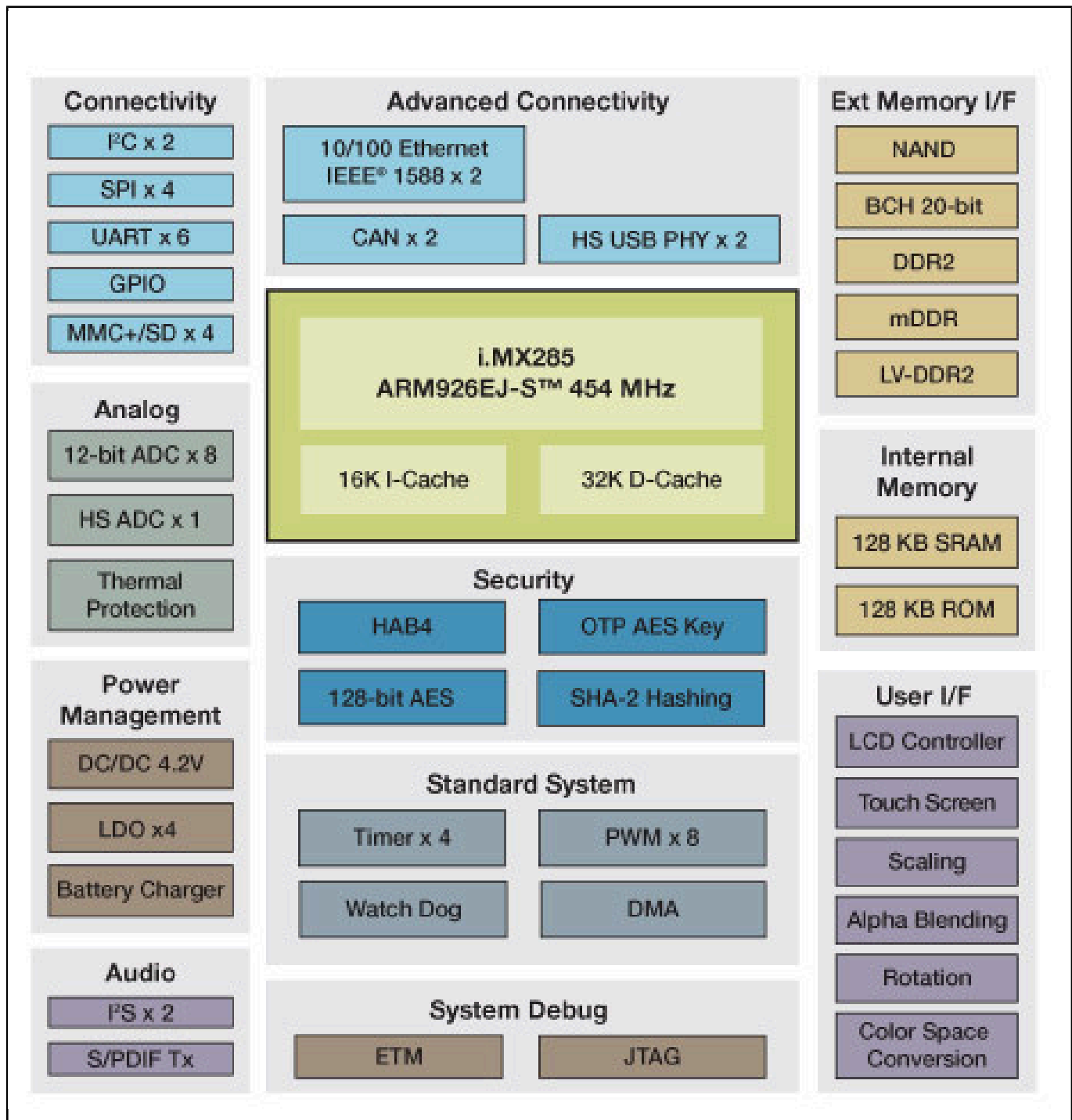# Multimedia Applications Processors – Integrated Power Management, Ethernet, Resistive Touch Screen, Arm9™ Core

i.MX285

Last Updated: Sep 4, 2024

The core of the i.MX285 is Our fast, proven, power-efficient implementation of the Arm926EJ-S™ core, with speeds of up to 454 MHz. With attention to overall system cost, i.MX28 integrates physical USB interfaces (PHY), a 10/100 Ethernet, power management, and a resistive touch screen display controller. This processor with full AEC –Q100 automotive qualification is ideal for automotive infotainment systems featuring display and touch screen control systems. As a result, the i.MX285 enables many of the features only available in high-end systems, but at a price point suitable for all vehicles.

i.MX285 Applications Processor Block Diagram Block Diagram

Connectivity
- I²C x 2
- SPI x 4
- UART x 6
- GPIO
- MMC+/SD x 4

Advanced Connectivity
- 10/100 Ethernet IEEE® 1588 x 2
- CAN x 2
- HS USB PHY x 2

i.MX285 ARM926EJ-S™ 454 MHz
- 16K I-Cache
- 32K D-Cache

Ext Memory I/F
- NAND
- BCH 20-bit
- DDR2
- mDDR
- LV-DDR2

Analog
- 12-bit ADC x 8
- HS ADC x 1
- Thermal Protection

Security
- HAB4
- OTP AES Key
- 128-bit AES
- SHA-2 Hashing

Internal Memory
- 128 KB SRAM
- 128 KB ROM

Power Management
- DC/DC 4.2V
- LDO x4
- Battery Charger

Standard System
- Timer x 4
- PWM x 8
- Watch Dog
- DMA

User I/F
- LCD Controller
- Touch Screen
- Scaling
- Alpha Blending
- Rotation
- Color Space Conversion

Audio
- I²S x 2
- S/PDIF Tx

System Debug
- ETM
- JTAG

View additional information for Multimedia Applications Processors - Integrated Power Management, Ethernet, Resistive Touch Screen, Arm9™ Core.

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

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