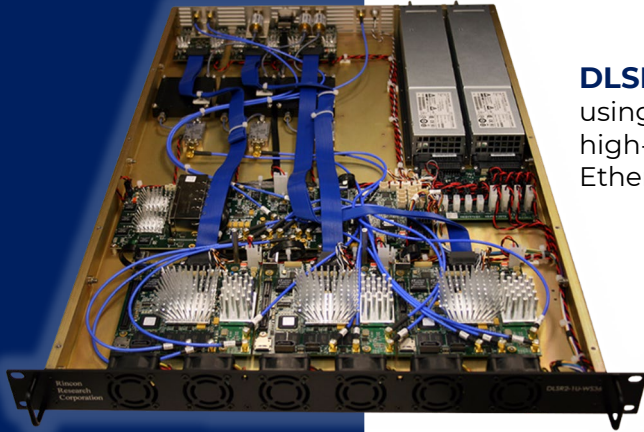


## **WIDEBAND DIGITAL-IF FAMILY** L-BAND DIGITIZERS AND PACKETIZERS

**ACHIEVE LOSSLESS, SCALABLE, AND RECONFIGURABLE L-BAND SIGNAL DISTRIBUTION** with Rincon Research Corporation's Digital-IF product family. These systems digitize multi-carrier L-band signals, and then convert individual signals to streams of Ethernet packets for distribution over traditional networks.

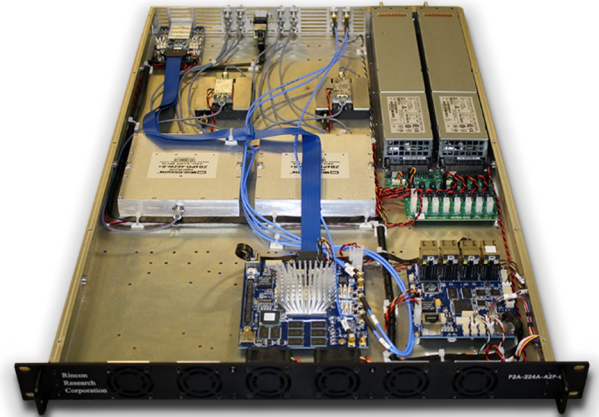


**DLSR2** units perform the analog-to-packets function, using wideband analog-to-digital converters and high-performance FPGAs for signal processing and Ethernet interfaces.

- L-band analog input, 950 MHz to 1750 MHz
- 1800 MSPS 10-bit ADC, 7.8 ENOB
- Programmable attenuator, 0dB to 31.5 dB, 0.5 dB steps
- Multiple digital downconverter (DDC) configurations provided
- High-precision data time tags provided for DDC and snapshot outputs
- Wideband (800 MHz) snapshot capability, up to 2 GB
- 1 to 4 analog inputs per unit

**P2A** units use similar technology to implement the packets-to-analog function. Multiple packet streams can be combined into a single L-band analog output.

- Digital IF data inputs via 10GbE interfaces
- L-band analog output, 950 MHz to 1750 MHz
- 1800 MSPS 14-bit DACs
- Integrated distribution splitters, optional
- Six-channel output per DAC
- 1.5 GByte network buffer memory per DAC
- Programmable attenuator for output adjustment
- Accepts external 10 MHz reference, optional
- 2 to 8 wideband-DAC channels per unit

