



# O-RAN Central Unit and Distributed Unit

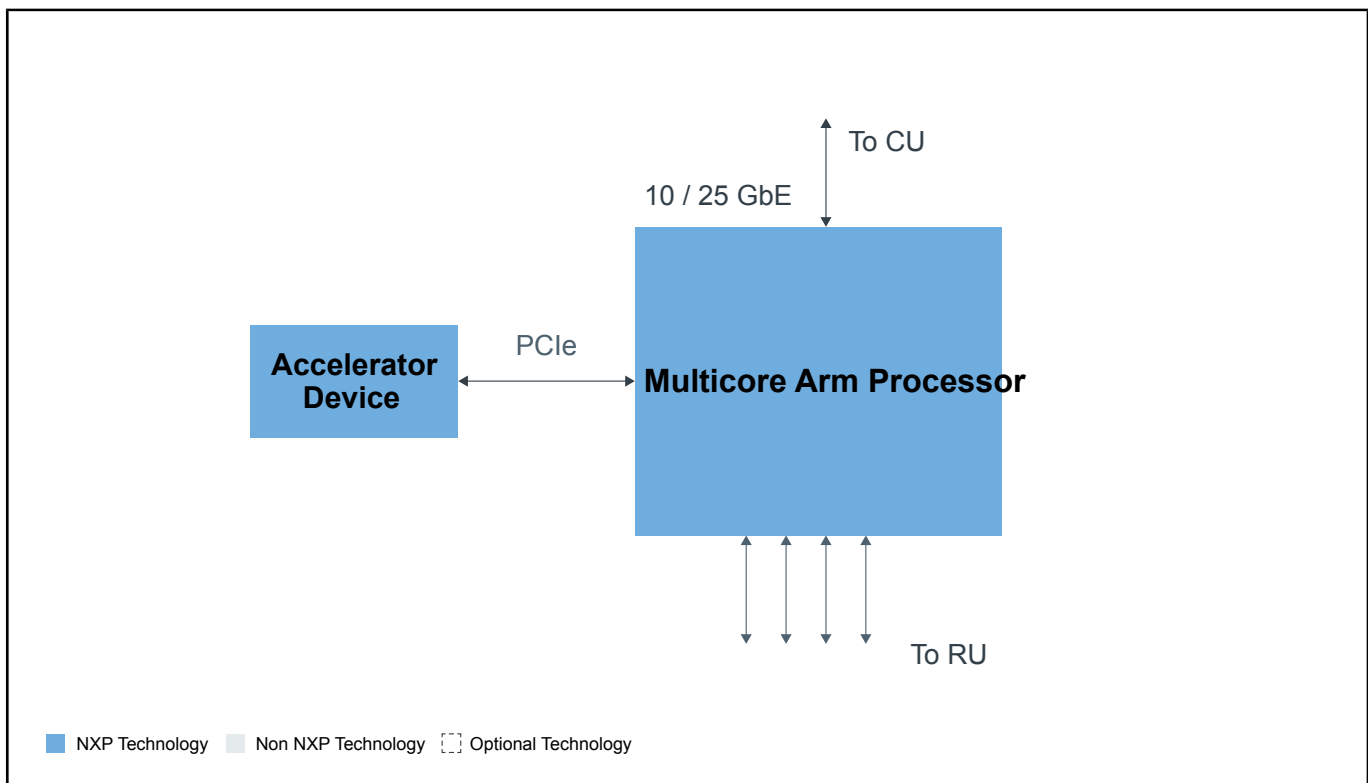
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5G standards allow for deployment options with a flexible, functional split between networking elements. This allows for implementations that are cloud/centralization centric.

O-RAN standards define the central unit as the entity responsible for Transport/S1, PDCP and RRC/Control plane processing in an option 2 split configuration. Deployment options range widely from low-end in-building processing with  $\leq 25$ -50Gbps capacity to scale-out scenarios supporting multiple Tbps aggregate processing.

The distributed unit is responsible for MAC/RLC and High-PHY processing, implemented as C code on general-purpose (eg Arm) devices. Cost and power are minimized by using optimized (Arm NEON) SIMD kernels and a look-aside accelerator device for forward error correction and DSP processing acceleration.

## O-RAN Block Diagram



## Recommended Products for O-RAN

Multicore Arm Processor

- [LX2160A](#): Layerscape® LX2160A, LX2120A, LX2080A Processors

Accelerator Device

- [LA12xx](#): Layerscape® Access LA12xx Programmable Baseband Processor

View our complete solution for [O-RAN Central Unit and Distributed Unit](#).

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

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