



**THE DATASHEET OF
MCIMX6Z0DVM09AB**





Ultra Low Cost Linux® Applications Processors

i.MX 6ULZ Applications Processors

The i.MX 6ULZ processor is a high-performance, ultra-efficient consumer processor featuring an advanced implementation of a single Arm® Cortex®-A7 core, which operates at 900 MHz.

TARGET APPLICATIONS

- ▶ Computing Engine
- ▶ Consumer Electronics
- ▶ Audio
- ▶ Voice control

The i.MX 6ULZ application processors includes full audio suite: ESAI, I²S X 3, S/PDIF, and an integrated power management module that reduces the complexity of an external power supply and simplifies power sequencing. Each processor in this family provides various memory interfaces, including 16-bit LPDDR2, DDR3, DDR3L, raw and managed NAND flash, NOR flash, eMMC, Quad SPI and a wide range of other interfaces for connecting peripherals such as WLAN, Bluetooth® and GPS. The i.MX 6ULZ is supported by discrete component power circuitry.

i.MX 6ULZ FEATURES

- ▶ Single Arm Cortex-A7 core can provide a more cost-effective and power-efficient solution
- ▶ Flexible boot options, including support for Quad SPI and raw NAND, and a memory controller that interfaces to both DDR3 and low-power mobile DDR2 memory
- ▶ Processor supports connections to a variety of interfaces: two high-speed USB on-the-go connections with PHY, multiple expansion card ports (high-speed eMMC/SDIO host and other), and a variety of other popular interfaces (such as UART, I²C, and I²S serial audio)



PACKAGE TECHNOLOGY

The i.MX 6ULZ processor provides the 14 x 14 289 MAPBGA with 0.8 mm pitch brings out all features and GPIO. It is ideal for simple and cost-optimized PCB design.

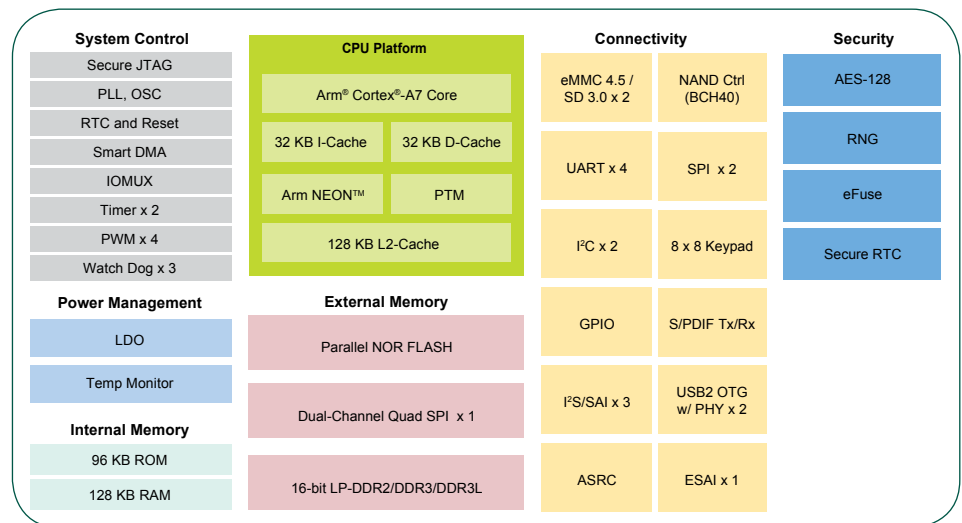
SOFTWARE AND TOOLS

The i.MX 6ULZ processor is supported by the i.MX 6ULL evaluation kit that includes a CPU module and a base board.

i.MX 6ULZ DEVICE OPTIONS

Feature	MCIMX6Z0
Core	Arm® Cortex-A7
Speed	900 MHz
Cache	32 KB-I, 32 KB-D
OCRAM	128 KB
DRAM	16-bit LP-DDR2, DDR3/DDR3L
eFuse for customer	256-bit
NAND (BCH40)	Yes
Parallel Nor/EBI	Yes
SDIO	2
UART	4
IIC	2
SPI	2
I ² S/SAI	3
ESAI	1
S/PDIF	1
Timer/PWM	Timer x 2, PWM x 4
Temperature	0°C to 95°C (Tj)

i.MX 6ULZ APPLICATIONS PROCESSOR BLOCK DIAGRAM



www.nxp.com/iMX6ULZ and www.imxcommunity.org

NXP, the NXP logo, Freescale and the Energy Efficient Solutions logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. Arm and Cortex are registered trademarks of Arm Limited (or its subsidiaries) in the EU and/or elsewhere. NEON is a trademark of Arm Limited (or its subsidiaries) in the EU and/or elsewhere. All rights reserved. © 2018 NXP B.V.

Release Date: September 2018
Document Number: IMXULZFS REV 2



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

⊖ [View MCIMX6Z0DVM09AB](#) on WIN SOURCE

⊖ [NXP / Nexperia](#) Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management