# 8MPLUSLPD4-PEVK: i.MX 8M Plus Evaluation Kit enabling Power Measurement

FOLLOW

# Overview

The i.MX 8M Plus PEVK provides a platform for comprehensive evaluation of the i.MX 8M Plus Quad/Dual and i.MX 8M Plus QuadLite applications processors. It is fully software compatible with the 8MPLUSLPD4-EVK and includes additional hardware to measure the i.MX 8M Plus SoC power consumption at run time. 8MPLUSLPD4-PEVK could therefore be used as a replacement to 8MPLUSLPD4-EVK.

The two-board solution consists of a compute module that contains i.MX 8M Plus SoC, LPDDR4, eMMC, QSPI, PMIC and power monitoring circuits and a base board that brings out the broad connectivity that is needed for product evaluation. It provides an excellent starting point to accelerate your own design.

The power consumption on the various power rails could be measured at runtime by using the following software tools: Board Control Utilities (BCU) and/or Power Measurement Tool (PMT). Please refer to User Guide and Quick Start Guide for more information.


8MPLUSLPD4-PEVK Top View

8MPLUSLPD4-PEVK Bottom View

## Target Applications

- Anesthesia Unit Monitor
- Anomaly Detection
- Avionics
- Building Safety
- Defibrillator
- Electricity Generation
- Electricity Grid and Distribution
- Hospital Admission Machine
- Intermediate Flight Controller
- Medical Imaging
- Powered Patient Beds
- Vision, Advanced Sensing and Processing Board
- In-Home Energy Display
- Automatic Vehicle Identification
- Building Security
- Fleet Management
- Industrial Control
- Industrial HMI
- Motor Drives

# Specifications

## Technical and Functional Specifications

| | |
|---|---|
| **Processor** | • i.MX 8M Plus Quad applications processor<br>• 4x Arm Cortex-A53 up to 1.8 GHz<br>• 1x Arm Cortex-M7 up to 800 MHz<br>• Tensilica® HiFi4 DSP up to 800 MHz |

| | |
|---|---|
| | • Machine Learning (ML) accelerator |
| **Memory** | • 6 GB LPDDR4<br>• 16 GB eMMC 5.1<br>• 64 MB QSPI Flash |
| **Display and Camera Interfaces** | • MIPI-DSI Display Mini-SAS Connector<br>• LVDS Display Mini-SAS Connector<br>• 2x MIPI-CSI Camera Mini-SAS Connector |
| **Wireless** | • Wi-Fi Type 1MW 802.11 a/b/g/n/ac 1x1 |
| **Audio** | • Audio DAC<br>• Microphone/headphone jacks |
| **Connectivity** | • 2x 10/100/1000 Ethernet port (1x w/ TSN)<br>• USB 3.0 Type C for Power<br>• USB 3.0 Type A<br>• USB 3.0 Type C<br>• PCIe M.2 interface |
| **Debug** | • JTAG connector |
| **Tools and OS support** | • Linux<br>• Android<br>• FreeRTOS |

# Design Resources

## Get Started with the i.MX 8M Plus PEVK

This page will help guide you through the process of learning about your i.MX 8M Plus PEVK board.

GET STARTED

# Get Started

1. Review this Getting Started and Quick Start Guide to get familiar with the hardware specifications

### Getting Started and Quick Start Guide

Get Started with the i.MX 8M Plus PEVK
HTML GS-iMX-8M-PLUS-PEVK

i.MX 8M Plus Power EVK Quick Start Guide (REV 0 )
PDF 4.3 MB 8MPLUSLPD4QSG [ English ]

### Design Tools and Files

i.MX 8M Plus Power Measurement Board Design Files (REV 1.0 )

ZIP 19.8 MB 8MPLUSLPD4-PWR-DESIGN-FILES