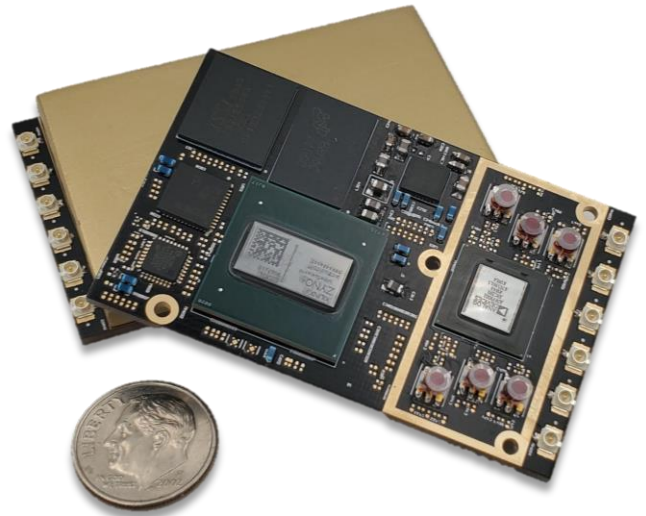


FEATURES

- Highly integrated 2 × 2 RF transceiver and baseband processor
- Dual transmitters each with observation receiver for digital predistortion and power monitoring
- Fully integrated digital pre-distortion (DPD) for narrowband and wideband waveforms
- Dual receivers.
- Frequency range of 30 MHz to 6000 MHz
- Transmitter and receiver bandwidths from 12.5kHz to 40 MHz
- FFH and TDD support
- 150 dBc/Hz dynamic range
- Top-side U.FL RF connectors or bottom-side SMPM board to board RF connectors
- Dual Cortex™ – R5, Quad Cortex™ – A53, Mali™ GPU
- 8GB eMMC / 1GB LPDDR4
- Gigabit Ethernet, USB3.0, SATA, Display Port
- AES256
- MIPI Support
- Single 5.0V power supply
- 120 pin board to board signal connector to host
- Board Support Package (BSP) software
- Linux, RTOS, Bare Metal OS support
- MATLAB and SIMULINK support
- Small form factor – 1.65" x 2.40" (42mm x 61mm)

APPLICATIONS

- Mission critical RF communications
- Rapid prototyping platform
- Industrial IOT
- Product integration
- ADRV9002 Evaluation tool
- Land Mobile Radio - APCO P25-P11
- Video Streaming
- MIMO
- Drone Communications



GENERAL DESCRIPTION

The BytePipe_x9002 SOM is a Software Defined Radio (SDR) System on Module (SOM) based on Analog Devices Inc.'s ADRV9002 Agile Transceiver™ with the Xilinx ZYNQ®- UltraScale+ SoC. The SOM can be used as an evaluation tool, prototyping platform, or integrated into a full-scale product.

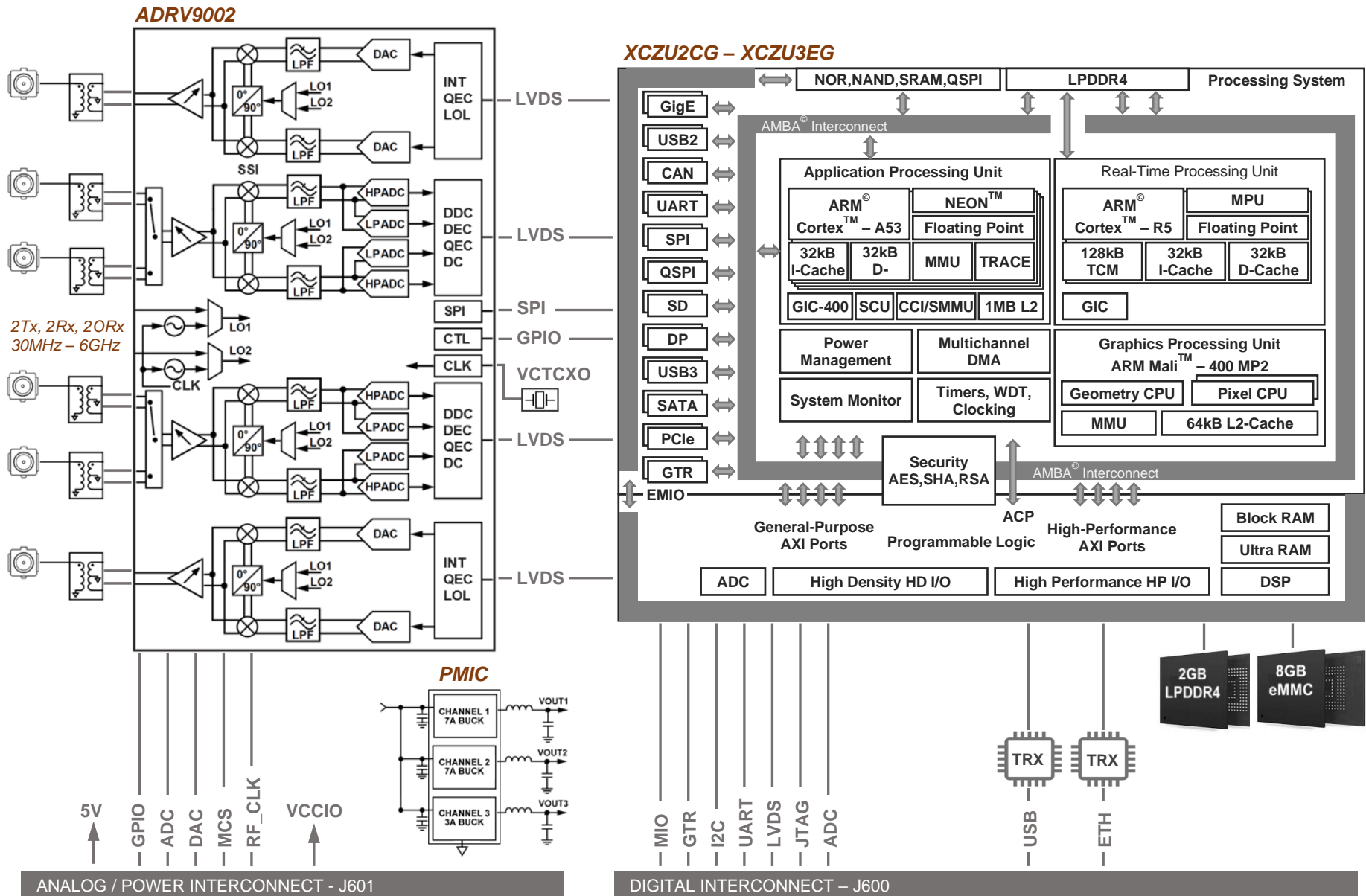
A 2x2 MIMO transceiver with integrated DPD engine operates from 30MHz to 6000MHz and supports both narrowband and wideband channel bandwidths from 12.5KHz to 40MHz. The narrow band support makes it suitable for applications including, Land Mobile Radio, APCO P25-P11 while supporting higher bandwidth applications like satellite communications, IoT, cellular, LTE, or Wi-Fi.

NextGen RF Design, through our design services lab, can also support customized versions optimized for application specific requirements.

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HARDWARE BLOCK DIAGRAM



For more information, contact NextGen RF Design at info@nextgenrf.com