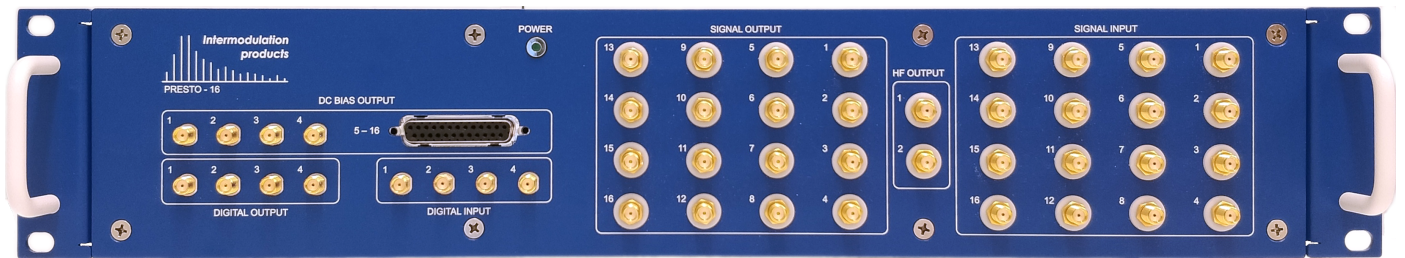


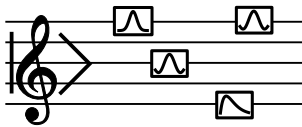
# Rack in a box

# Presto microwave platform

No mixers, no microwave generators,  
just Direct Digital Synthesis up to 9 GHz



## QUANTUM EVENT ORGANIZER



Place pulses and readout  
on a 2 ns event grid

## ARBITRARY PULSES



Up to 256 templates with  
1 GHz bandwidth

## TEMPLATE MATCHING



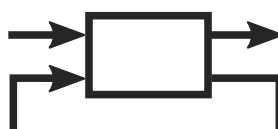
Match incoming pulses to templates  
for state discrimination

## MULTIFREQUENCY



Continuous-wave generation  
and demodulation with 192  
simultaneous frequencies

## LOW-LATENCY FEEDBACK



Trigger output pulses  
from any combination of  
template-matching results

## ALGORITHMS



Simple flexible interface for  
reset, readout, Ramsey, Rabi or  
your own custom algorithm

16 RF outputs

16 RF inputs

2 local-oscillator outputs

16 DC-bias outputs

4 digital inputs

4 digital outputs

1 GHz bandwidth around 0 – 9 GHz carrier with DDS technology

1 GS/s with digital IQ demodulation up to 9 GHz

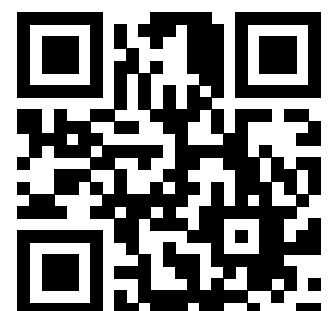
Ideal for pumping parametric amplifiers  
Up to 15 GHz continuous-wave output -

16-bit resolution

5 programmable ranges up to  $\pm 10$  V

Programmable triggers and markers

Scalable and synchronizable with Metronomo



More about Presto