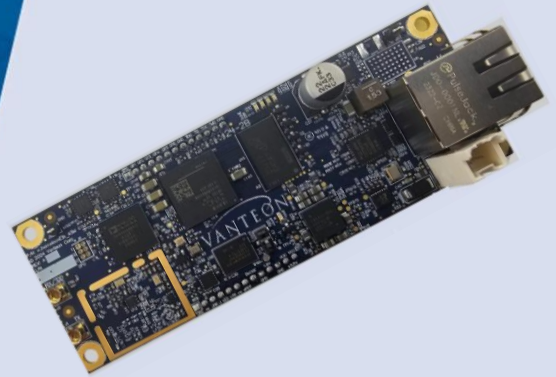## PRODUCT

ETHERNET ENABLED
vChameleon

Low Cost Software Defined Radio (SDR)

The vChameleon Ethernet SDR can be configured for a wide variety of characteristics and behaviors while enabling ethernet connectivity. It is a highly integrated, small ultra-flexible radio platform.

vChameleon Ethernet is perfect for high-performance signal processing applications that require an ethernet interface. It is a uniquely agile SDR at a low-cost price point.

Platform Features

The vChameleon Ethernet platform offers the following key features:

- Xilinx Zynq Family FPGA for high-performance signal processing
- Embedded ARM Cortex – A9 Processors in the Zynq core
- Highly integrated, wide-frequency range transceiver (AD936X)
- Performance-enhancing RF Front End (RFFE) to improve on the AD936X Front End

Performance Specifications

- Support for bandwidths up to 12 MHz
- Broad RF frequency range up to 2.36 GHz with minimal to no hardware modifications
- Capable of supporting thousands of endpoint radios
- High Sensitivity through <2 dB Noise Figures
- Transmit power up to 17 dBm
- Ethernet-enabled communication

Offerings

- Coming soon - Evaluation Kits and SOMs
- vChameleon Ethernet can be licensed as a starting point for your next custom SDR system

Accelerate Your Design
1.888.506.5677
sales@vanteon.com

Use Cases

A low-cost, highly flexible SDR design that can be leveraged on a variety of applications:

- Smart Grid – Collectors & Endpoints
- Oil, Gas, & Other Resource Monitoring
- Security Products
- Test Equipment
- SCADA Systems

Licensable Software

Vanteon offers both its hardware and software designs for license, enabling our customers to jumpstart their design efforts. With a service contract, Vanteon can offer a range of software solutions, including:

- 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 up/down conversion
- Carrier recovery/tracking
- Filters (FIR, IIR, multi-rate, adaptive)
- Automatic Gain Control
- Channel coding
- Multichannel capabilities
- FEC encoding/decoding
- Spread spectrum coding
- Customizable MAC