

i.MX 8ULP Applications Processor Family

i.MX8ULP

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The i.MX 8ULP applications processor family brings ultra-low power processing and advanced integrated security with EdgeLock® secure enclave to the intelligent edge.

Optimizing energy at the chip level is becoming increasingly crucial for designing energyefficient edge systems. NXP's innovative Energy Flex architecture implementation in i.MX 8ULP processors uniquely combines heterogeneous domain computing, design techniques and process technology. A dedicated power management subsystem offers more than 20 power mode combinations to deliver exceptional efficiency across a range of applications.

Building on our strong history of security solutions, NXP's EdgeLock secure enclave is preconfigured to simplify complex security implementations for faster time to market and help designers avoid costly configuration errors. The i.MX 8ULP processor has also achieved PSA and SESIP Level 2 certifications, enabling security for device manufactures at the design stage.

The i.MX 8ULP family features up to two Arm® Cortex®-A35 running at 800 MHz, an Arm Cortex-M33 core, 3D/2D Graphics Processing Units (GPUs) and a Cadence® Tensilica® HiFi 4 DSP and Fusion DSP for low-power audio/voice and edge Al/ML processing.

i.MX 8 applications processors are part of NXP's EdgeVerse[™] edge computing platform.

i.MX 8ULP Applications Processors Block Diagram



View additional information for i.MX 8ULP Applications Processor Family.

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

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