Multimedia Applications Processors Based on Arm11™ Core

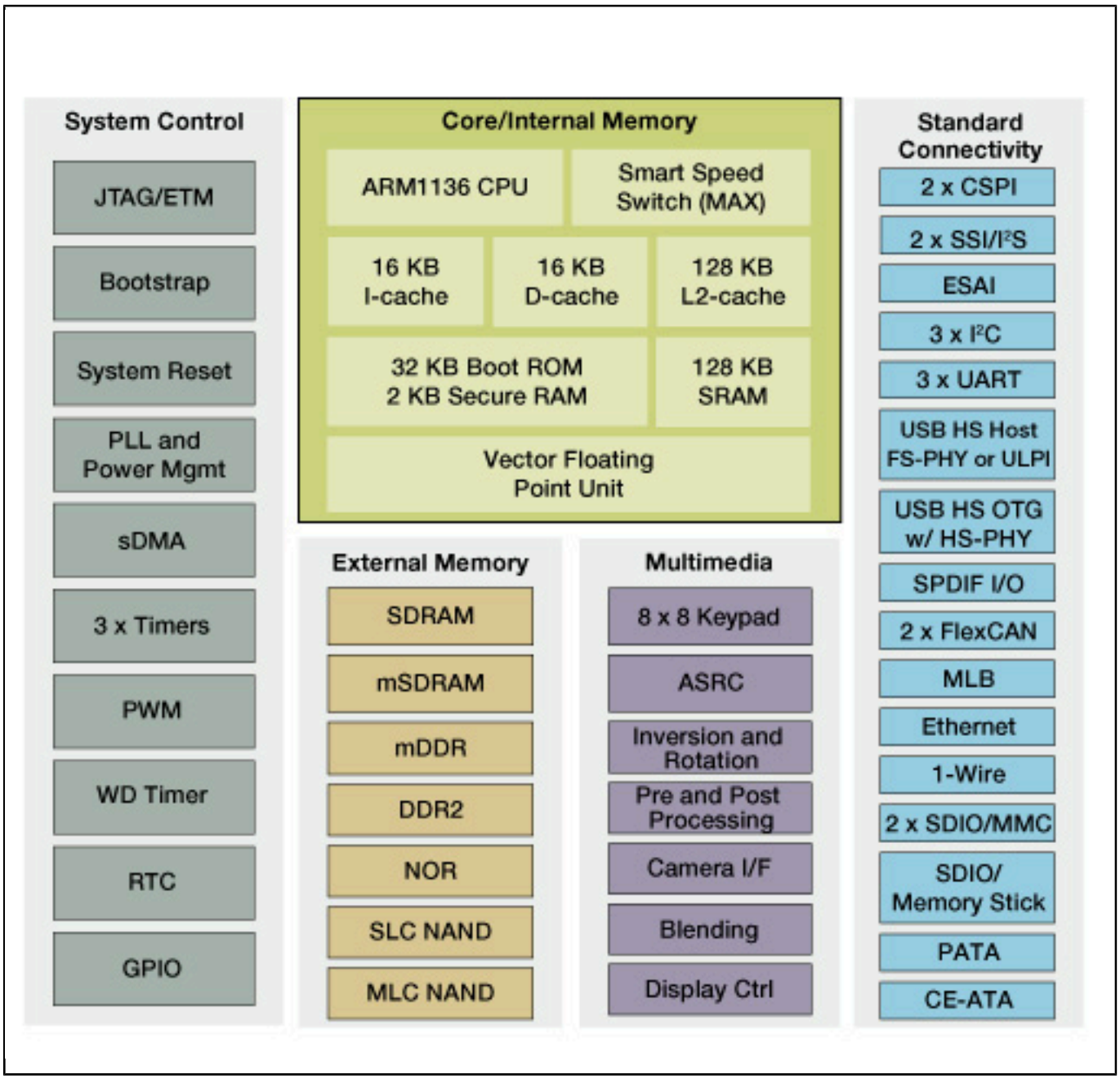
i.MX355

Last Updated: Jun 1, 2026

The i.MX355 processor takes advantage of the Arm11™ core running at 532 MHz with the advantage of an Image Processing Unit. The i.MX355 integrates Enhanced Serial Audio Interface (or ESAI) for multi-channel (5.1) audio, SPDIF I/O for compressed digital audio connectivity and an advanced sample rate converter (ASRC) for mixing digital content with different sampling frequencies. For flexible connectivity options the i.MX355 integrates 2-CAN modules, Media Local Bus (or MLB), Ethernet and the ability to connect to external wireless modules via SDIO or USB ports. To reduce system costs a full-speed PHY on the Host port and high-speed PHY on the On-the-go port were added. Support for lower cost memories like 3.3V SDRAM, DDR2, and multi-level cell NAND were integrated. Also included are storage device connections P-ATA and CE-ATA.

The i.MX355 is supported by companion NXP® power management ICs (PMIC), MC13892 and MMPF0100.

i.MX355 Applications Processor Block Diagram Block Diagram



View additional information for Multimedia Applications Processors Based on Arm11™ Core.

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.