



i.MX applications processors

Evaluation Kit Based on i.MX 6ULL Applications Processors

NXP® delivers the next installment in a line of highly flexible, market-focused development tools with an evaluation kit (EVK) based on the i.MX 6ULL applications processor.

The i.MX 6ULL processor is an extension of the popular i.MX 6 series, with a single ARM® Cortex®-A7 core running up to 528 MHz. This EVK enables an LCD display and audio playback as well as many connectivity options. It is designed to showcase the most commonly used features of the processor in a small, low-cost package and to facilitate software development with the ultimate goal of faster time-to-market through the support of the Linux® operating system.

EFFICIENT PERFORMANCE WITH LOW POWER AT A LOW BOM COST

Leveraging the energy efficiency of the Cortex-A7 core, the i.MX 6ULL is the smallest and most energy-efficient processor built on ARM technology, providing maximum performance in low-power, space-constrained embedded environments. The board is powered by discrete power circuitry consisting of three DC-to-DC converters and one low dropout (LDO) regulator.

i.MX 6ULL EVK System Contents

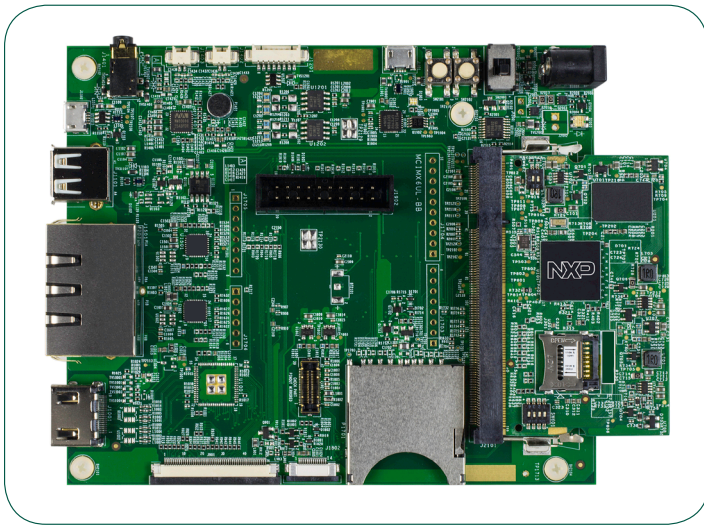
- ▶ i.MX 6ULL CPU board and base board

SENSORS

The NXP FXLS8471Q accelerometer is highly versatile for industrial and consumer high-performance low-g applications that offer noise density, board mount offset, temperature performance and sensitivity. Integrated motion detection features include tilt, shake and tap detection with a new vector magnitude output that simplifies implementation and reduces power consumption. The NXP MAG3110 eCOMPASS is a small, low-power digital 3D magnetic sensor with a wide dynamic range to allow operation in PCBs with high extraneous magnetic fields. A footprint is also available to enable a gyroscope sensor.



i.MX 6ULL EVK



SOFTWARE AND TOOLS

Simplify product design with a low-cost, feature-rich development platform that allows you to work with the majority of the processor's primary features and the corresponding software support. For software, design files, development tools and additional information, visit www.nxp.com/imx6tools.

MCIMX6ULL-EVK FEATURES

CPU Board	
Processor	NXP i.MX 6ULL 528 MHz ARM® Cortex®-A7 core, MCIMX6Y2DVM05AA
Power management	Discretes
Memory	<ul style="list-style-type: none">• 4 GB DDR3L SDRAM, 400 MHz• 256 MB Quad SPI flash• MicroSD connector• Footprint for eMMC• Footprint for NAND flash
Size	2.66 inch x 1.27 inch (6.76 cm x 4.24 cm), 4-layer board
Base Board	
Display board interface	<ul style="list-style-type: none">• LCD expansion port connector• HDMI connector and footprint for HDMI transmitter
Audio	<ul style="list-style-type: none">• Audio codec• 3.5 mm stereo headphone output with MIC• Mono-microphone input on board• Left and right speaker out connectors
Connectivity	<ul style="list-style-type: none">• One USB 2.0 Micro-B OTG connector• One USB 2.0 Standard-A host connector• Two Ethernet (10/100T) connectors• Dual CAN connector• SD/SDIO connector
Camera	Parallel camera connector
Sensors	<ul style="list-style-type: none">• NXP MAG3110 eCOMPASS• NXP FXLS8471Q accelerometer• Footprint for gyroscope
Debug	<ul style="list-style-type: none">• 20-pin standard JTAG connector• UART to Micro USB connector
Expansion port	Arduino® header
Size	5.12 inch x 4.25 inch (13.0 cm x 10.8 cm), 4-layer board

www.nxp.com/imx6ULLEVK and imxcommunity.org

NXP, the NXP logo, Freescale and the Energy Efficient Solutions logo are trademarks of NXP Semiconductors. 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. All rights reserved. © 2016 NXP B.V.

Document Number:
EVKIMX6ULFS REV 2

