

R8810I
Brief Sheet
16-BIT RISC MICROCONTROLLER

1. Features

I CPU Core

- RDC's proprietary RISC architecture
- Five-stage pipeline
- CPU clock speed up to 25 MHz
- Supports CPU ID
- Supports 32 PIO pins
- Static & synthesizable design

I Bus Interface

- A multiplexed address and data bus which is compatible with the 80C188 microprocessor
- Supports a non-multiplexed address bus A[19:0]

I ROM/RAM Controller and Addressing Space

- 1M-byte memory address space
- 64K-byte I/O space

I PSRAM Interface

- PSRAM (Pseudo static RAM) interface with auto-refresh control

I Two Independent DMA Channels

I Asynchronous Serial Channel

- Supports one asynchronous serial channel with one synchronous serial channel

I Interrupt Controller

- The Interrupt controller with five maskable external interrupts and one non-maskable external interrupt

I Programmable Chip-select Logic

- Programmable chip-select logic for memory or I/O bus cycle decoder

I Programmable Wait-state Generator

I Counter/Timers

- Three independent 16-bit timers and Timer 1 can be programmed as a watchdog timer

I Software is compatible with the 80C188 microprocessor

I Operating Voltage Range

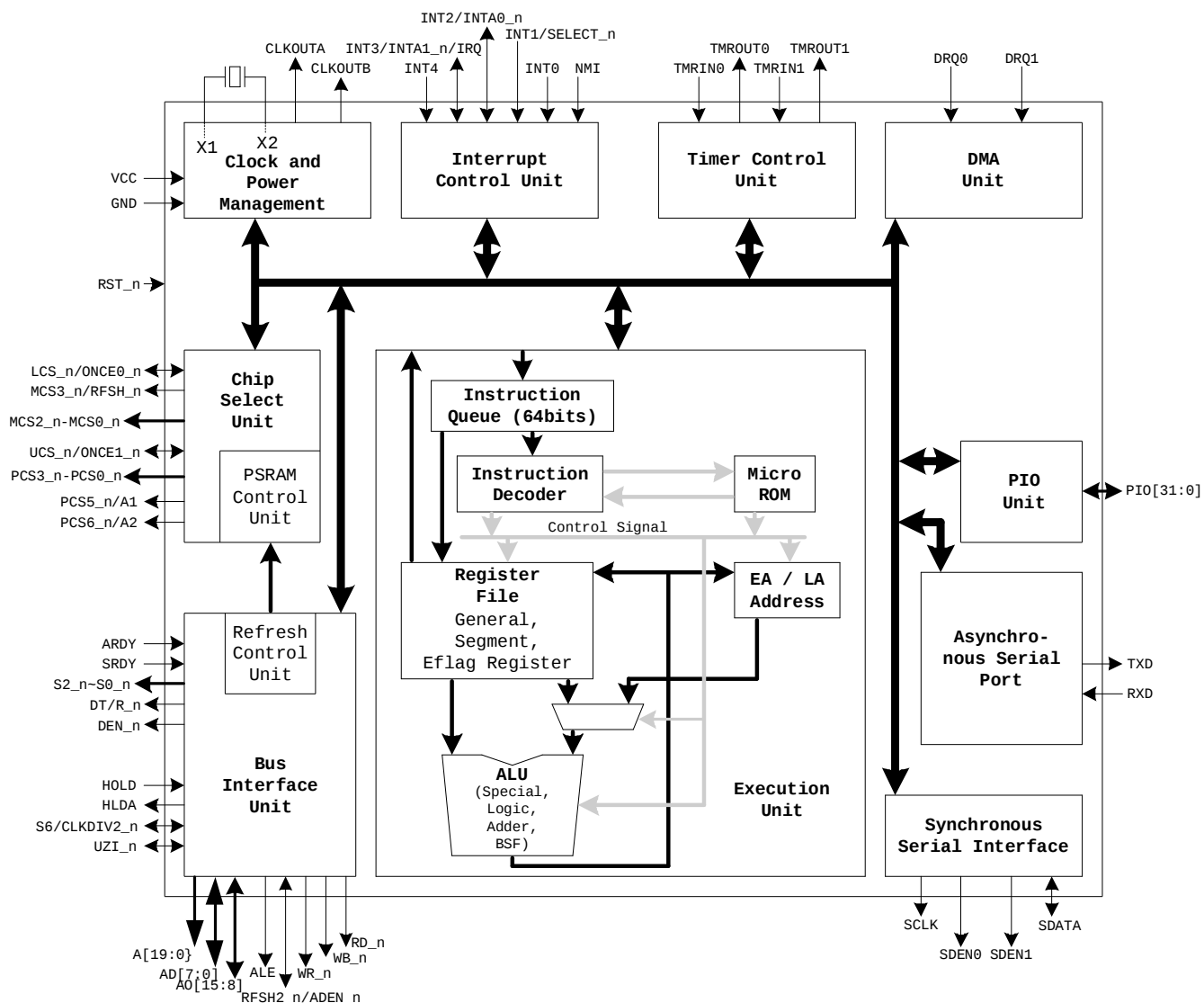
- Core voltage: 5V $\pm$ 5%
- I/O voltage: 5V $\pm$ 10%

