

Layerscape® Access LA9310 Programmable Baseband Processor

LA9310

Last Updated: Apr 11, 2024

The Layerscape® Access LA9310 programmable baseband processor is a digital signal processor with integrated data converters (ADC/DAC) for physical layer processing of 5G infrastructure, DFE, and custom communication systems at the network edge. Its low cost and power and programmable signal processing capabilities make it an attractive option to expensive FPGAs in applications such as network listening, small-scale radio units and repeaters.

The ADC / DAC supports a zero-IF I/Q interface to an RFIC suitable for both sub-6GHz and limited bandwidth mmWave applications. NXP's VSPA DSP implements sample-level baseband processing in the digital domain, enabling a flexible software defined radio.

High Performance Control Processor **VSPA Vector Engine** Interconnect (non-coherent) Integrated Analog to Forward x1 PCle **Digital Converter System** Error Gen3 Correction Controller ADC DAC - - -Zero IF Zero IF 8 GHz DMA ... analog in analog out SERDES

Layerscape Access LA9310 Block Diagram Block Diagram

View additional information for Layerscape® Access LA9310 Programmable Baseband Processor.

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

www.nxp.com

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2024 NXP B.V.