°C	20-QFN	Now
MC96F1206R	8-bit CISC	16MHz	6KB	256B	-	-	-	2-ch	15-ch	18	2.2~5.5V	-40~+85°C	20-TSSOP	Now
MC96F1206M	8-bit CISC	16MHz	6KB	256B	-	-	-	2-ch	12-ch	14	2.2~5.5V	-40~+85°C	16-SOPN	Now

### Targeted Application

- Battery charge & discharge control
- Small Home Appliance

### MC96F1206 Block Diagram



# MC96F1206 Development Kit

## Hardware Tools



**MC96F1206 Demo Board**

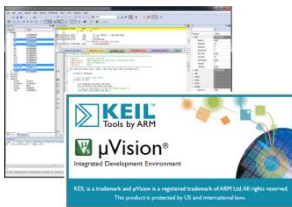
- 2.2 ~ 5.5V Power Supply from External Source
- OCD I Interface Connector
- 5-push button ( 1 button for External RESET )
- External User Port
- MC96F1206 20-QFN, 20-TSSOP,, 16-SOPN packages

## Debugger



**OCD2**

## Software Tools



**KEIL™ uVision4**



**E-PGM+**



**E-GANG4/E-GANG6**

## Embedded Software



**VPE (Code Generator)**



**Example Codes**