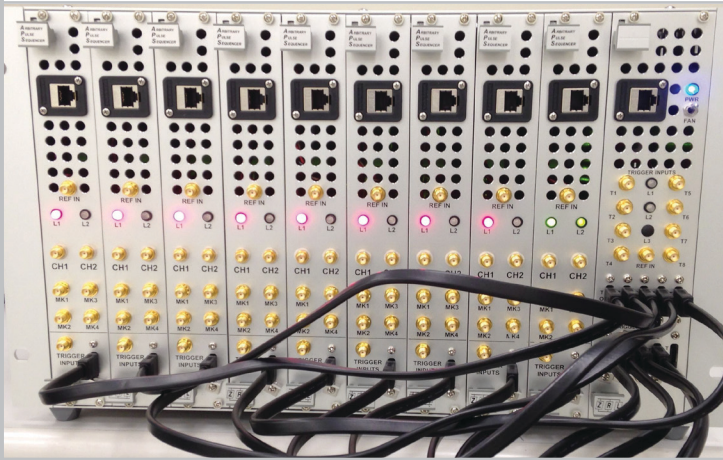




# BBN Technologies Arbitrary Pulse Sequencer

## Advanced Sequencing Capability



APS2 is the only commercially available arbitrary waveform generator with a controlled flow of sequencing instructions enabling low-latency feedback experiments.

### Features

- Up to 18 DC-coupled analog output channels driven by 14-bit, 1.2 GS/s DACs with 400 MHz small-signal bandwidth
- Two single-ended digital outputs per analog channel (up to 40) for triggering other devices
- 1 gigabytes of DDR3 SDRAM for waveform and sequence data storage. A low-latency cache stores 64,000 waveform samples, and sequence data is streamed from deep memory, allowing execution of sequences with more than 10 million entries
- Advanced trigger module with 8 SMA and 2 SATA inputs for distributing steering data across the system
- Ultra-low noise performance: noise power spectrum is ~40 decibels lower than competing technology
- Gigabit Ethernet interface for high-speed data upload

The BBN APS2 is a multichannel, 14-bit, 1.2 GS/s arbitrary waveform generator tailored for quantum information applications.

The APS2 solution provides an advanced sequencing capability. The sequencer allowing for specific individual operations or gates to be defined as units in a waveform library. This capability allows an algorithm or experiment to be defined by stringing together sequences of gates and delays. The result is a compact descriptor for efficient memory use.

### Arbitrary Pulse Sequencer

<b>8 channels</b>	\$81,300
<b>10 channels</b>	\$94,600
<b>12 channels</b>	\$107,800
<b>18 channels</b>	\$147,600
<b>Additional module (2 channels)</b>	\$13,300

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