

What is an Arbitrary Waveform Transceiver AWT?

An Arbitrary Waveform Transceiver is a class of products that takes advantage of the latest RF DAC and ADC technology, combined with high-speed FPGA control and processing to solve complex measurement and simulation problems in Quantum Physics, RF Semiconductor Test, Radar and Electronic Warfare.

The Tabor Proteus Family

The Proteus Family of products from Tabor Electronics, have high performance specifications making it the industry leading Arbitrary Waveform Transceiver. It is a modular based solution based on the PXIe standard and comes in three form factors to suite your applications need - Module, Bench and Desktop.



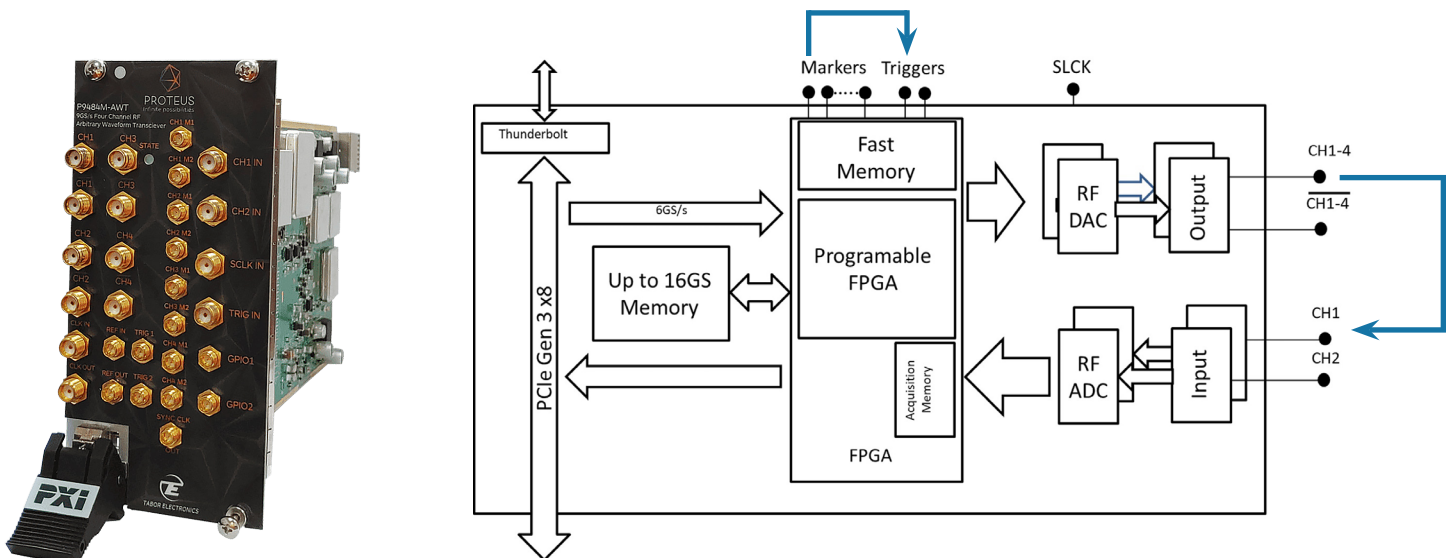
PROTEUS
Infinite possibilities

AWT Measurement Module (3 Slot)
AWG Measurement Module (2Slot)



Modular Direct to RF/uW Architecture

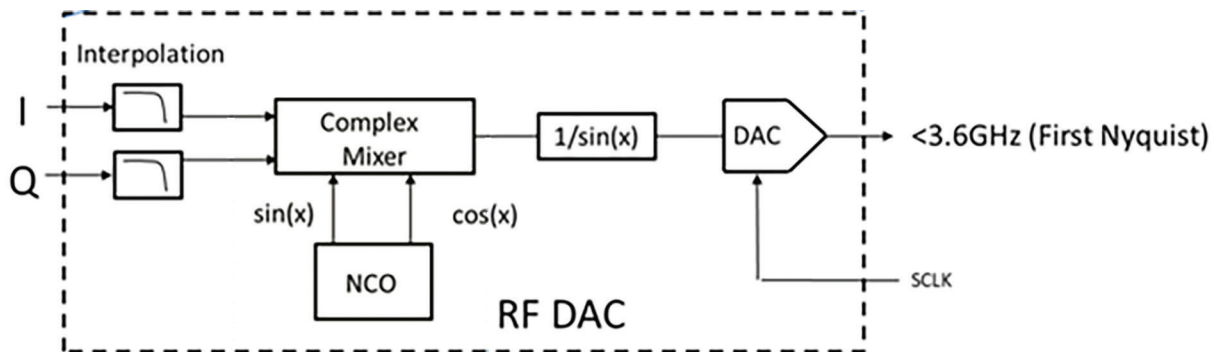
Each module consists of up to four 9GS/s Arbitrary Waveform Generator, and an optional 5.4GS/s Digitizer or two 2.7GS/s Digitizers. Controlled by a state-of-the-art FPGA. Modules can be housed in a standard PXIe Chassis or have up to 3 modules in Desktop and Benchtop Chassis.



Unfiltered differential input and output channels allow for operation in multiple Nyquist zones, allowing for direct to RF signal generation of more than 10GHz . The instrumentation can also be AC or DC coupled (optional) allowing for direct to IF/RF generation or IQ signals generation.

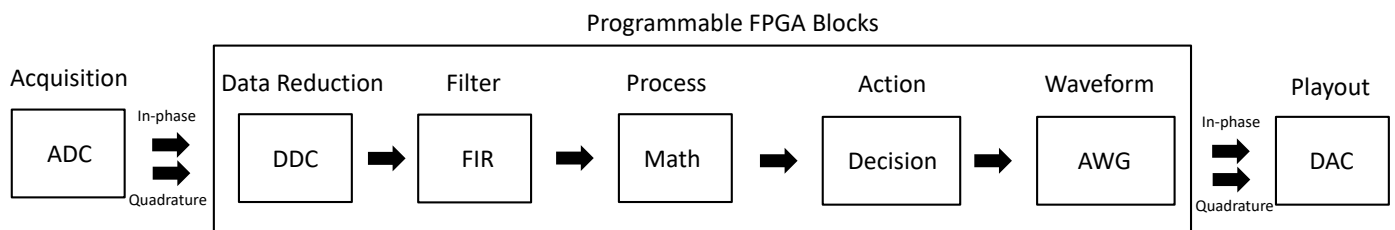
Real Time DUC and DDC capability

Each DAC or ADC within Proteus has a built in IQ Modulator/Demodulator, and Numerically Controlled Oscillator allowing for direct to IF/RF generation in the first Nyquist Zone and direct to uW in higher Nyquist zones.



Programmable FPGA

At the center of the Proteus is a programmable FPGA, that facilitates signal generations decisions. The 'Decision Block' architecture allows for real time signal generation responses based on received signal characteristics. You can by-pass or choose to use blocks, and define the operational parameters of each block, for example the number of FIR Taps can be defined.



Learn More

Product Introduction - learn more about the Proteus Platforma and its different form factors
<https://www.taborelec.com/The-All-New-Proteus-Series-Arbitrary-Waveform-Transceivers-Generators>

Technical Details/Specifications - AWG 9GS/s, 4CH, AWT 5.4GS/s, 2CH, up to 16 GS memory, 2x external/internal trigger, up to 8 markers
<https://www.taborelec.com/Arbitrary-Waveform-Transceivers>

