FEATURES

- 4 channel 3U OpenVPX wideband microwave Transceiver
- 20 MHz to 18 GHz frequency coverage
- 2 Tuner Channels
- 2 Transmit Channels
- 500 MHz bandwidth
- 1 GHz IF Input/Output
- MORA & SOSA compliant
- Independent and phase coherent tuning
- Single slot 3U VPX form factor, 1.5 lbs., 48 W
- 1G/10G Ethernet command control

NDR664
3U OpenVPX Wideband Microwave Transceiver

DESCRIPTION

The NDR664 is a wideband, 4 channel, 3U OpenVPX microwave transceiver that provides frequency coverage from 20 MHz to 18 GHz. The NDR664's industry leading channel density minimizes system level SWaP. Each of the 4 channels provides a 1 GHz analog IF output with a 500 MHz instantaneous bandwidth. The 2 tuner channels can tune both independently and phase coherently and the 2 transmit channels can tune both independently and phase coherently and multiple NDR664 units can be synchronized for phase coherent operation. The NDR664 incorporates a super-heterodyne RF conversion architecture to minimize spurious products and yield high dynamic range performance. The fully integrated synthesizers provide fast tuning, low phase noise and the tuning flexibility to choose an alternative IF input/output center frequency (an IF different than 1 GHz) if desired. The NDR664 includes an internal 100 MHz OCXO and accepts a 10 MHz reference input.

The unit's form factor is single slot (1 inch pitch) 3U VPX and the total power consumption is 48 Watts (12 Watts per channel). The RF interface is provided through the VPX backplane using coaxial ports that are compliant with VITA 67.3. The backplane interface is compliant with SOSA, and VITA 46/65 OpenVPX. The NDR664 is controlled via a Gigabit Ethernet interface over the VPX backplane via a 1G/10G Ethernet. The NDR664 digital architecture is based on the Xilinx Zynq SoC.

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