



NDR325

TECHNOLOGY
DEMONSTRATOR

4 Channel Software Defined Payload

A MODULAR PAYLOAD 1U FORM FACTOR

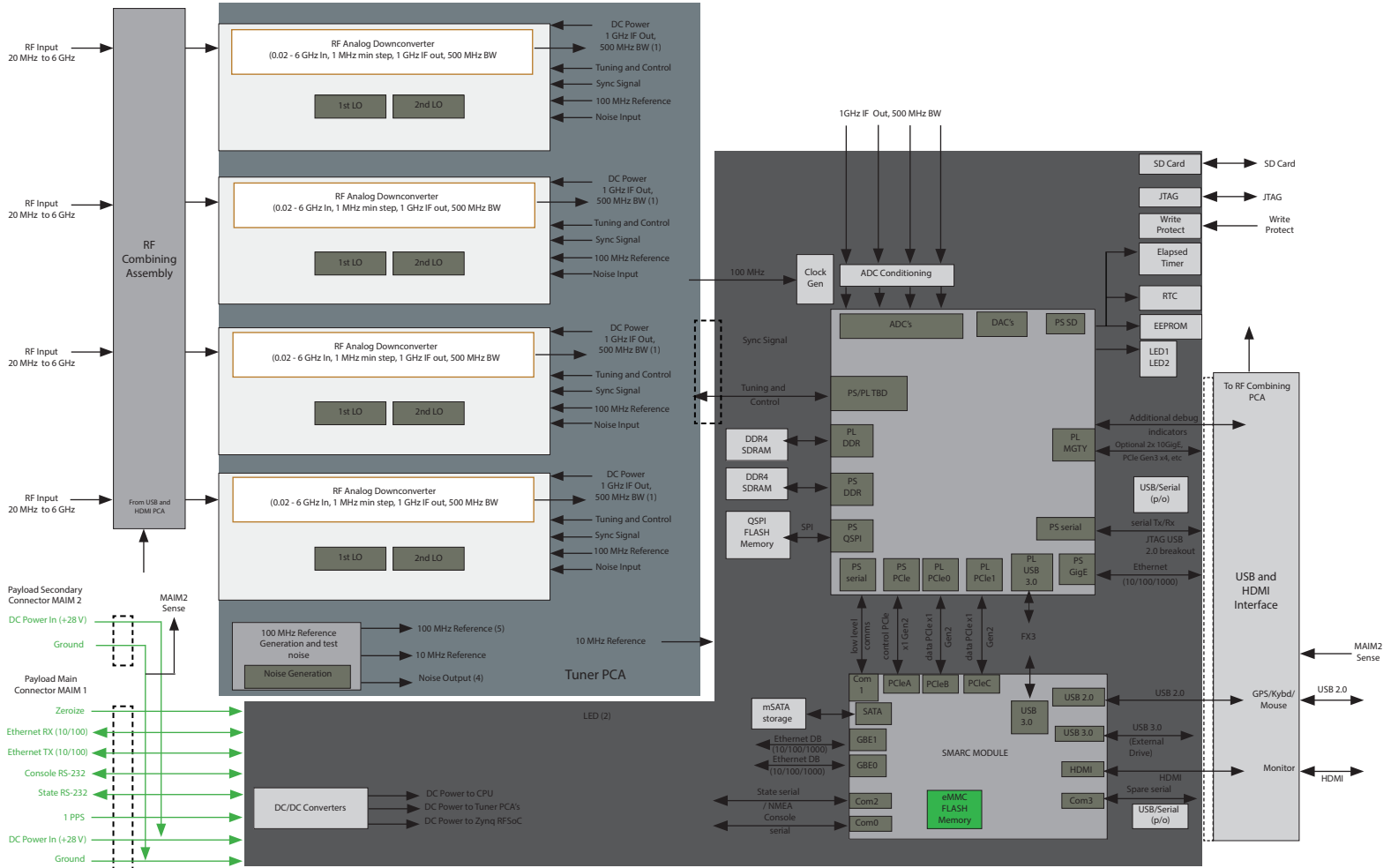
The NDR325 is a software defined payload packaged in a Modular Payload (Mod Payload) Design Standard, Rev. 5.0 compliant 1U form factor. It includes a 4-channel, super-heterodyne tuner that covers RF signals from 20 MHz to 6 GHz and each channel provides a 500 MHz instantaneous bandwidth. The unit provides both independent and phase coherent tuning to support applications such as search, survey, direction finding and geolocation. An on-board Xilinx Zynq UltraScale+ RFSoc is used for the A/D converters, the channelizer, the VITA-49 formatter, the data multiplexer and multiple lower bandwidth DDCs. Internal Digital IF data is routed to integrated COTS processing (SMARC with the Intel® Atom™ x7-E3950 1.6 GHz Quad Core Processor) and the unit includes a board support package for loading custom software applications.

Command and control are via an Ethernet interface and power is derived from a +28 VDC power input. The NDR325 is packaged in a rugged, conduction-cooled aluminum chassis that provides RF shielding, thermal management, and protection suitable for harsh environments.

KEY HIGHLIGHTS

- 4 Channel Software Defined Payload
- 20 MHz to 6 GHz Frequency Coverage
- 500 MHz Bandwidth
- Independent & Phase Coherent Tuning
- Modular Payload (Mod Payload) Design Standard, Rev. 5.0 compliant 1U Form Factor
- Flexible Power Management
- Ethernet Command and Control
- Xilinx Zynq UltraScale+ RFSoc processing architecture
- SMARC with Intel® Atom™ x7-E3950 1.6 GHz Quad Core Processor
- 67W Power Consumption
- 2.2 lb./ 1 kg Weight

BLOCK DIAGRAM



Specifications subject to change without notice.

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