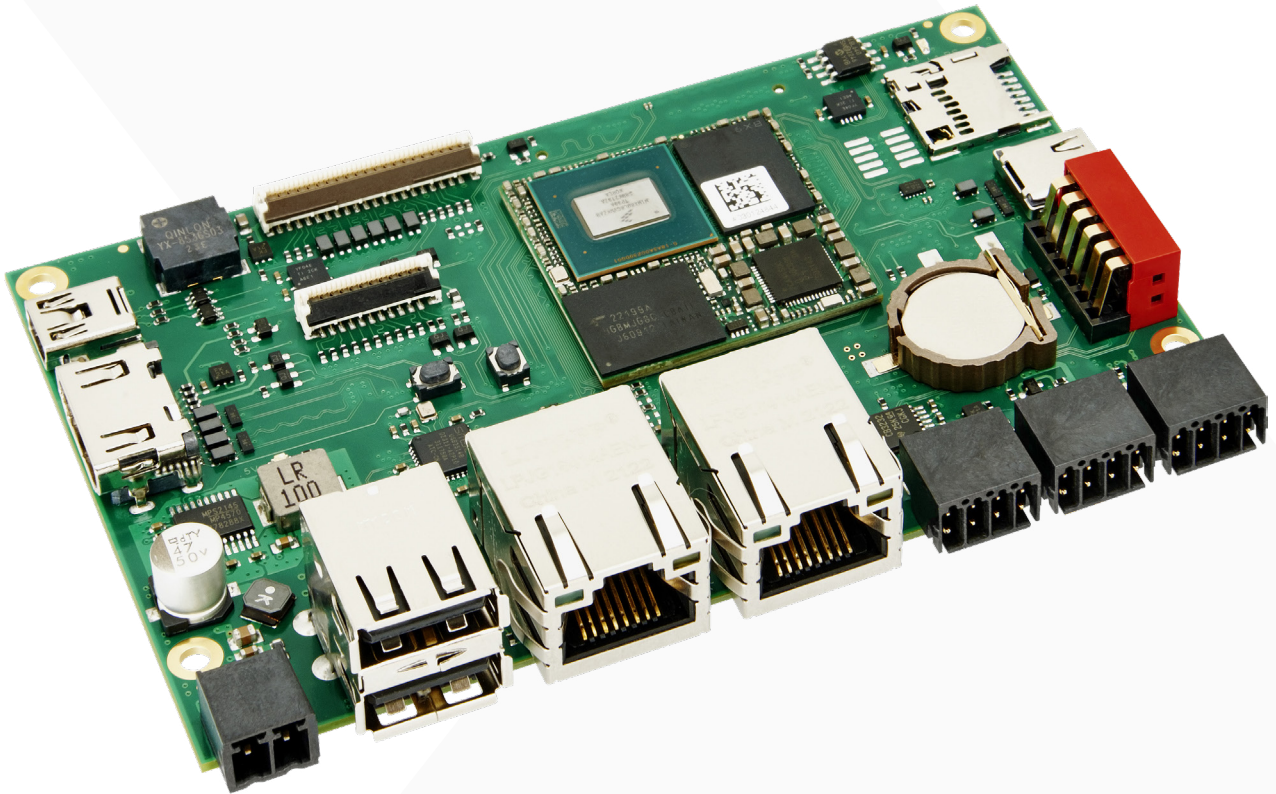


# BL i.MX8M Plus

## Board-Line



## Baseboard for AI applications with 4k HDMI connection

- ▶ NXP i.MX8M Plus, 4x Arm® Cortex®-A53 @1.6 GHz with Neural Processing Unit (NPU)
- ▶ Dual Display Support (LVDS/HDMI 2.0a), Camera Support (4-lane CSI with PHY)
- ▶ Dual Gigabit Ethernet, 1x USB 3.0 Type-C, 2x USB 2.0
- ▶ Yocto Mainline Kernel BSP

