

# P89LPC932

8 KB Flash with 512 Byte Data  
EEPROM and 768 Byte SRAM

Semiconductors



## Features

- High performance 2-clock 80C51 CPU providing 6 times the performance of the standard 80C51
  - Most instructions execute in 167 at 12 MHz
- High Performance at reduced clock frequency results in both power saving and reduced EMI
- 2.4 V to 3.6 V  $V_{DD}$  operating range with 5 V tolerant I/O pins
- 8 Kbyte Flash code memory with 64-byte sectors and 2 ms block write/erase cycle
- 512 Byte data EEPROM memory allows device serialization, parameter storage etc.
- 256 Bytes RAM and 512 Bytes auxiliary on-chip XRAM
- 400 kBit/s I<sup>2</sup>C and 3 Mbit/s SPI communication ports plus enhanced UART
- Two 16-bit counter/timers with I/O port toggle and 8-bit PWM functions plus real time clock / system timer
- Two analog comparators with selectable inputs and reference source
- 16-bit Capture/Compare Unit (CCU) with 32x PLL providing input capture, output compare and PWM

## Description

The LPC900 family is based on a high performance processor architecture that executes instructions in two to four clocks, six times the rate of standard 80C51 devices. Many system level functions have been incorporated into the LPC900 family in order to reduce component count, board space, and system cost.

The P89LPC932, the first device in the LPC900 family integrates 8KB of Flash program memory, 512 bytes of data EEPROM, along with a host of communications ports and system supervisory functions all into a 28-pin package. The P89LPC932 is designed for applications that demand low voltage, high-integration, high-performance, and low cost.

## Applications

- Hand Held Devices
- White Goods
- Security Systems
- Thermal Management
- Protocol Conversion

## Benefits

- Reduced system cost
- Flexible power management
- Small footprint

## Ordering information

Part Number	Temp. Range	Flash Memory	RAM	EEPROM	Description
P89LPC932BDH	0° to +70°C	8 KB	768 B	512 B	4.4 mm width 28-pin TSSOP
P89LPC932BA	0° to +70°C	8 KB	768 B	512 B	28-pin PLCC
P89LPC932BHN	0° to +70°C	8 KB	768 B	512 B	6x6 mm body 28-pin HVQFN

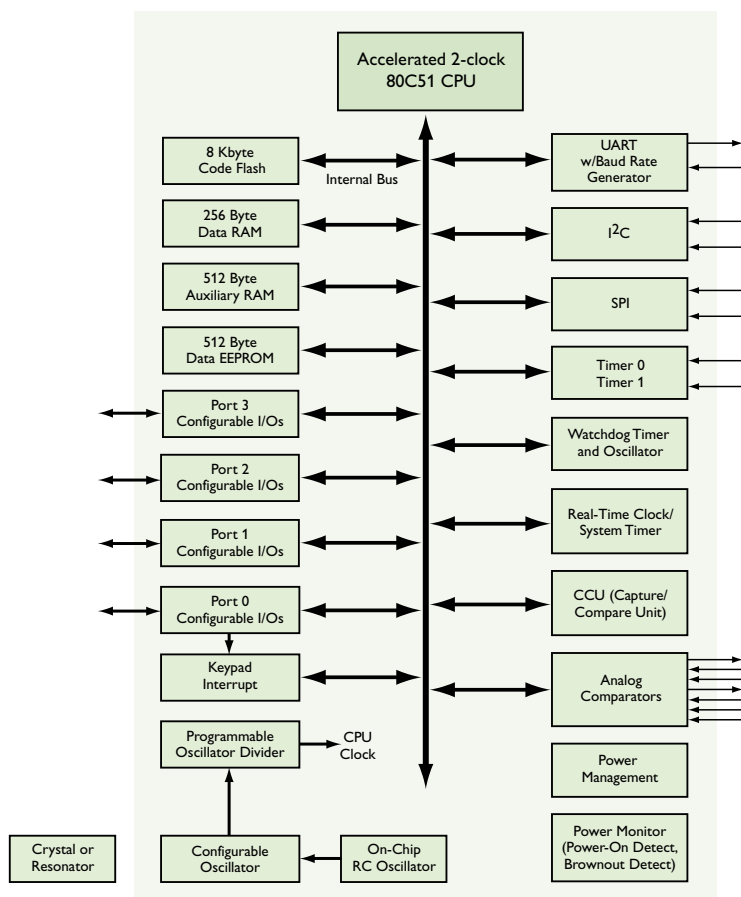
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P89LPC932 block diagram



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