I Ambient Temperature: -40 ~ +85°C

I Package Type

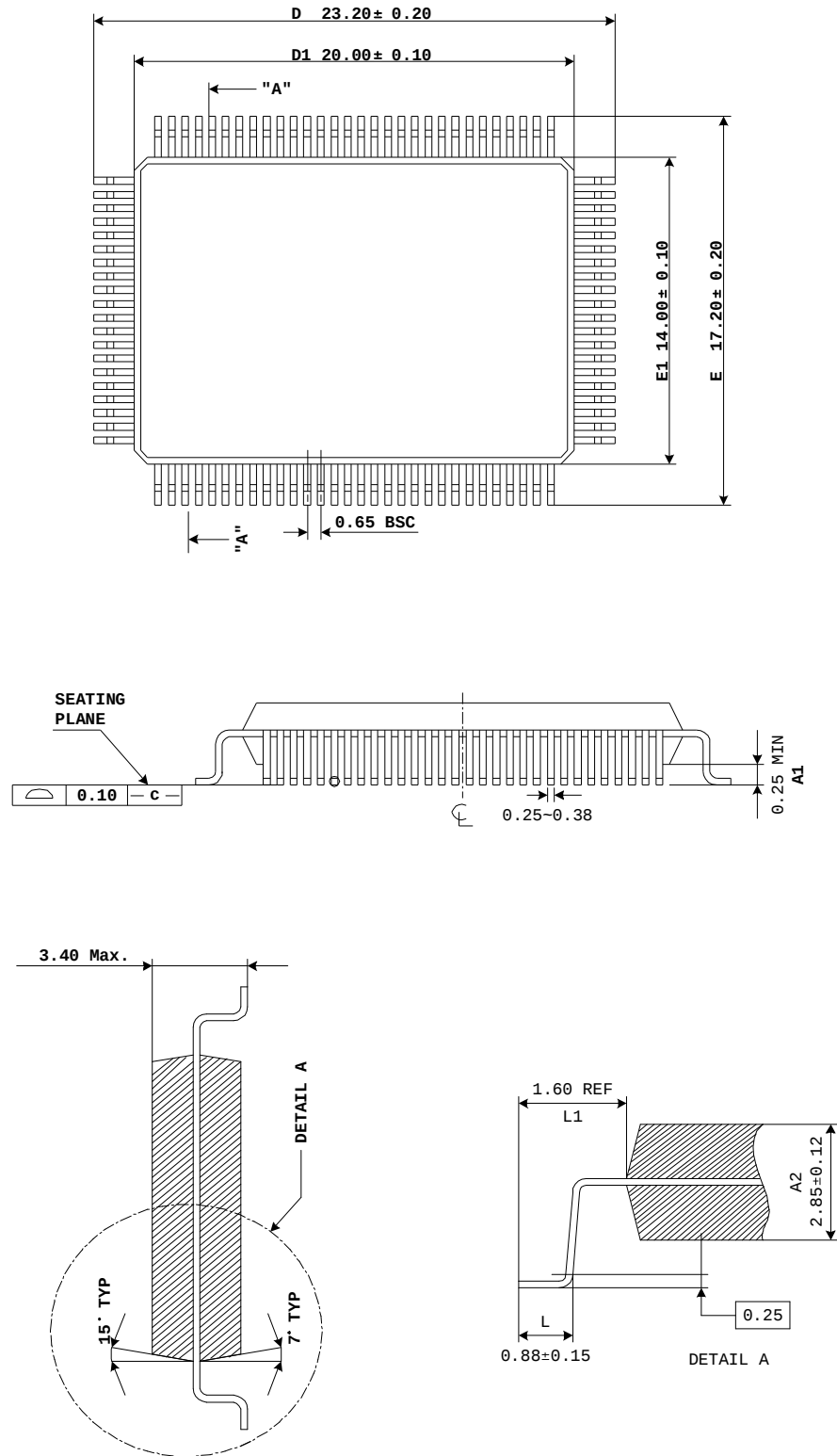
- 100-pin PQFP
- 100-pin LQFP

2. Block Diagram



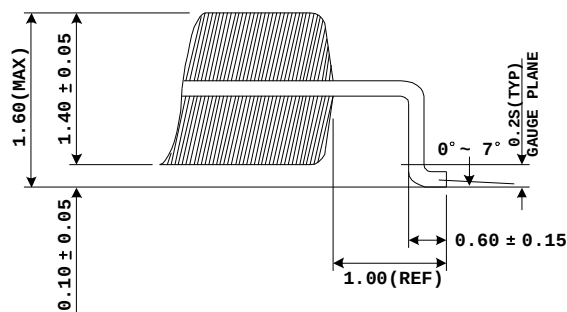
