CREATE UNRIVALLED IOT EXPERIENCES WITH i.MX RT CROSSOVER MCUs

The i.MX RT series combines ease of use with high-performance processing and next-level integration and security.

WHAT CAN YOU DO WITH THE i.MX RT SERIES PORTFOLIO?

GETTING STARTED IS AS SIMPLE AS 1-2-3

1. i.MX RT Series SDK
2. IDE
3. Config

CONNECT WITH YOUR WORLD LIKE NEVER BEFORE

i.MX RT series of crossover MCUs push the boundaries of what's possible in the IoT.

The i.MX RT series combines ease-of-use with high-performance processing and next-level integration and security.

DESIGN NEXT-GENERATION HMI APPLICATIONS

The i.MX RT series provides scalable HMI solutions with support for parallel and MIPI display controllers and cameras. For graphics acceleration, take advantage of the 2D pixel pipeline accelerator, 2D GPU with vector graphics acceleration, in addition to embedded graphics software as part of the MCUXpresso SDK.

MAKE IT SECURE

Every interaction - whether machine-to-machine or human-to-machine - must be protected for confidentiality, integrity, and availability. The i.MX RT series, part of the EdgeLock Assurance program, is built on a foundation of secure boot, secure debug, and secure life cycle management designed to resist remote and local software attacks.

DEVELOP CUSTOM UIs WITH ADVANCED FUNCTIONALITY

Leverage integrated DSPs for voice solutions, NXP’s eIQ™ ML Software Development Environment for ML/AI, embedded graphics for innovative, next-generation HMIs and NXP EdgeReady voice control and face recognition solutions to get to market fast.

SPEED UP DEVELOPMENT WITH MCUXpresso SOFTWARE AND TOOLS

Optimize, standardize and accelerate embedded system development of applications on NXP’s Arm Cortex-M-based MCUs with MCUXpresso Software and Tools.

EXPAND YOUR MEMORY CAPABILITIES

i.MX RT series architecture gives you flexibility to interface with multiple external memory types, including serial/parallel NOR, NAND and RAM, in addition to support for eMMC. This enables broad support of various options of memory densities, performance and power. The i.MX RT series also offers memory scalability by embedding large SRAM densities, including “zero-wait,” single-cycle access.

BUILD HIGH-PERFORMANCE PRODUCTS

The i.MX RT series portfolio is designed with the high-performing Arm® Cortex®-M based technology, which gives you up to 6468 total CoreMarks with Cortex-M7 @ 1 GHz + Cortex-M4 @ 400 MHz* - providing both a real-time system and an applications-processor-level of performance and integration - all with ease of use of an MCU.

*Available on the i.MX RT1170 MCU

LAUNCH FASTER WITH i.MX RT EVALUATION KITS

Take your design to the next level by reducing complexity and accelerating time to market with i.MX RT series robust enablement. Expand upon the i.MX RT series feature-rich EVK with compatible Arduino™ hardware shields.

SMART HEALTH

Leverage smart portable tools to simplify transactions and communications.

SMART OFFICE

Remotely manage home controls and use voice, advanced HMI and ML/AI to take care of housework.

SMART HOME

Go the distance with wearable devices offering advanced HMI and long battery life.

SMART OFFICE

Track and share biometrics to optimize health and performance.

www.nxp.com/iMXRT

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