SX18AC/SX20AC/SX28AC/SX18AC75/SX20AC75/SX28AC75

Configurable Communications Controllers with EE/Flash Program Memory, In-System Programming Capability and On-Chip Debug

1.0 PRODUCT OVERVIEW

1.1 Introduction

The Ubicom SX family of configurable communications controllers are fabricated in an advanced CMOS process technology. The advanced process, combined with a RISC-based architecture, allows high-speed computation, flexible I/O control, and efficient data manipulation. Throughput is enhanced by operating the device at frequencies up to 50/75 MHz and by optimizing the instruction set to include mostly single-cycle instructions. In addition, the SX architecture is deterministic and totally reprogramable. The unique combination of these characteristics enables the device to implement hard real-time functions as software modules (Virtual Peripheral™) to replace traditional hardware functions.

On-chip functions include a general-purpose 8-bit timer with prescaler, an analog comparator, a brown-out detector, a watchdog timer, a power-save mode with multi-source wakeup capability, an internal R/C oscillator, user-selectable clock modes, and high-current outputs.

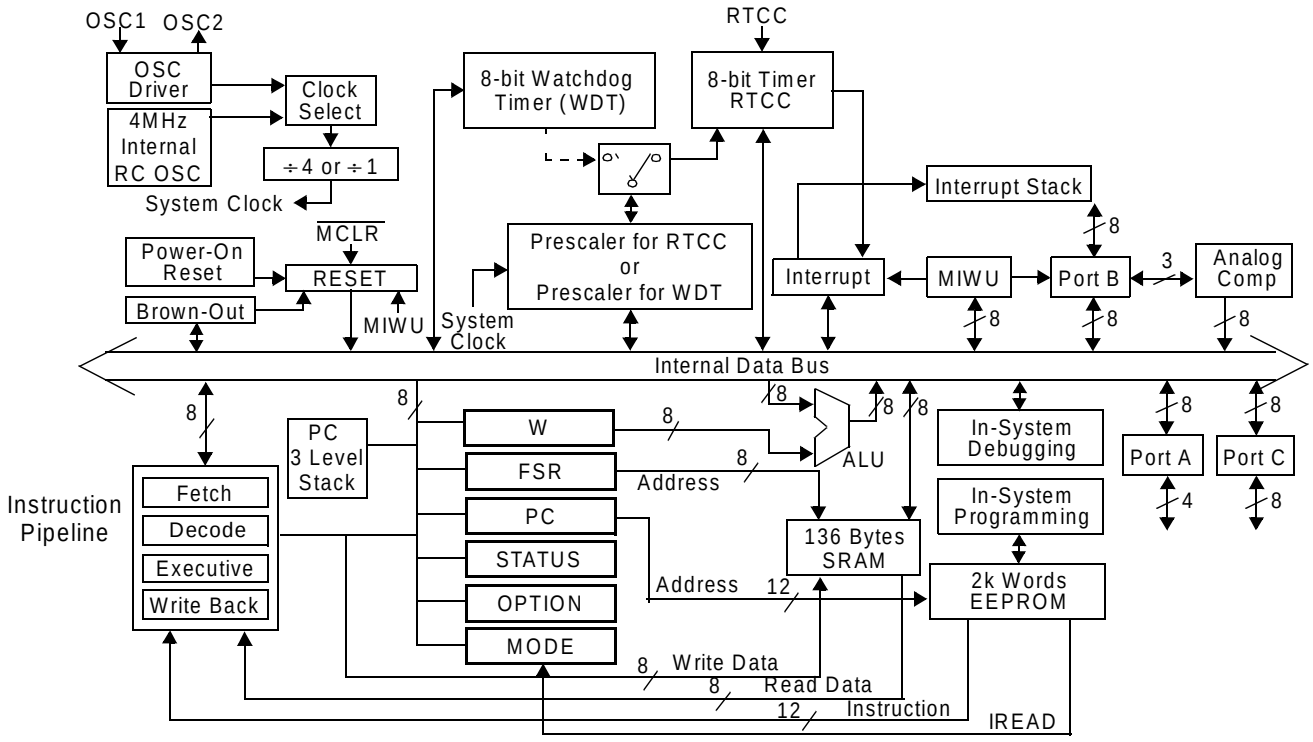

Figure 1-1. Block Diagram