

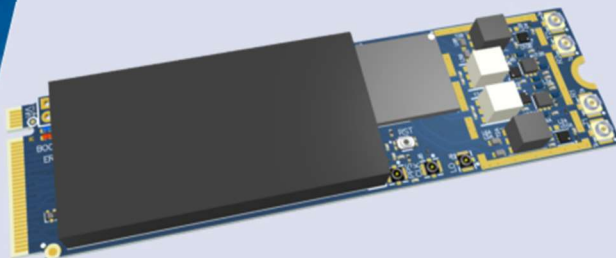
### Product Roadmap Announcement

# vPROTEAN|M.2

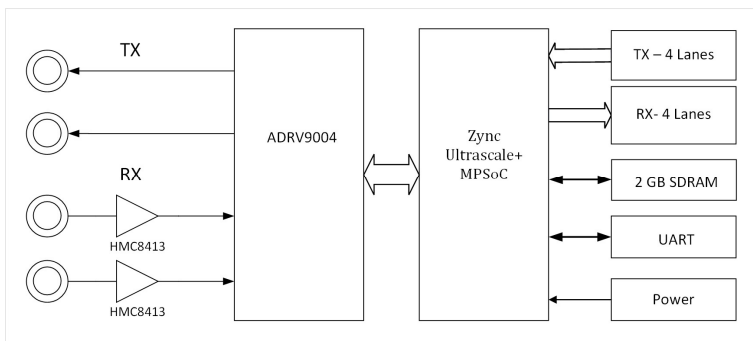
## Ultra-Flexible Software-Defined Radio (SDR)

The vProtean|M.2 SDR is the ultra-flexible SDR with fantastic narrowband performance, in a highly integrated and fully programmable radio platform based on the M.2 form factor.

## PRODUCTS



vProtean|M.2 is the latest SDR in the vProtean family with the highest density radio processing horsepower available. The vProtean|M.2 is a highly flexible wideband SDR for most any RF processing application. Its high performance RF front end is frequency and bandwidth configurable, while its integrated RF transceiver provides optimal narrowband performance with dual transmit and dual receive capabilities.



### Performance Specifications

- Frequency range of 30 to 6000 MHz
- Instantaneous bandwidth from 12 kHz to 40 MHz
- Low power consumption
- 2 TX and 2 RX operability
- Footprint and pinout compatible, M.2 M-key form factor (22 mm x 80 mm)
- On-board 128 MB QSPI Flash and Micro-SD Card slot
- On-board 2 GB LPDDR4 SDRAM

### 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](mailto:sales@vanteon.com)

### Platform Features

The vProtean|M.2 platform offers the following key features:

- Supports full bandwidth IQ transport for both transmit and both receive paths at the same time.
- Supports onboard waveform/baseband processing without the need for external IQ generation or receive processing (stand-alone operation)
- Xilinx Ultrascale+™ MPSoC for exceptional signal processing performance
- Quad Embedded ARM Cortex®-A53 and Dual Cortex®-R5F processors in the Ultrascale+ core
- ADI ADRV9004 highly integrated, wide frequency range RF transceiver
- Performance enhancing RF Front End (RFFE) to improve on the transceiver FE.
- Multi-Channel and Multi-Chip Synchronization
- Full duplex at 40 MHz BW, using I/Q baseband or digital data, on both channels.
- M.2 M-key with PCIe pluggability
- Four (4) PCI Express lanes, UART, I2C
- External RF inputs for clock reference and sync signals (e.g., 1 PPS)
- Vanteon IP, DSP module library of target-agnostic C/C++, VHDL, and MATLAB/Simulink® DSP core radio functions (available with Services Contract)