

i.MX RT CROSSOVER PROCESSORS & ZEPHYR™ OS IMPROVE RESPONSIVENESS, REDUCE COSTS



i.MX RT1050 AND ZEPHYR - A WINNING COMBINATION

When compared to an Arm® Cortex®-A7 core running Linux, the i.MX RT1050 running Zephyr OS performed:

- **27x** faster in context switching*
- Up to **11x** faster in allocating, deallocating memory*
- Up to **15x** faster in locking and unlocking mutexes using pthreads**

Faster in creating, joining, and canceling threads using pthreads**

Delivered more performance with less resources at a lower cost

* Comparison between Zephyr running on i.MX RT1050 EVK and Linux running on i.MX 6UL EVK

** POSIX PSE52 partial support

ZEPHYR OS

Zephyr OS is a small, scalable open source RTOS for IoT Embedded devices. It is optimized for resource constrained devices, and built with security in mind.

Learn more at www.nxp.com/zephyr



NXP CROSSOVER PROCESSORS

The i.MX RT1050 crossover processor features NXP's advanced implementation of the Arm® Cortex®-M7 core and is designed to:

- Support the next generation of IoT applications
- Offer high level of integration and security at a competitive price.

Learn more at www.nxp.com/imxrt

See benchmark study at:
www.nxp.com/zephyr

