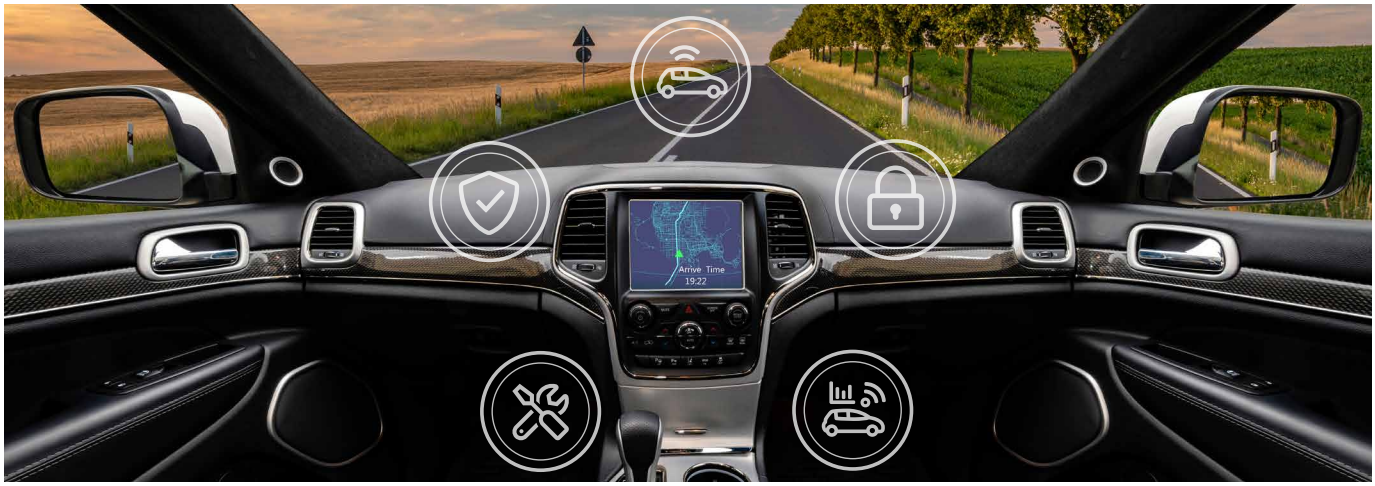
i.MX 8XLite — HIGH-PERFORMANCE AND SECURE APPLICATIONS PROCESSOR



i.MX 8XLite for secure V2X and Industrial IoT applications combines the high-performance application processing from the i.MX 8X processor with V2X acceleration for next-generation telematics.

TARGET APPLICATIONS

- Automotive—high-performance telematics and vehicle-to-vehicle (V2X) gateway
- Industrial vehicle—heavy equipment and machinery telematics
- Building control and robotics requiring time-sensitive networking (TSN) Ethernet or controller area network (CAN)

ENABLEMENT TOOLS

- Hardware board support
  - i.MX 8XLite evaluation kit
  - Board design files
  - Hardware design guide
- Software enablement
  - Linux® BSP
  - Firmware for V2X accelerator
  - AUTOSAR® MCAL
- Documentation and support
  - Datasheets
  - App notes
  - Reference manual

