



VersaCOMM™ Digital Converters

RECEIVE/TRANSMIT SIGNAL PROCESSORS · DIGITAL MODULATORS

VERSATILE COMMUNICATIONS PRODUCTS ENABLING COST-EFFECTIVE, PROGRAMMABLE RADIO ARCHITECTURES

Analog Devices introduces the VersaCOMM family of leading edge digital data communications products. VersaCOMM (Versatile Communications Processors) permits both 2 G and 3 G software radio implementations for multi-carrier and multi-mode digital receive and transmit architectures. Applications include macro, micro, and pico cellular base station designs for processing both 2 G and 3 G (W-CDMA) air standards such as IS136, GSM, EDGE, IS95, CDMA 2000, and UMTS. Other applications include wireless local loop, smart antennas, phased array antennas, as well as medical imaging, and ultrasound applications.

Our family of digital Receive Signal Processors (RSP), digital Transmit Signal Processors (TSP), and Quadrature Digital Upconverter (QDUC) products are part of Analog Devices' SoftCell™ transceiver chipset solution designed for compatibility with Analog Devices' family of high-speed IF-sampling ADCs and TxDACs®.



FEATURES

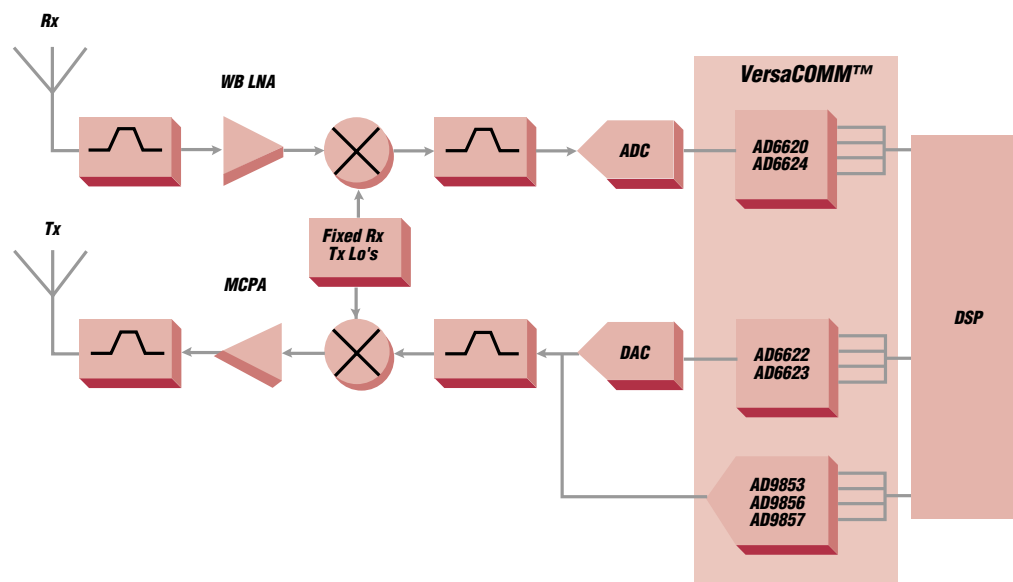
- High-performance RSP, TSP, and QDUC-based products
- Lower power and cost than FPGA or DSP based solutions
- Supports multi-carrier and multi-mode standards
- Optimized to work with Analog Devices' high-speed converters
- Parallel input and output ports
- High Bandwidth Signal Processing

APPLICATIONS

- Cellular Base Stations
- Smart & Phased-Array Antennas
- Wireless Local Loop
- Medical Imaging
- Co-processing
- E911 Location Services
- In-building Wireless



VersaCOMM Digital Converters



VERSACOMM PRODUCT FAMILY

Receive Signal Processors (RSP)

- **AD6620**
Single/Dual Channel
65 MSPS
- **AD6624**
Single/Dual/Quad Channel
80 MSPS
- **AD6634**
Dual Channel W-CDMA
80 MSPS

Transmit Signal Processors (TSP)

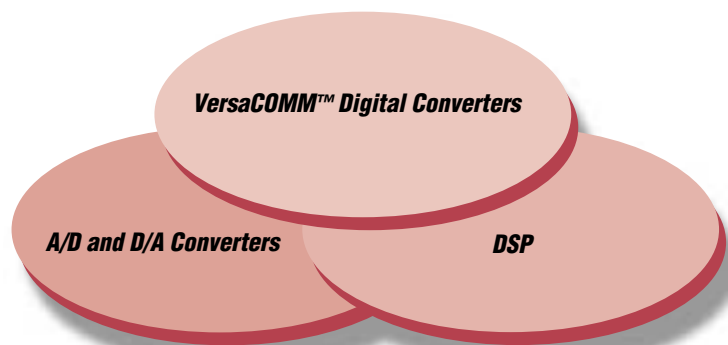
- **AD6622**
Single/Dual/Quad Channel
75 MSPS
- **AD6623**
Single/Dual/Quad Channel
104 MSPS

Quadrature Digital Upconverter/Modulator (QDUC)

- **AD9853**
5-65 Mhz QPSK/16-QAM
Digital Modulator with
10-bit DAC
- **AD9856**
200 MSPS Quadrature
Digital Upconverter with
12-bit DAC
- **AD9857**
200 MSPS Quadrature
Digital Upconverter
with 14-bit DAC

Embedded Features in VersaCOMM Solutions	RSP	TSP	QDUC
High Speed NCO Frequency Translation	√	√	√
Decimating Filters	√		
AGC Support	√	√	
Non-Integer Data Rate Re-Sampling	√	√	
Synchronized Operations (Hop, Ramp, Mode)	√	√	√
Programmable Filter Response	√	√	√
JTAG, BIST, PN, Generation	√	√	
Phase Equalization		√	
Digital Modulation (GMSK, QPSK, 8PSK)		√	√
Interpolating Filters		√	√
On-Chip DAC			√

VersaCOMM provides the link between Data Converters and DSP



For more information on the VersaCOMM product family, visit:
www.analog.com/VersaCOMM



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