MCX A14x/15x MCUs with Arm® Cortex® M33, Scalable Device Options, Low Power and Intelligent Peripherals

MCX-A14X-A15X

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MCX A14 and MCX A15 microcontrollers, featuring an Arm® Cortex®-M33 core, operates at up to 96MHz with high levels of integration and analog. They address a wide range of applications with scalable device options. The low-power and intelligent peripherals include timers that generate three complementary PWM pairs with deadband insertion, 4Msps 12b ADC with hardware windowing and averaging features. The innovative power architecture is designed to support high utilization of I/Os and power efficiency with a simple supply circuit in a smaller footprint.

The devices are supported by the MCUXpresso Developer Experience to accelerate embedded system development.
## MCX A14x and MCX A15x Block Diagram

### System Control
- **Power Control**: Single VDD Power Supply, POR, Core I/O
- **Clock Generation Unit**: FRO 192, FRO16K, XTAL 6-50 MHz, Clock Out
- DMA0

### CORE Platform
- **Arm® Cortex® M33**: 48 MHz and 96 MHz

### Interfaces
- 1x LPI
- 2x FS USB
- 3x LPUART
- 1x I3C
- 2x LPSPI

### Memory
- **FLASH**: Up to 128 kB with 4 kB Cache
- **RAM**: Up to 32 kB (with 8 kB ECC)
- **ROM Boot**

### Timers
- Wakeup Timer
- 3x 32-bit Timers
- Windowed WDT
- LP Timer
- Micro Tick Timer
- OS Event Timer

### Motor Control Subsystem
- 1x QDC
- 1x AOI
- 1x FlexPWM

### Analog
- 1x 12-bit ADC
- 2x ACMP
- Temp Sensor

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View additional information for **MCX A14x/15x MCUs with Arm® Cortex® M33, Scalable Device Options, Low Power and Intelligent Peripherals.**

**Note:** The information on this document is subject to change without notice.

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