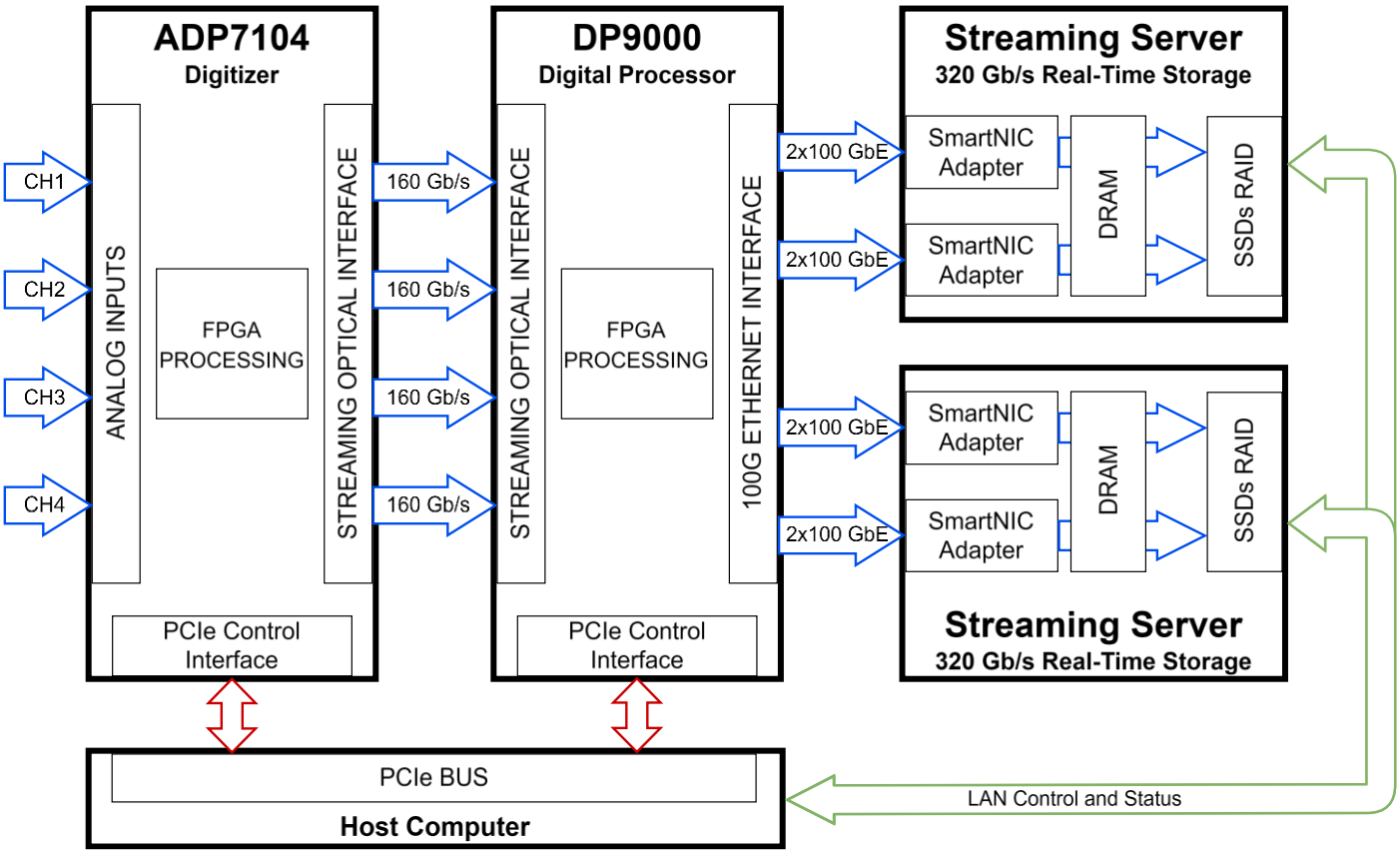
Real-Time 640 Gb/s Acquisition, Streaming, and Storage

The SDP7000 data acquisition and processing system provides a cutting-edge solution for continuous digitizing analog signal by ADP7000, streaming 640 Gb/s data to DP9000 digital processor and store in real-time in two data storage servers. It fits ideally for applications in 5G, telecommunications, medical imaging, plasma fusion, semiconductor industry, aerospace, defense, military, radar electronics and a variety of other disciplines. The wide analog bandwidth and high sampling rate of the digitizers allow both baseband and direct RF sampling of multi-band input channels.

System Highlights

- **10-bit ADC resolution**
- **2 channels with 10 GHz analog bandwidth or 4 channels with 6.5 GHz analog bandwidth**
- **Up to 240 TB of total storage**
- **Up to 100 minutes of continuous acquisition in 16 GS/s mode**
- **Up to 50 minutes of continuous acquisition in 32 GS/s mode**
- **SDK available for customization and integration**

SDP7000 System Block Diagram



Key Components

- **APD7000 Digitizer:** 10-bit, up to 32 GS/s, optical data offload
- **DP9000 Processor:** Real-time data repacking, 8x 100 Gb/s Ethernet (RDMA) output
- **Streaming Servers:** Real-time data storage (up to 120 TB SSD storage per server)
- **Host Computer:** Central control and configuration

Learn more at www.guzik.com