

## FEATURES

- 4 channel 3U OpenVPX wideband digital tuner
- Aligned with the SOSA™ Technical Standard
- 2 MHz to 8000 MHz frequency coverage
- 125 MHz BW/Ch
- 16-bit internal ADC, 368 Msps
- Full bandwidth Digital IF Output over P1 data plane
- Internal FPGA-based signal processing with variable rate DDCs
- Ethernet command and control

## FEATURES (continued)

- Time-tagged Digital IF output (based on 1PPS input)
- Command set matches existing NDR358 command set
- Fast Scan Control Interface
- Supports multiple existing NDR358 DSP-based modes of operation:
  - Receiver Mode
  - Coherent Scan Mode
  - Fast Scan Mode
  - Resampler Mode
- Designed for harsh environments

# NDR374

## 4 Channel 3U VPX

### Digital Tuner

## DESCRIPTION

The NDR374 digital tuner is an 4-channel, superheterodyne downconverter that covers RF signals from 2 MHz to 8 GHz. It is a rugged 3U conduction cooled VPX module, per VITA 46/48/65/67. The NDR374 digital tuner is designed as a 3U open architecture version of the existing NDR358 tuner to include RF performance, command set and multiple DSP-based modes of operation (the NDR374 enables efficient system integration for existing NDR358 users). Integrated high dynamic range 16-bit Analog-to-Digital converters (ADC's) are utilized to digitize an 125 MHz wide IF at 368 Msps sample rate.

Command and control of the digital tuner are via an Ethernet interface and power is derived from the P0 12V power supply input (65W power consumption). An on-board Xilinx MPSoC UltraScale FPGA is used for the channelizer, the VITA-49 formatter, data multiplexer and the Digital IF data interface. The Data Plane Digital IF output simultaneously provides both full bandwidth Digital IF data along with multiple narrow bandwidth DDC outputs.



**CyberRadio**  
SOLUTIONS