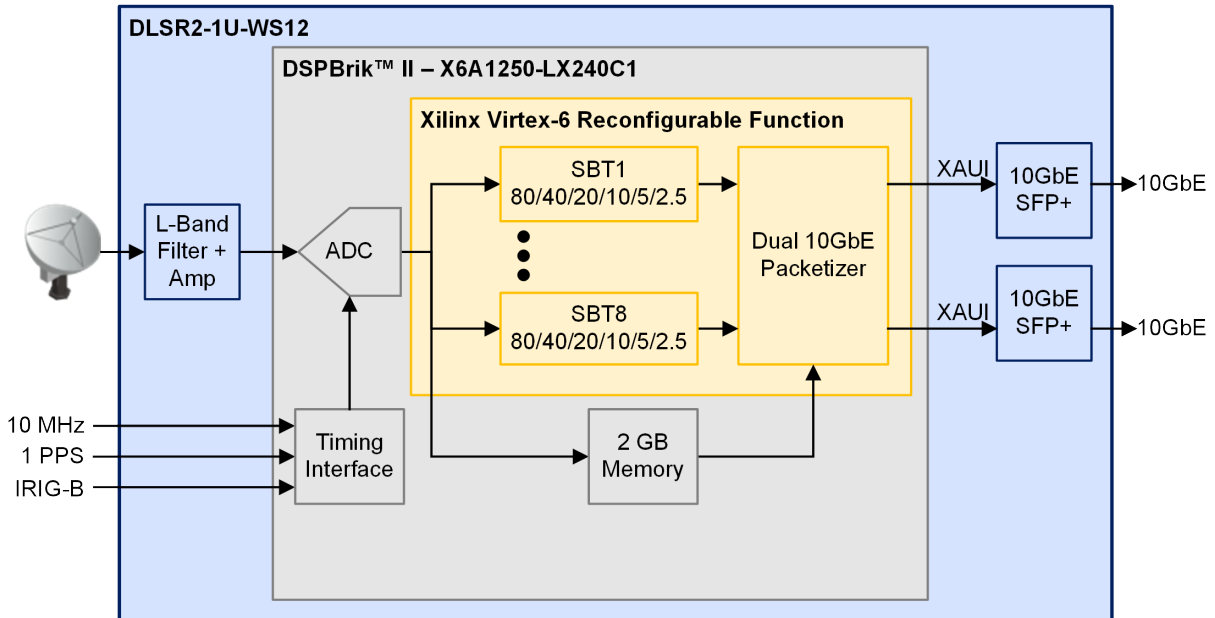


**DIGITAL-IF**

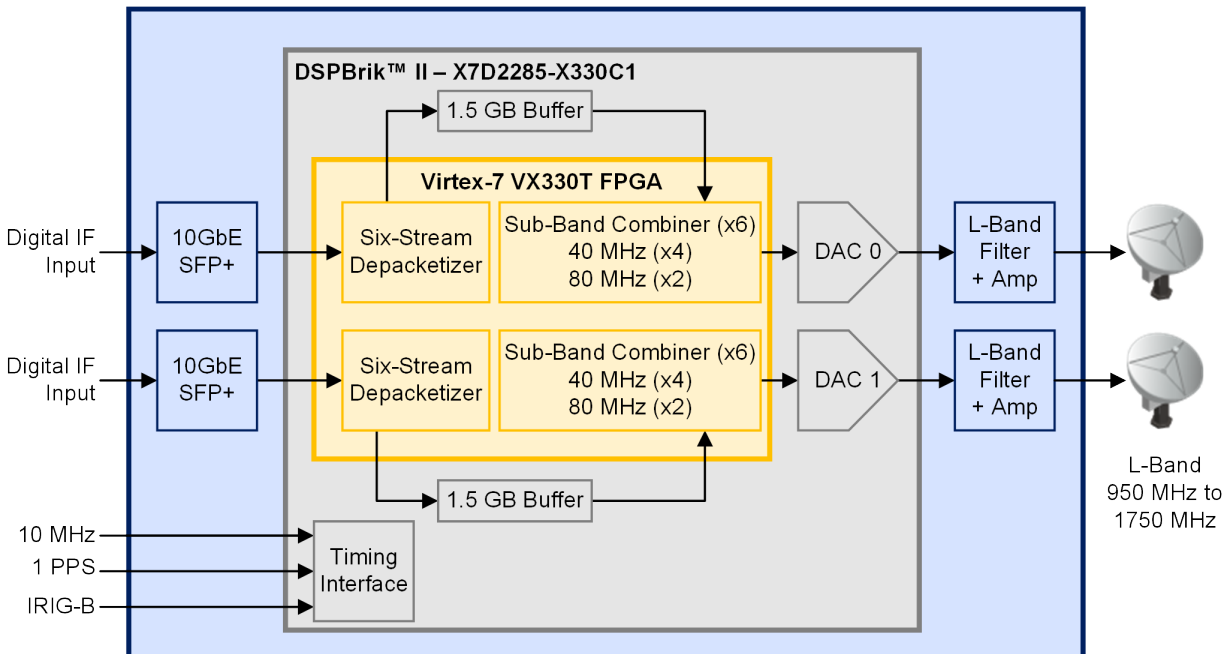
# L-BAND ANALOG INPUT/OUTPUT

**EMBEDDED PROCESSORS IN BOTH THE DLSR2 AND P2A** provide command-and-control functions through a dedicated Ethernet interface. Multiple units can operate from a single network file system, greatly simplifying the application of firmware updates and shared configuration modes. The DLSR2 and P2A have flexible signal processing controls, supporting multiple data formats, sample rates, and signal bandwidths. Network interfaces can be configured for unicast or multicast data, resulting in an L-band signal distribution architecture with all the flexibility of Ethernet data networks.

## DLSR2



## P2A



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