



S12XA Automotive and Industrial Microcontrollers (MCUs)

S12XA

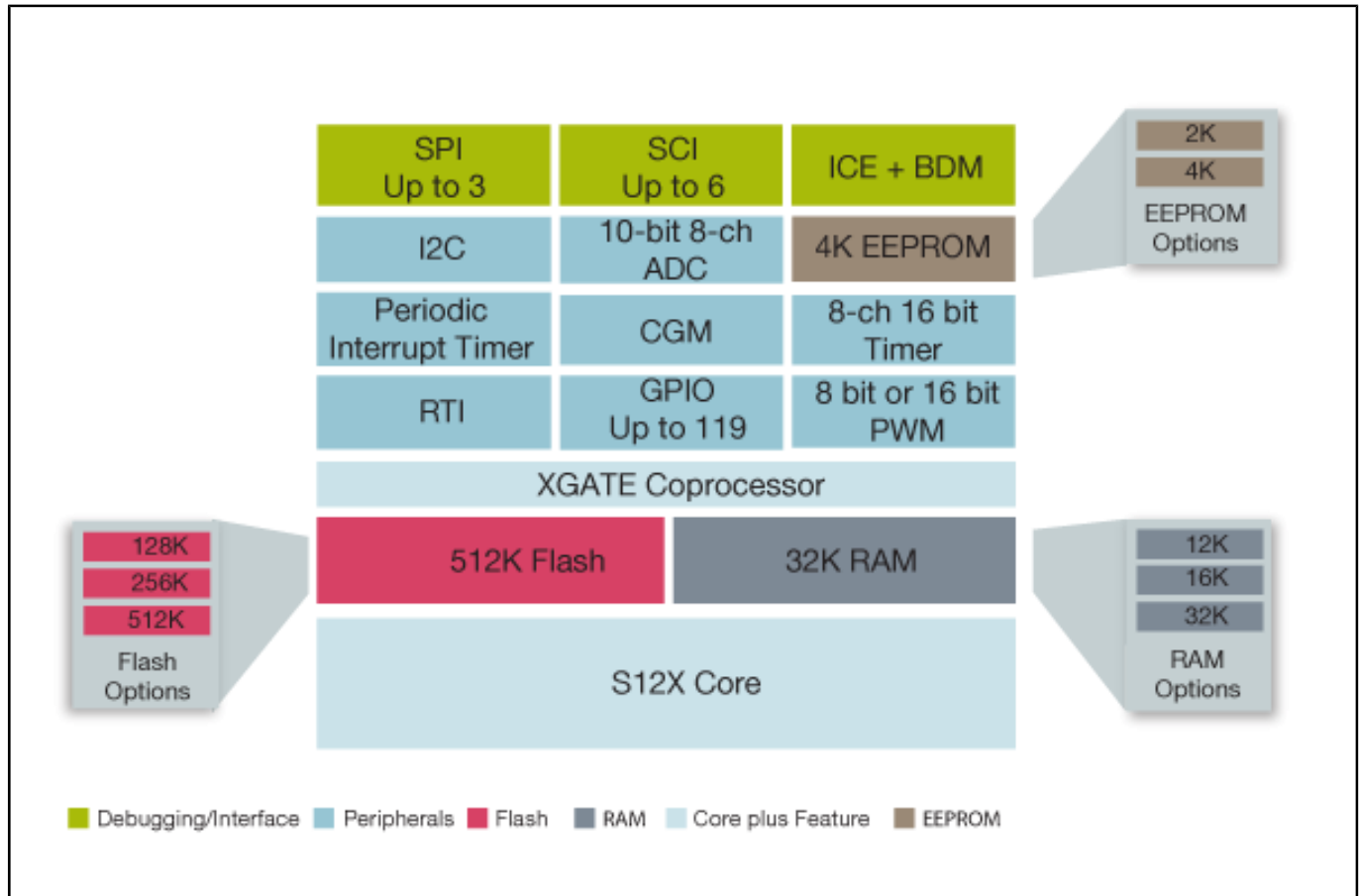
Last Updated: Jan 17, 2023

The S12X MCU family retains the cost-effective, power consumption, electromagnetic compatibility and code-size efficiency advantages currently enjoyed by users of the existing 16-bit HCS12 MCU family.

Based on an enhanced HCS12 core, the S12X family gives you two to five times the performance of a 25 MHz HCS12 while retaining a high degree of pin and code compatibility with the HCS12.

The S12X family introduces the performance-boosting XGATE module. Using enhanced DMA functionality, this parallel processing module offloads the CPU by providing high-speed data processing and transfer between peripheral modules, RAM and I/O ports.

S12XA Microcontroller Block Diagram Block Diagram



View additional information for [S12XA 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. © 2024 NXP B.V.