

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

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