VANTEON®

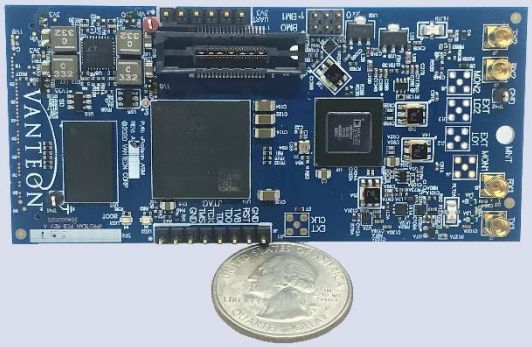
WIRELESS SOLUTIONS

PRODUCTS

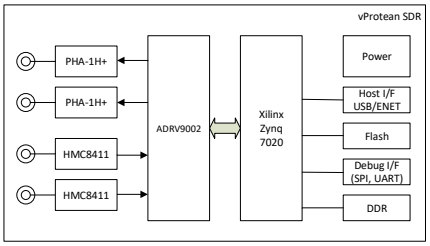
vPROTEAN™

Ultra-Flexible Software-Defined Radio (SDR)

The vProtean™ SDR is the ultra-flexible SDR with fantastic narrowband performance, in a highly integrated and fully programmable radio platform.



vProtean™ is the flexible Wideband SDR for signal intelligence and multi-band processing applications. Its configurable, high performance, RF front end is frequency and bandwidth configurable, while its integrated RF transceiver provides optimal narrowband performance.



Performance Specifications

- Configurable RF front end with 20 dBm transmit power
- Frequency range of 30 to 6000 MHz
- Instantaneous bandwidth from 12 kHz to 40 MHz
- Low power consumption
- 2 TX and 2 RX operation
- Small footprint (9.0 cm x 4.2 cm)
- USB and Ethernet host interface
- On-board 512 Mb Flash
- On-board 4 Gb DDR SDRAM
- UART and SPI debug ports

Accelerate Your Design

Let Vanteon's engineering team help you get your products to market faster with a proven scalable SDR design.

Call us at 888.506.5677 or email sales@vanteon.com

Platform Features

The vProtean™ platform offers the following key features:

- Xilinx Zynq-7020 FPGA for high performance signal processing
- Dual Embedded ARM Cortex A9 processors in the Zynq core
- ADI ADRV9002 highly integrated, wide frequency range RF transceiver
- Performance enhancing RF Front End (RFFE) to improve on the transceiver FE
- Available DSP module library of target-agnostic C/C++, VHDL, and MATLAB/Simulink® DSP core radio functions:
  - Modulation/demodulation (ASK/AM, FSK/FM, PSK/PM, QAM, OFDM)
  - Digital down/up conversion
  - Symbol timing recovery/tracking
  - Carrier recovery/tracking
  - Filters (FIR, IIR, multi-rate, adaptive)
  - Automatic gain control
  - Channel coding
  - Multichannel TX/RX capabilities
  - FEC (e.g., convolutional, Reed-Solomon)
  - Spread spectrum coding
  - Customizable MAC