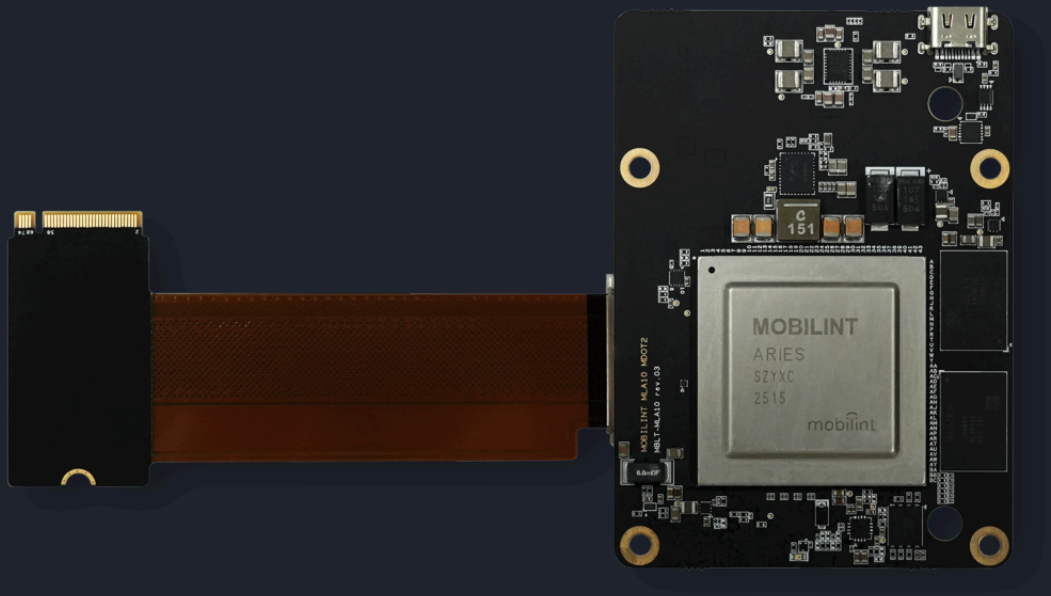
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MLA10 M.2

Product User Guide



To ensure your safety and convenience,
please read the user guide.

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TABLE OF CONTENTS

1 INTRODUCTION

User Guide Information 03

Product Overview 04

Detailed Specifications 05

2 HARDWARE & SETUP

Component Names 06

System Requirements 07

Installation Instructions 08

Software 09

3 SAFETY INFORMATION

Installation Precautions 10

Operating Precautions 10

User Guide Information

This user guide explains how to install and operate the Mobilint MLA10 M.2.
If you cannot find the information you need in this guide, please contact Mobilint Technical Support.

Technical Inquiries	discuss.mobilint.com
	tech-support@mobilint.com

Product Overview

M.2 AI Accelerator for Performance-Driven Embedded Design

MLA10 M.2 is an M.2 AI accelerator module powered by ARIES, Mobilint's flagship NPU, delivering 80 TOPS* of on-device inference at under 10 W.

Connecting over PCI Express Gen4, it runs vision, speech, natural language understanding, and conversational AI workloads on a single module without sourcing separate accelerators for each task.

