

SiLabs rozširuje ponuku 8-bitových MCU (presnejšie mixed-signal system-on-a-chip MCU) o novú rodinu "EFM8™ Laser Bee".

Táto rodinka, by mala obsahovať fyzicky menšie čipy s analógovými perifériami a '51 jadrom.

Čipy budú dostupné v púzdrach QFN24, QSOP24 (Q je v tomto prípade mätku, pretože sa jedná o SOP - t.j. vývody sú len po dvoch stranách púzdra), QFN32, QFP32,

Vlastnosti

- Core:

- Pipelined CIP-51 Core
- Fully compatible with standard 8051 instruction set
- 70% of instructions execute in 1-2 clock cycles
- 72 MHz maximum operating frequency

- Memory:

- Up to 64 kB flash memory (63 kB user-accessible), in-system re-programmable from firmware in 512-byte sectors
- Up to 4352 bytes RAM (including 256 bytes standard 8051 RAM and 4096 bytes on-chip XRAM)

- Power:

- Internal LDO regulator for CPU core voltage
- Power-on reset circuit and brownout detectors
- I/O: Up to 29 total multifunction I/O pins:
- Up to 25 pins 5 V tolerant under bias
- Selectable state retention through reset events
- Flexible peripheral crossbar for peripheral routing
- 5 mA source, 12.5 mA sink allows direct drive of LEDs

- Clock Sources:

- Internal 72 MHz oscillator with accuracy of $\pm 2\%$
- Internal 24.5 MHz oscillator with $\pm 2\%$ accuracy
- Internal 80 kHz low-frequency oscillator
- External CMOS clock option
- External crystal/RC/C Oscillator (up to 25 MHz)

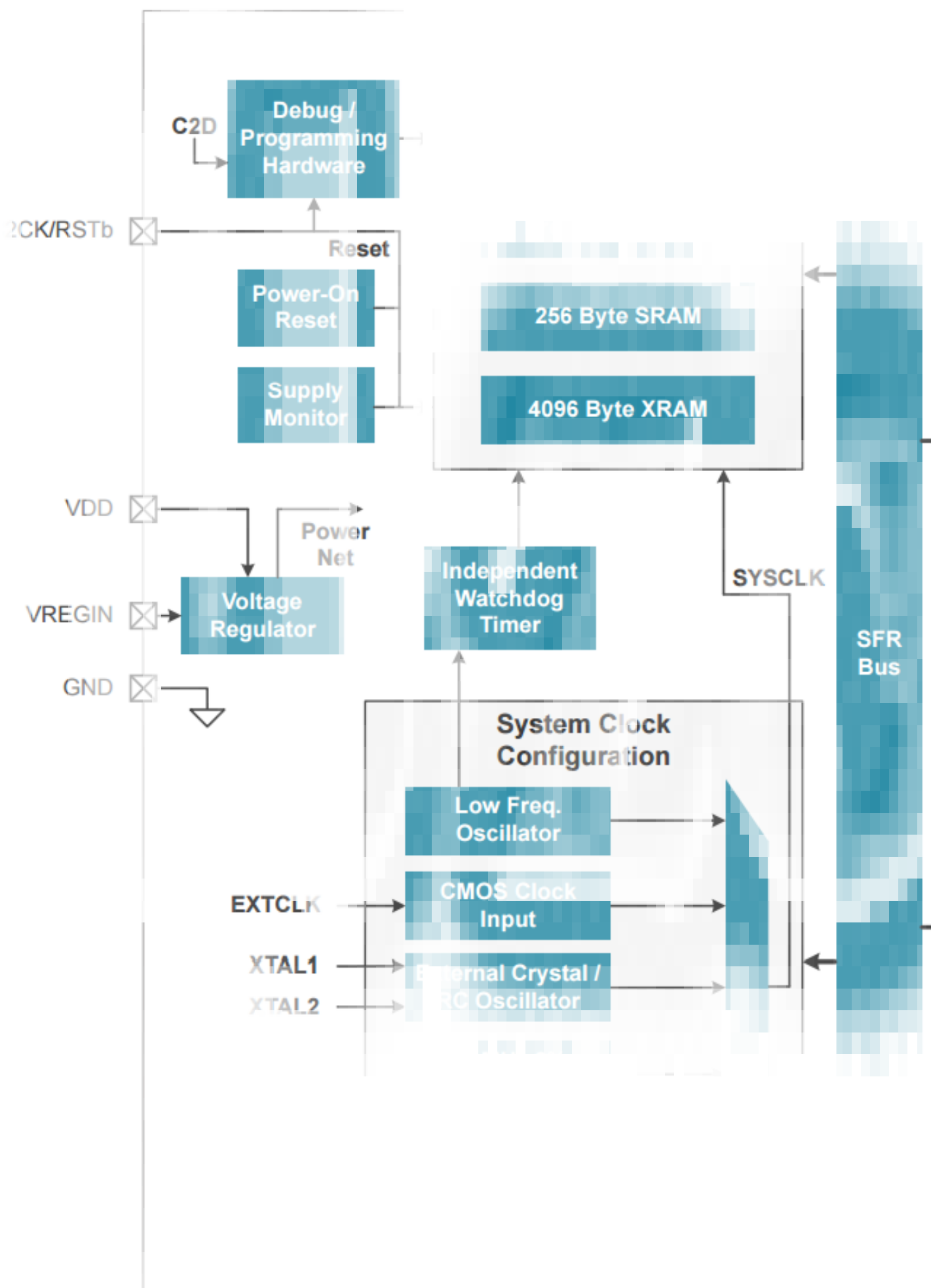
- Analog:

- 14/12/10-Bit Analog-to-Digital Converter (ADC)
- Internal calibrated temperature sensor ($\pm 3\text{ }^{\circ}\text{C}$)
- 4 x 12-Bit Digital-to-Analog Converters (DAC)
- 2 x Low-current analog comparators with adjustable reference

- Communications and Digital Peripherals:

- 2 x UART, up to 3 Mbaud
- SPI™ Master / Slave, up to 12 Mbps
- SMBus™ / I2C™ Master / Slave, up to 400 kbps
- I2C High-Speed Slave, up to 3.4 Mbps
- 16-bit CRC unit, supporting automatic CRC of flash at 256-byte boundaries
- 4 Configurable Logic Units
- Timers/Counters and PWM:
 - 6-channel Programmable Counter Array (PCA) supporting PWM, capture/compare, and frequency output modes
 - 6 x 16-bit general-purpose timers
 - Independent watchdog timer, clocked from the low frequency oscillator
 - On-Chip, Non-Intrusive Debugging
 - Full memory and register inspection
 - Four hardware breakpoints, single-stepping

Blokové zapojenie

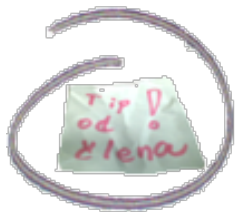


Cena

U Mouseru, ceny od 0,721€/ks po 1,76€/ks (64k flash)

Odkazy

[EFM8™ Laser Bee 8-bit Microcontrollers \(MCUs\) Product page](#)



Distribúcia

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