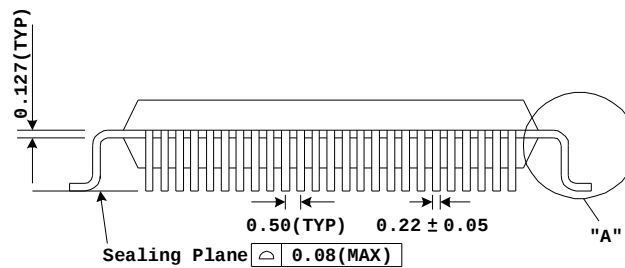
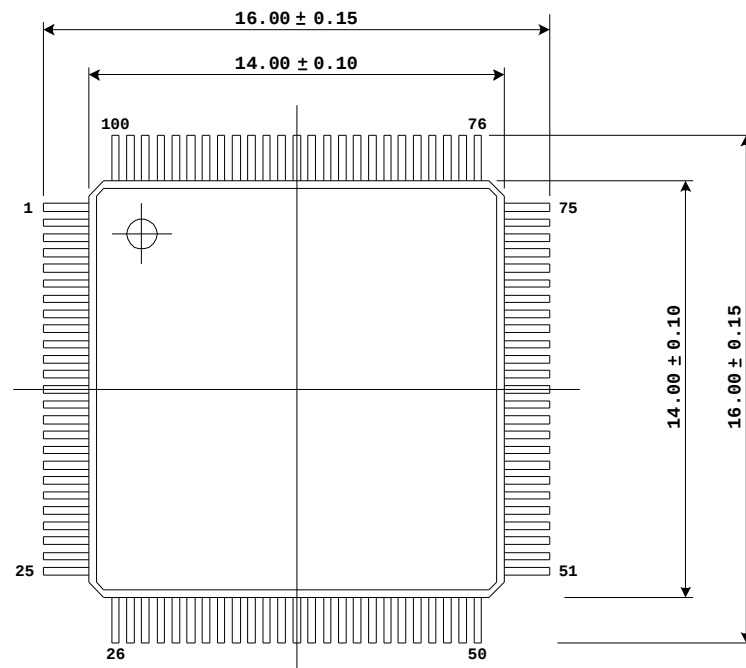
3. Package Information

PQFP 100 pins



UNIT : mm

LQFP 100 pins



UNIT : mm