



MCF51JE Flexis 32-bit ColdFire V1 Microcontrollers

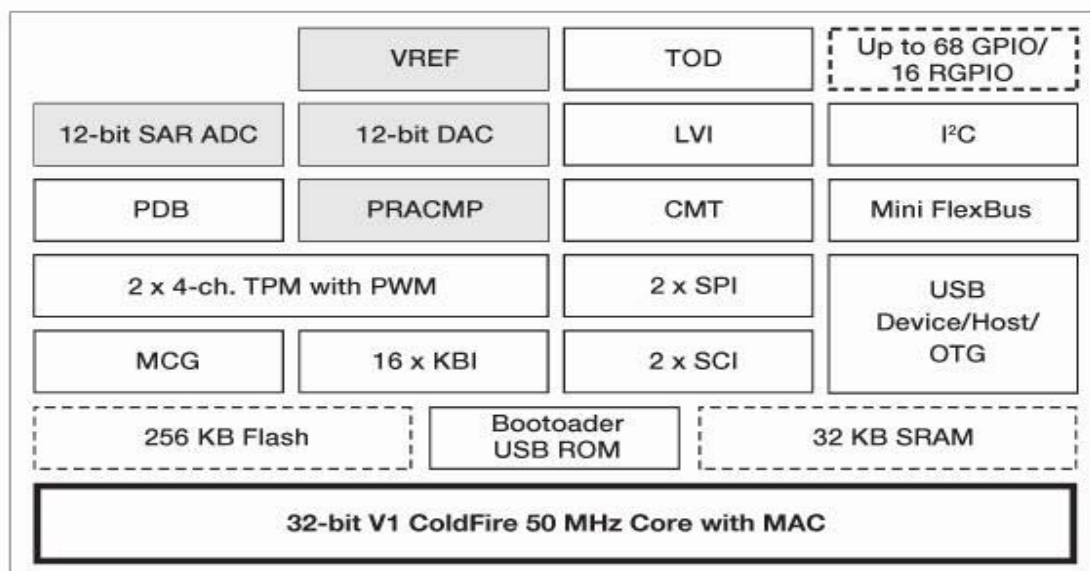
General Description:

The MCF51JE256/128 (JE256/128) provides ultra-low power operation, USB connectivity and high measurement accuracy, all in a single 32-bit microcontroller, allowing designers to develop a more fully featured system at a lower cost. The JE256/128 integrates high-resolution ADC and DAC modules, rich peripheral set including a USB 2.0 host/device/OTG controller, multiple serial interfaces and an external bus interface.



The JE256/128 is part of the Freescale Flexis™ microcontroller series, which includes both 8-bit S08 and 32-bit V1 ColdFire® microcontrollers that have a common set of peripherals and development tools to deliver the ultimate in migration flexibility. The JE246/128 family is also easy to use. Freescale provides a comprehensive suite of development tools and software to help developers design quickly and easily.

MCF51JE256 Block Diagram



Key Features:

- On-Chip Memory
 - o Up to 256 KB flash
 - o Up to 32 KB SRAM
 - o Mini FlexBus (external bus interface)
- Measurement Engine Unit
 - o 12-bit SAR ADC - High resolution ADC
 - o PDB - Programmable Delay Block
 - o PRACMP - Analog Comparator with 5bit DAC
 - o VREF - Internal Voltage Reference
- Communication Peripherals
 - o USB - Device/Host/OnTheGo controller
 - o 2 x SPI - Serial Peripheral Interface
 - o 2 x SCI - Serial Communication Interface
 - o I2C - Inter-Integrated Circuit
- Timers
 - o 2 x 4-channel Timer
 - o Pulse Width Modulator Module
 - o TOD - Time of Day Module
 - o CMT - Carrier Modulator Timer
- System Integration
 - o 2 x KBI - KeyBoard Interrupts
 - o LVI - Low Voltage Indicator
 - o Low-power Stop 2 current:500 nA (32K of active SRAM)

Applications:

- HVAC building control systems
- PC peripheral
- Lighting control systems
- Industrial networking products
- Portable medical devices

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
MCF51JE256CLK	1812179	74R4415	MCF51JE Flexis 32-bit ColdFire V1 Microcontrollers--80LQFP
MCF51MM256CLK	1812182	74R4417	MCF51JE Flexis 32-bit ColdFire V1 Microcontrollers--80LQFP