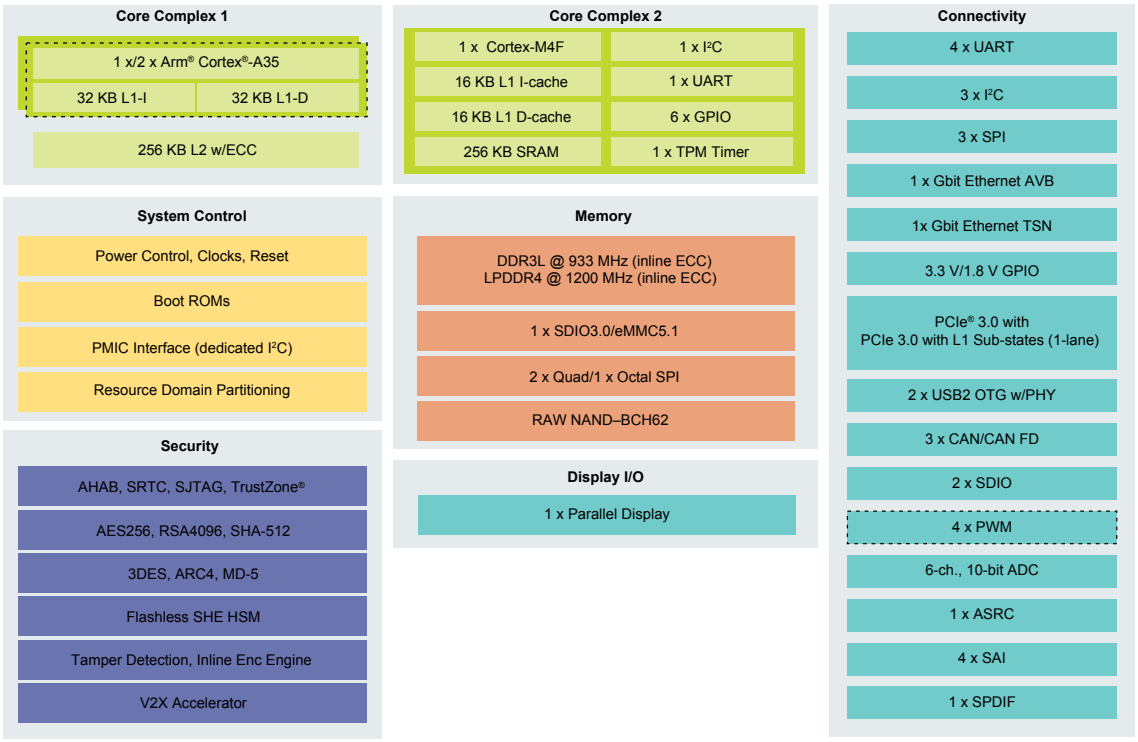
i.MX 8 SERIES ECOSYSTEM

Leveraging the broad Arm® community, the i.MX 8 series builds technology alliances to enable better customer solutions and faster time-to-market.

Partner solutions include:

- Tool chains
- Software
- Embedded board solutions
- Design services
- System integrators
- Training

i.MX 8XLite BLOCK DIAGRAM



i.MX 8XLite APPLICATIONS PROCESSOR FOR HIGH-PERFORMANCE SECURE TELEMATICS AND INDUSTRIAL APPLICATIONS

Key Features	Benefits
Up to two (2) 1.2 GHz Arm® Cortex®-A35 processors	A powerful and power efficient upgrade path for next-generation solutions; the Cortex-A35 is Arm's efficient Armv8 core
Multiple systems, one processor	High-level integration on one chip, such as the Cortex-A35 applications core, Cortex-M4F real-time processing core, and V2X acceleration, and more
Optimized power	Reduce thermal system cost and power usage by shutting down the Cortex-A35 core while the Cortex-M4F core remains active to perform low-level system monitoring tasks
Increase your system's accuracy	Error correcting code (ECC) available in all DDR memory options
Improved system reliability with fully depleted silicon on insulator (FD-SOI)	Built using 28 nm FD-SOI, the i.MX 8XL applications processor dramatically improves mean time between failures (MTBF) and reduces latch-ups due to FD-SOI's inherently high immunity to soft errors.
Flexible memory options	Supports multiple DDR interfaces, such as LPDDR4 and DDR3L with Inline ECC support; for fast boot from SPI NOR flash, Quad SPI are available as well as support for SD 3.0, eMMC 5.1 and RAW NAND
Product longevity	When designing with i.MX, you can depend on the quality of the product and the stable, consistent supply of product for your embedded designs through the NXP Product Longevity program. Visit www.nxp.com/productlongevity for details.
AEC-Q100 Grade 2 device (-40 °C to 125 °C Tj) Industrial Grade (-40 °C to 105 °C Tj)	Supports a wide range of automotive and industrial applications.

www.nxp.com

Document Number: IMX8XLFS REV 1