

S12A Automotive and Industrial Microcontrollers (MCUs)

S12A

Last Updated: Mar 5, 2025

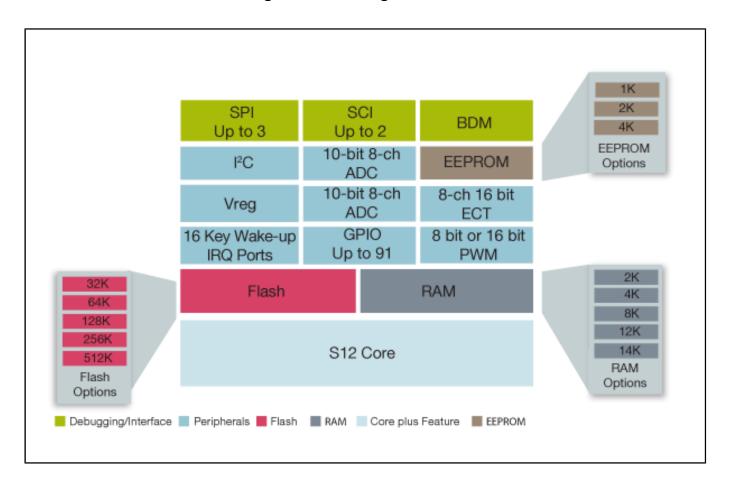
The MC9S12A512 MCU is a 16-bit device composed of standard on-chip peripherals, including a HCS12 CPU.

System resource mapping, clock generation, interrupt control and bus interfacing are managed by the system integration module (SIM).

The MC9S12A512 has full 16-bit data paths throughout, however the external bus can operate in an 8-bit narrow mode so single 8-bit wide memory can be interfaced for lower cost systems.

The inclusion of a phase-lock loop (PLL) circuit allows power consumption and performance to be adjusted.

S12A Microcontroller Block Diagram Block Diagram



View additional information for S12A Automotive and Industrial Microcontrollers (MCUs).

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. © 2025 NXP B.V.