What is the recommended tool going forward: MCUXpresso IDE or MCUXpresso for VS Code?

Both tools remain supported. **MCUXpresso IDE** continues to be fully maintained. **MCUXpresso for VS Code** is the **strategic direction** for developers who want a modern, extensible environment and integrated support for Zephyr and future MCX products. We recommend a smooth transition for new developments.

Is the MCUXpresso toolchain available on Linux or macOS?

Yes for both options. Toolchain options include:

- **MCUXpresso for VS Code** → Support for Windows, Ubuntu and macOS.
- MCUXpresso IDE → Windows & Linux

Is NXP migrating from FreeRTOS to Zephyr?

NXP continues to support **FreeRTOS** through MCUXpresso SDK.
However, NXP is investing on support Zephyr to attend user needs.

Both RTOS options remain supported.

How easy is Zephyr OS board bring up on FRDM boards?

Very easy. Most FRDM boards already have **Zephyr support**, we invite you to explore MCUXpresso for VSCode that simplifies Zephyr set-up. Zephyr Getting started

What is the on chip accelerator used for AI workloads?

Some NXP microcontrollers and processors include an NPU (Neural Processing

Unit) designed to accelerate AI and ML inference. The specific NPU varies by product family, but the goal is the same: instead of running ML workloads only on the main CPU core, the NPU handles the heavy mathematical operations. This provides higher performance, lower latency, and lower power consumption for edge AI applications

Does NXP offer tools for AI at the edge?
Yes, eIQ® AI Software Stack and Development Tools and a Expansive Edge AI Processor Portfolio

Which NXP boards include a 5G modem or SIM based IoT connectivity?
NXP's FRDM line does not include integrated 5G modems.
However, NXP supports **Cellular/NBIoT/LTE modems** via expansion modules **and** M.2 connector on i.MX platforms.

Can I use Ethernet and CAN at the same time?
Yes. MCX devices support concurrent operation of these peripherals with no functional restrictions.

Where can I get the boards mentioned in the webinar?
Boards are available from **NXP.com** and **Distribution Network**

When will the FRDM-MCX L series be available?
The series is planned for release soon. Availability will be announced on NXP.com product pages

Can these boards be used to learn embedded systems?

Yes. FRDM boards are designed for developers at all levels and are widely used in universities and maker spaces. The **MCX A Series** is especially well suited for beginners because it offers an easy way to learn both **analog and**

digital concepts within the same device, making it an excellent starting point for embedded systems education.

Can the FRDM board perform all the operations of an i.MX 8M Mini or Plus?
FRDM boards and i.MX 8M application processors serve different purposes. The FRDM platform **does include the FRDM-IMX8MPLUS**, which allows developers to evaluate and work with the **i.MX 8M Plus** processor. However, there is **no FRDM board for the i.MX 8M Mini**, so Mini specific features are not available within the FRDM lineup. In general, FRDM boards are designed for accessibility and rapid prototyping, while full EVKs for the i.MX 8M families provide broader interfaces and deeper feature coverage.

Is LPC802 suitable for wearable prototypes and display modules?
LPC802 is **not part of the FRDM Development Platform**, but it is an **ultra-low power** MCU. However, it has **limited memory** and **no integrated display controller**. It can drive **simple SPI-based displays**, but for richer UIs or more capable display options, you can visit **nxp.com/FRDM** to explore boards ranging from **entry level MCUs to advanced i.MX processors** that support full graphics capabilities.

Do FRDM Development boards support MicroPython?
There is no official release.

Will the State Configurable Timer (SCT) continue to be supported in new MCX devices?
Yes. The SCT continues to be included in several MCX families.

Which graphics library does GUI Guider use, and what are the benefits?

GUI Guider is built on the **LVGL** opensource graphics library. It provides a drag and drop editor, built-in LVGL widgets, code generation for NXP MCUs and Processors, and easy simulation all helping developers create embedded UIs much faster.

What type of debugging interfaces are supported for this product?

MCX FRDM boards include an **onboard MCULink debugger**, which provides **SWD debugging**, **flash programming**, and **CMSISDAP** support. MCU-Link can also operate as a **J-Link** with a simple configuration described in the board's user manual, giving developers additional flexibility during development.

I see many boards heat up when running AI applications. How about this board—does it need a heatcontroller IC?

For MCX-based FRDM boards, heat is generally not an issue—these MCUs are optimized for ultra-low power edge AI, so they do not require a heat controller IC for typical ML inference workloads.

However, the FRDM platform also includes boards based on i.MX application processors, which can run higher performance ML workloads, the board can generate more heat. For those use cases, a form of thermal management (e.g., heat spreader or heat sink) is recommended to maintain sustained performance.

Can I use Ethernet and CAN at the same time?

Yes. MCX devices support **concurrent operation** of Ethernet and CAN with no functional restrictions. Each peripheral runs independently, and as long as the

board's pin routing does not overlap, both interfaces can be enabled and used in the same application.

For example, this **App Code Hub (ACH) demo** shows a design using **CAN and Modbus** on an FRDM-MCXE31B board: https://mcuxpresso.nxp.com/appcodehub?search=dm-modbus-can-temp-monitor-frdm

Although this particular demo doesn't implement Ethernet, the hardware **supports Ethernet and CAN simultaneously**, so developers can extend the project to run both communication protocols at the same time if desired.