



# NDR585

## 4 Channel VPX Microwave Tuner Platform

### A 4 CHANNEL SUPERHETERODYNE MICROWAVE TUNER

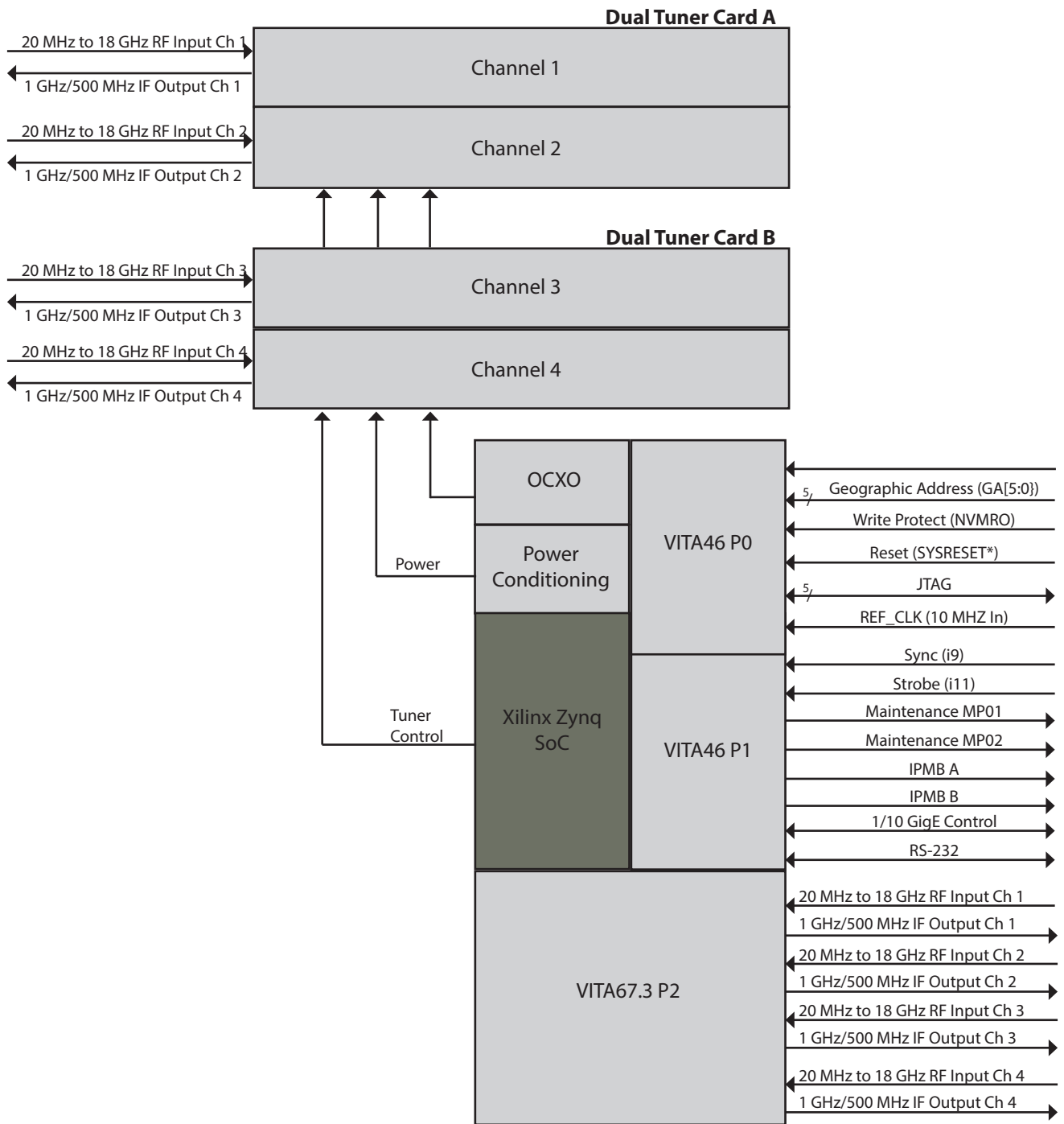
The NDR585 is a 4 channel, 3U SOSA VPX microwave tuner platform that provides frequency coverage from 20 MHz to 18 GHz. The NDR585's industry leading channel density minimizes system level SWaP. Each of the 4 channels provides a 1 GHz analog IF output with a 500 MHz instantaneous bandwidth. The channels can tune both independently and phase coherently and multiple NDR585 units can be synchronized for phase coherent operation. The unit 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 output center frequency (an IF different than 1 GHz) if desired. The NDR585 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 NDR585 is controlled via a Gigabit Ethernet interface over the VPX backplane via a 1G/10G Ethernet. The NDR585 digital architecture is based on the Xilinx Zynq SoC.

### KEY HIGHLIGHTS

- 4 Channel 3U VPX Microwave Tuner Platform
- 20 MHz to 18 GHz RF Coverage
- 500 MHz Bandwidth Per Channel
- Independent and Phase Coherent Tuning
- 1 GHz Analog IF Output
- Industry Leading Channel Density
- MORA 2.4 BSP
- 1G/10G Ethernet command and control
- Slot Profile – SLT3-PAY-1F1U1S1S1U-1U2FIH-14.6.11-4
- 48W Power Consumption

# BLOCK DIAGRAM



SLT3-PAY-1F1U1S1U1U2F1H-14.6.11-4

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