# Multimedia Applications Processors – Data Acquisition, User Interaction, Connectivity, Arm9™ Core
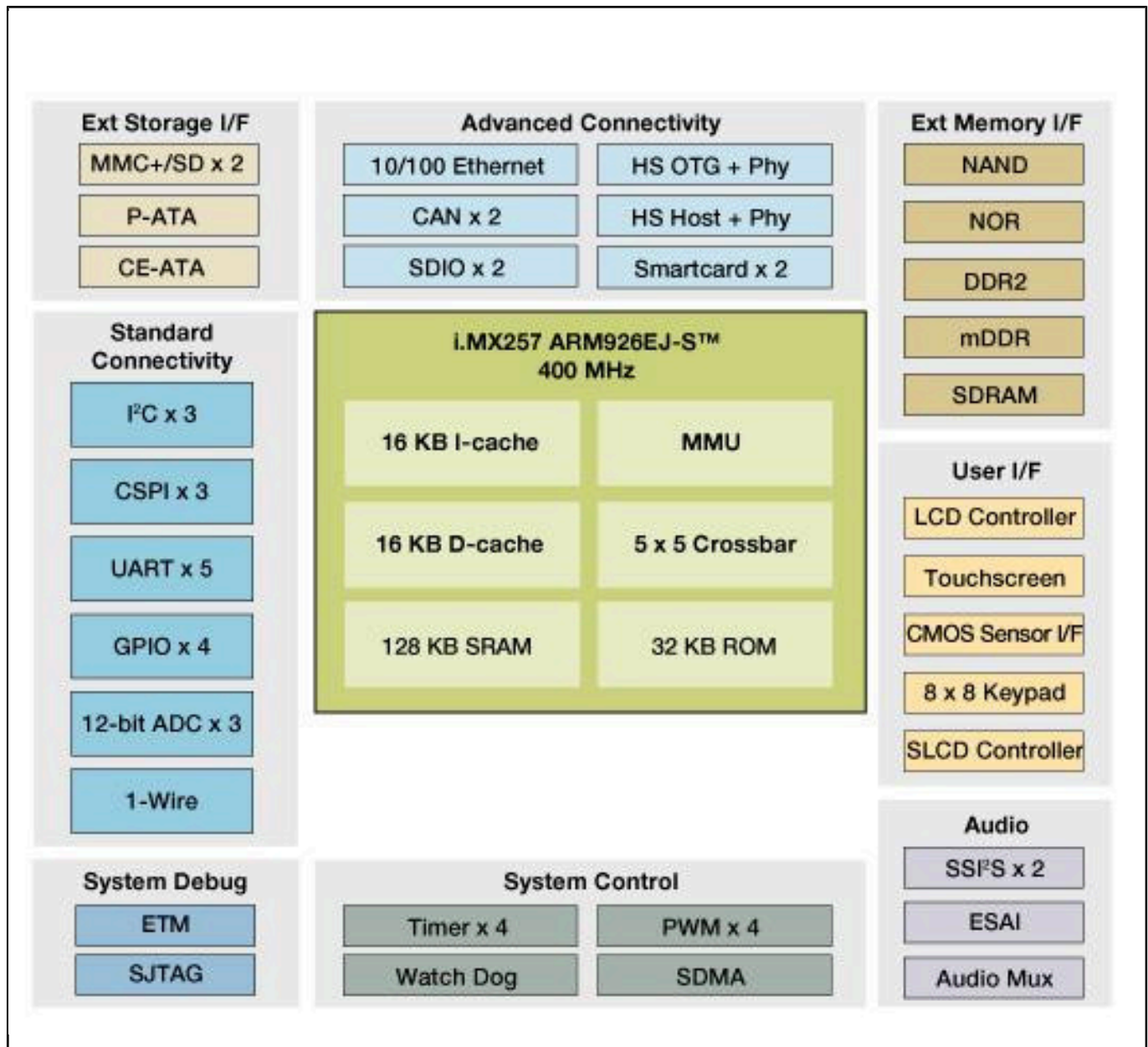
## i.MX257

Last Updated: Jan 16, 2023

NXP's Arm9™ based i.MX257 applications processor targets consumer and industrial applications that require data acquisition or need greater levels of user interaction.

The i.MX257 integrates all features of the i.MX253 and adds a CMOS sensor interface for data input, and a touchscreen controller that lets the user interact with the device through the display enabling "smart touch". Extra connectivity features such as Controller Area Network (CAN) and Smartcard provide endless possibilities for building plugged-in or portable, connected devices. With its high level of integration and connectivity options, and low-power technology, the i.MX257 is ideal for building applications including "smart touch" HMI, factory automation, and data acquisition devices.

# i.MX257 Multimedia Applications Processor Block Diagram Block Diagram

**Ext Storage I/F**
- MMC+/SD x 2
- P-ATA
- CE-ATA

**Advanced Connectivity**
- 10/100 Ethernet
- CAN x 2
- SDIO x 2
- HS OTG + Phy
- HS Host + Phy
- Smartcard x 2

**Ext Memory I/F**
- NAND
- NOR
- DDR2
- mDDR
- SDRAM

**Standard Connectivity**
- I²C x 3
- CSPI x 3
- UART x 5
- GPIO x 4
- 12-bit ADC x 3
- 1-Wire

**i.MX257 ARM926EJ-S™ 400 MHz**
- 16 KB I-cache
- MMU
- 16 KB D-cache
- 5 x 5 Crossbar
- 128 KB SRAM
- 32 KB ROM

**User I/F**
- LCD Controller
- Touchscreen
- CMOS Sensor I/F
- 8 x 8 Keypad
- SLCD Controller

**Audio**
- SSI²S x 2
- ESAI
- Audio Mux

**System Debug**
- ETM
- SJTAG

**System Control**
- Timer x 4
- PWM x 4
- Watch Dog
- SDMA

View additional information for Multimedia Applications Processors - Data Acquisition, User Interaction, Connectivity, Arm9™ Core.

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