



Flexis 32-Bit V1 ColdFire USB Microcontroller

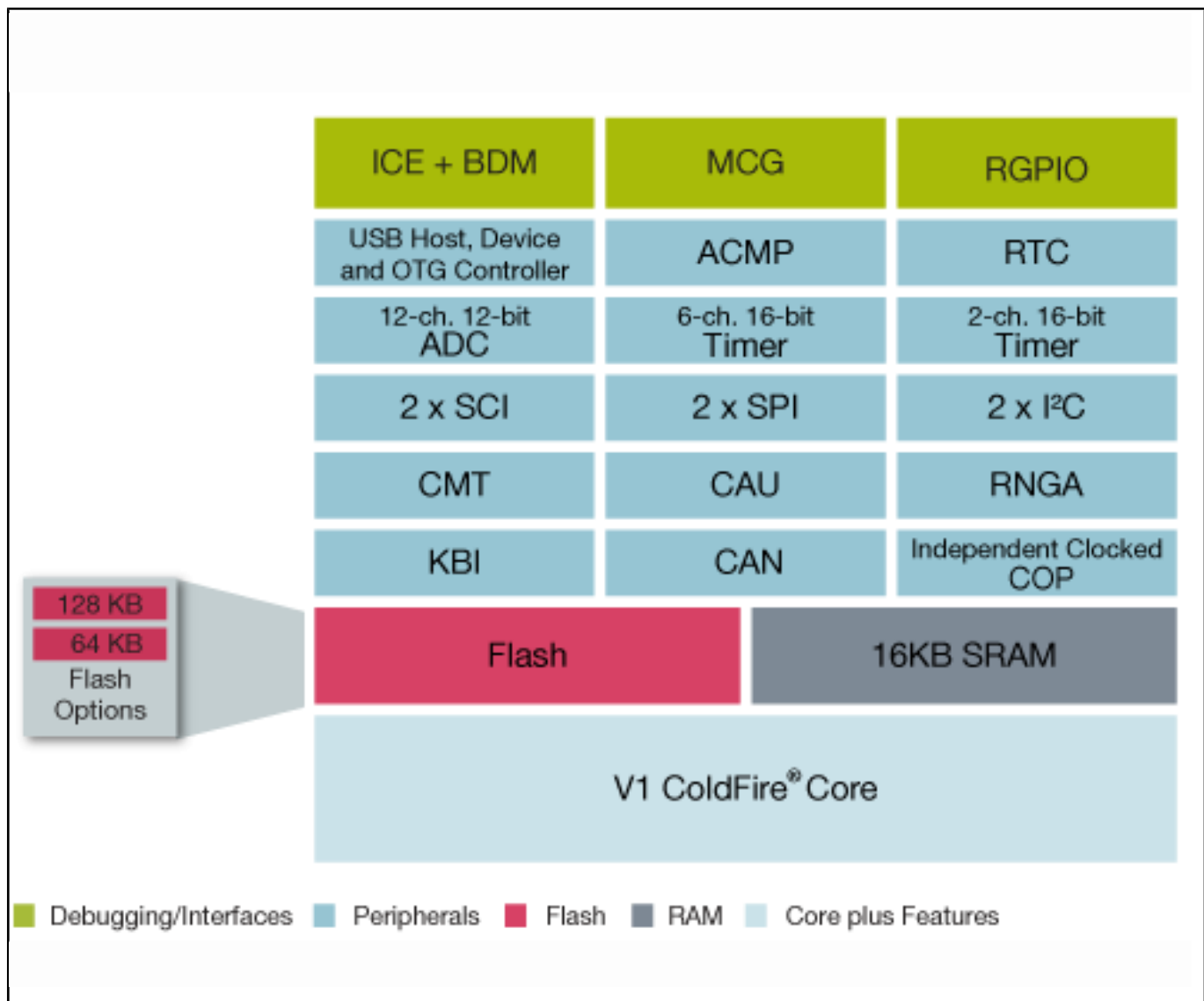
MCF51JM

Last Updated: Dec 15, 2024

The MCF51JM family is part of the Flexis® microcontroller series, the connection point on Our Controller Continuum where 8-bit and 32-bit compatibility becomes a reality. The Flexis series of devices includes complementary families of 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 32-bit MCF51JM128 further extends the low-end of the ColdFire embedded USB controller family with up to 128 KB of flash memory, a full-speed USB 2.0 controller with host, device and on-the-go (OTG) support, an integrated CAN module and a 12-channel, 12-bit analog-to-digital converter (ADC). The ColdFire JM family also features a hardware cryptographic acceleration unit (CAU), a random number generator accelerator (RNGA) and several system protection features such as low-voltage detect and a computer operating properly (COP) module.

ColdFire MCF51JM Microcontroller Block Diagram Block Diagram



View additional information for [Flexis 32-Bit V1 ColdFire USB Microcontroller](#).

Note: The information on this document is subject to change without notice.

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2026 NXP B.V.