<b>MICROPROCESSOR</b>	<b>CPU</b>	NXP i.MX8M Plus, 4x Arm®Cortex®-A53 @1.6 GHz (1.8 GHz), 1x Arm® Cortex®-M7 @800 MHz, 2D GPU and 3D GPU, NPU (2.3 TOPS)
<b>MEMORY SOM</b>	<b>LPDDR4 RAM eMMC</b>	4 GByte (Optional: 1...2 GByte) 32 GByte (Optional: 4...64 GByte)
<b>MEMORY BASEBOARD</b>	<b>EEPROM SD CARD nv MEMORY</b>	8 kB (64 kb) 1x microSD Card Slot 8 kB (64 kb) EERAM
<b>COMMUNICATION</b>	<b>ETHERNET USB DIO SERIAL INTERFACE CAN</b>	2x 1 Gbit/s 2x USB 2.0 Host, 1x USB 3.0 Type-C 4x DIO (24 V / up to 800mA) 1x RS232, 1x RS485 1x CAN FD
<b>DISPLAY/TOUCH</b>	<b>LCD INTERFACE  TOUCH</b>	1x HDMI (up to 4Kp30), 1x LVDS (up to 1366x768p60) 1x I²C, 1x USB
<b>CAMERA</b>	<b>CAMERA INTERFACE</b>	1x MIPI CSI (4-lane)
<b>SOFTWARE</b>	<b>OPERATING SYSTEM, BOOTLOADER</b>	Embedded Linux (Yocto Distribution) U-Boot
<b>OTHER</b>	<b>POWER SUPPLY TEMPERATURE RANGE FORM FACTOR RTC RTC BUFFERING DEBUG EXPANSION PORTS AUDIO APPROVAL</b>	24 V DC ±20 % 0 °C ... +55 °C, ambient, non-condensing 105,5 x 67 mm (4,3") 5 ppm accuracy CR 1220 1x Console 1x SDIO (8-bit), 1x I²C, 1x SPI, 1x SAI, 1x PCIe, 1x USB, 1x MIPI-CSI, 1x UART 1x Buzzer CE
<b>SECURITY</b>		HAB secure boot, TrustZone, TRNG, RSA up to 4096, AES-128/192/256, 3DES, ARC4, MD-5, SHA up to 256, ECC, secure JTAG

## Product Highlights

The BL i.MX8M Plus comes with the latest multi-media functions, including an HDMI connection for 4K resolution, a 2D/3D GPU and a Video Processing Unit (VPU). By optimizing memory and bandwidth usage while simultaneously higher video quality, the BL i.MX8M Plus is ideal for demanding applications in HMIs, medical devices, and AI edge computing devices. The board's dual-display solution offers an LVDS interface for a local display and a 4K HDMI interface for an external monitor.

The integrated Cortex®-M7 processor core enables real-time control via the CAN-FD interface and dual Gigabit-Ethernet. The powerful NXP i.MX8M Plus SoC features an integrated neural processing unit (NPU), a 2.3 TOPS AI processor. This supports the processing of large amounts of data in real-time and is suitable for applications in machine learning and vision systems.

The BL i.MX8M Plus combines proven technology and the highest quality. This powerful and independent platform is versatile and a secure investment for your future products.

### Client Benefits

- Quick and easy applicability of complex processor solutions
- Latest image processing tasks with AI support implementable
- Full Linux toolchain available free of charge
- Short Time to Market

### Applications

- IoT/Industry 4.0
- Control and automation technology
- Medical technology
- HMI, Touch Panel
- Artificial intelligence in Edge devices



## About Kontron

Kontron AG is a leading IoT technology company. For more than 20 years, Kontron has been supporting companies from a wide range of industries to achieve their business goals with intelligent solutions. From automated industrial operations, smarter and safer transport to advanced communications, connectivity, medical, and energy solutions, the company delivers technologies that add value for its customers. With the acquisition of Katek SE in early 2024, Kontron significantly strengthens its portfolio with the new GreenTec division, focusing on solar energy and eMobility, and grows to around 8,000 employees in over 20 countries worldwide. Kontron is listed on the SDAX® and TecDAX® of the German Stock Exchange.

For more information, please visit: [www.kontron.com](http://www.kontron.com)

## About Kontron Electronics

Kontron Electronics GmbH is a full-service provider in the field of electronics, development and manufacturing services. Our business portfolio includes proprietary and client-specific products, development and design services for complex electronics components, modules and systems, as well as production and assembly services for entire devices. The company is part of the technology corporation Kontron AG.

For more information please visit: [www.kontron-electronics.com](http://www.kontron-electronics.com)

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