

# QorIQ LS1012A – key messages

## The world's smallest and lowest-power 64-bit processor

*ARM® 64-bit performance & line-rate networking for the smallest, space-constrained applications with ultra-low power consumption and system cost savings*

### High Performance @ Low Power

- Best in class CoreMark / mW ratio
- 64-bit ARM Cortex-A53 delivers over **2K CoreMark™ of performance at 1 W** (typical) power – suitable for battery-powered and USB-powered applications
- Only product in its class to offer **Hardware Packet Acceleration** for **IP forwarding and TCP/IP**, delivering outstanding packet throughput for this power/package envelope.

### Ultra-small form-factor

- Innovative L-BGA package **measures just 9.6mm on a side**, yet is routable on a **4-layer PCB**
- Tiny dimensions enable the LS1012A to be used in **highly space-constrained** applications, such as portable devices and Ethernet drives.
- In spite of it's small size, the LS1012A is capable of **line-rate networking performance** via 2.5Gb Ethernet, SATA3, USB 3.0 and PCIe interfaces.

### IoT Solutions that Scale

- Enables **common 64-bit software platform** to scale across customer products from single-core up to 8 core devices, allowing customers to **maximize the value of their software** investment.
- **Trust and Security acceleration** enables root of trust and high performance encryption consistent the rest of the QorIQ product range.
- Supported by a general-purpose SDK or Applications Solution Kits with **optimized software for gateway, routing and storage applications**.

