

## 4-bit Single Chip Microcomputer

Preliminary

- 4-bit E0C63000 Core CPU
- A/D Converter
- Low Voltage Operation (0.9V min.)
- High Speed Instruction Cycle (2-6CPI)

### ■ DESCRIPTION

The E0C63158 is a microcomputer composed of a CMOS 4-bit core CPU (E0C63000), ROM, RAM, A/D converter and timers. Since the E0C63158 features low voltage and high speed operation and low current consumption, it is suitable for systems that need to be driven with a battery.

### ■ FEATURES

- CMOS LSI 4-bit parallel processing
- Clock ..... 32.768kHz (X'tal or CR oscillation)  
2MHz (CR or Ceramic oscillation)
- Instruction set ..... 46 types (411 instructions with all)
- ROM capacity ..... 8,192 words × 13 bits
- RAM capacity ..... 512 words × 4 bits
- Input port ..... 9 bits
- Output port ..... 12 bits
- I/O port ..... 20 bits
- Clock timer ..... 1 ch.
- Programmable timer ..... 8 bits × 2 ch. or 16 bits × 1 ch.
- Watchdog timer ..... Built-in
- Serial interface ..... Synchronous 8 bits
- A/D converter ..... 4 bits (0.9V to 2.7V)  
8 bits (2.7V to 3.6V)
- Supply voltage detection (SVD) circuit ..... From 1.05 to 2.60V
- Operation voltage ..... 0.9 to 3.6V
- Current consumption ..... TBDμA (32.768kHz X'tal, 3.0V, HALT)  
TBDμA (32.768kHz X'tal, 3.0V, RUN)  
TBDμA (2MHz Ceramic, 3.0V, RUN)
- Package ..... QFP13-64pin, QFP12-48pin, Die form

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