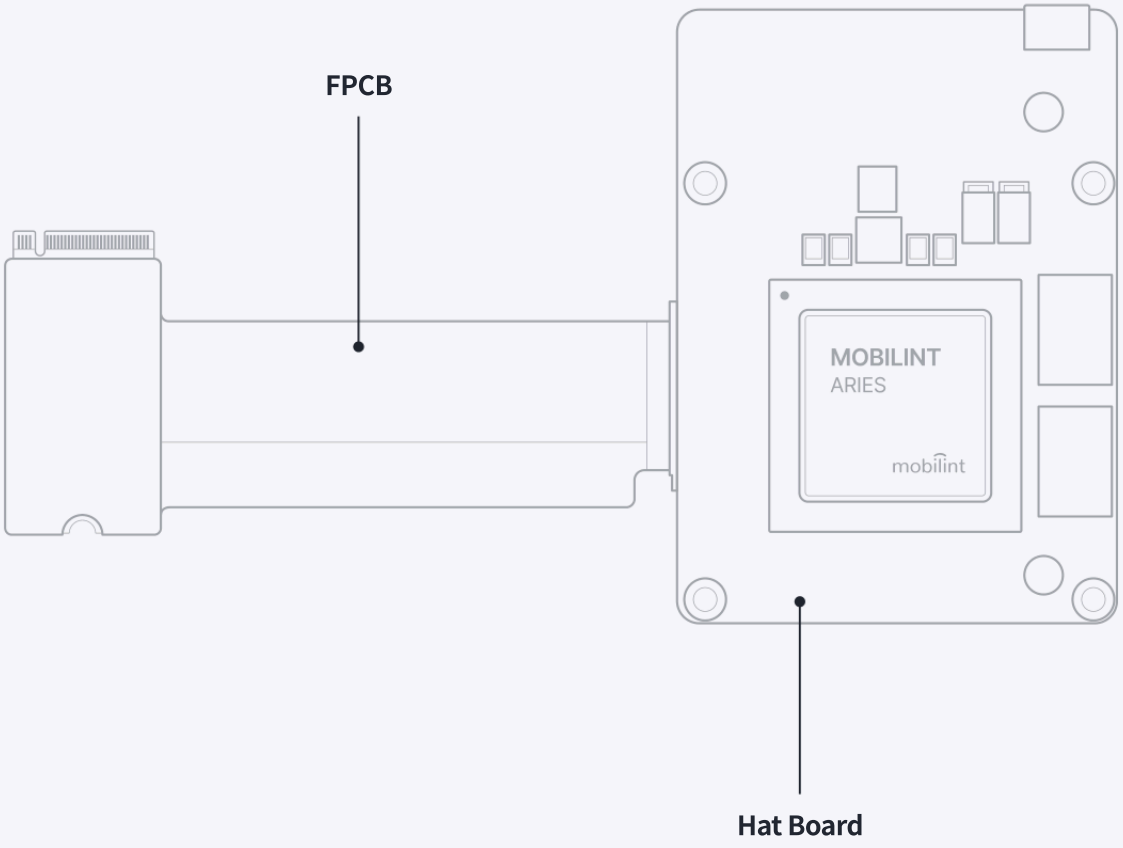
* TOPS based on INT4

Detailed Specifications

Model Name	MLA10 M.2
NPU	ARIES
Performance	80 TOPS*
NPU Frequency	1.25 GHz
NPU Cores	8
Memory Type	LPDDR4X
Memory Capacity	4 GB × 2 / 8 GB × 2 / 2 GB × 2
Memory Speed	4,266 MT/s
Flash Memory	32 MB
Host Interface	PCI Express Gen4 4-lane
UART	1 port (UART to USB)
LED Indicators	1 (Heartbeat LED)
Supported OS	Linux, Windows
Supported Frameworks	PyTorch, TensorFlow, TFLite, ONNX, Keras
TDP	~10 W
Input Voltage	DC +3.3V (from M.2 Slot)
Dimensions (mm)	• Hat Board: 85.6 (L) × 61.5 (W) • FPCB: 22 (L) × 80 (W) or 42 (W)

