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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Target Applications

Femtocell: Home or small office cellular base stations supporting the following standards:

- LTE-FDD/TDD
- WCDMA (HSPA+)
- CDMA2K
- TD-SCDMA

QorlQ Qonverge Platform

QorlQ Qonverge BSC9131 for Femtocell Base Station Solutions

A new dimension in wireless processing

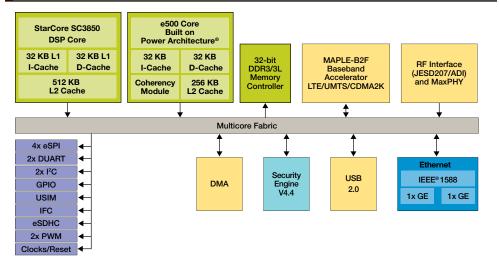
Overview

The QorlQ Qonverge BSC9131 processor is a highly integrated device that targets evolving femto and enterprise femto applications. The BSC9131 combines Power Architecture® e500 and StarCore SC3850 core technologies with MAPLE-B2F baseband acceleration processing, addressing the need for a high-performance,

cost-effective, integrated solution that handles all the digital baseband processing required for femtocells.

The programmable BSC9131 device, targeted at LTE/FDD/TDD, WCDMA (HSPA+) and CDMA2K, supports multiple air interface standards and can support two concurrent standards.

QorlQ Qonverge BSC9131 Processor







QorlQ Qonverge Features

The BSC9131 is a highly integrated device combining Power, StarCore and MAPLE architectures. The device includes the following features:

Core	Power Architecture® subsystem including one e500 processor and 256 KB shared L2 cache
DSP	StarCore SC3850 DSP subsystem including 512 KB private L2 cache
Baseband Acceleration	MAPLE-B2F multi-accelerator platform engine supports functions that enable LTE-FDD/TDD, WCDMA (HSPA+) and CDMA2K wireless standards
Memory	DDR3 memory interface with 32-bit data width (40 bits including ECC), up to 800 MHz data rate Integrated flash controller for NOR, NAND and FPGA support
Security	Dedicated security engine featuring trusted boot
RF Interface	Antenna interface controller supporting three industry standard JESD207/three custom ADI RF interfaces (two dual port and one single port)
	Two pulse width modulators (PWM) for control of external components Three MAXIMs MaxPhy serial interfaces
Connectivity	Two triple-speed Gigabit-Ethernet controllers featuring network acceleration including IEEE® Std 1588v2™ hardware support
	USB 2.0 host and device controller
	DMA controller with four bidirectional channels that serves both Power Architecture cores and DSP domains
	UART, SPI, eSDHC, USIM and I ² C controllers
	GPIO, 16 32-bit timers

Freescale will provide commercial L1 and transport software. L2, L3 will be provided through our partner stack vendors:

- LTE-FDD/TDD and WCDMA (HSPA+) L1 software-licensed by Freescale
- L2/L3 software for LTE-FDD/TDD and WCDMA (HSPA+)-via partners
- Development tools and operating system software through Freescale and its ecosystem partners







BSC9131 Reference Design Board

For more information about the QorlQ Qonverge BSC913x family, visit freescale.com/QorlQQonverge



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