* TOPS based on INT4

Component Names

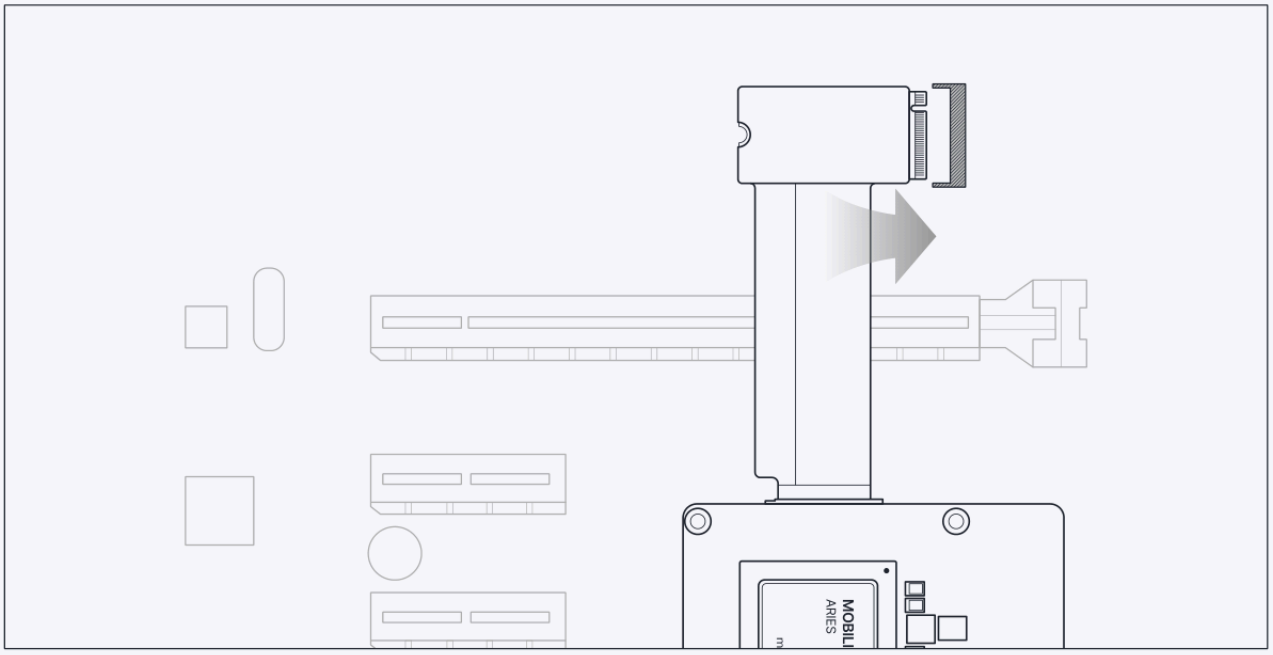


System Requirements

The features supported by this product may be expanded or reduced depending on the installed software version.

- Windows 10/11
- Ubuntu 20.04 or later
- Other Linux distributions supported upon consultation

Installation Instructions



1 **Turn off the power of the host PC.**

2 **Please ensure that the system power cable is disconnected before installing or removing the product.**

3 **Connect the MLA10 M.2 module and the FPCB using the flex cable and lock the latch down to secure the cable in place.**

4 **Insert the M.2 connector into the host's motherboard. Align the product with the M.2 slot and press it gently. Make sure it is firmly seated in the slot.**

- If a module is already installed, remove it.
- Once installation is complete, use the provided guide or test program to confirm that the device operates normally.

5 **Close the chassis and connect the power cord.**

⚠ Disconnecting the product while it is running a task, such as AI model inference, may cause errors, data loss, or device malfunction. Disconnect the device only after all tasks have completely ended.

Mobilint Software

Mobilint SDK qb is provided through the official support channel, where guidance on how to use the software is also available. For inquiries, you can receive answers through the Mobilint technical support channel (discuss.mobilint.com).

Technical Inquiries	discuss.mobilint.com
	tech-support@mobilint.com

Installation Precautions

- The installation images above are for reference only. The actual installation method may vary depending on your environment.
- Before installing the product, discharge any static electricity from your body by touching the metal frame inside the powered-off system.
- Handle the product by its edges to avoid contact with circuitry.
- Ensure that clothing or accessories do not come in contact with electronic components.
- Disconnecting the product while it is running a task, such as AI model inference, may cause errors, data loss, or device malfunction. Disconnect the device only after all tasks have completely ended.

Operating Precautions

- To ensure smooth operation, install the latest driver and SDK version provided by the manufacturer.
- When connecting or disconnecting the product, hold the connector straight and do not apply excessive force.
- Do not connect or disconnect the device while the system is powered on. Always shut down the system first to ensure safe handling.
- The product surface may become hot during prolonged high-load use. Handle with care.
- Operating the product in high humidity or poorly ventilated environments may shorten its lifespan.
- Do not handle the product with wet hands, as this may cause electric shock.
- Do not disassemble or modify the product. Unauthorized modification may cause product damage, electric shock, or other unforeseen hazards.

Mobilint Technical Inquiries

- discuss.mobilint.com
- tech-support@mobilint.com

Mobilint Website

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This user guide is subject to change without prior notice due to product improvements or version updates.

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