

Quarto



A Digital Brain for the Analog World™



The Quarto is a multi-function data acquisition and control platform with a user-programmable processor for interacting with data in real-time.

Hardware

- 4 Analog Inputs ($\pm 10V$, 16 bit)
- 4 Analog Outputs ($\pm 10V$, 16 bit)
- 8 GPIO pins, 2 Triggers
- 500 MHz Processor
- 32 MB RAM, 8 MB Flash
- SD Card Support

For initial setup, see the Quick Start Guide

<https://qnimble.com/QS>



Key Capabilities

- 100 kHz Servo bandwidth
- $< 3\mu s$ Latency
- 1 MS/s Analog Sampling
- Floating Point Processor
- Arduino™ Compatible
- Open Source

More details and full manual, available at

<https://qnimble.com/Quarto>



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Specifications

ADC

Parameter	Value
Channels	4
Number of bits	16
Modes	± 10 , $\pm 5V$, $\pm 2.5V$, $\pm 1.25V$
Max Sample Rate*	1 MS/s
Input Impedance	$> 100k\Omega$
Bandwidth	$> 400\text{ kHz}$

DAC

Parameter	Value
Channels	4
Number of bits	16
Step Size	$312.5\text{ }\mu V$
Max Sample Rate*	1 MS/s
Output Impedance	50Ω
Latency	$< 1\text{ }\mu s$

Processor

Parameter	Value
Speed	528 MHz
Interrupt Latency*	$< 250\text{ ns}$
Floating Point Acceleration	32-bit and 64-bit floats

Digital I/O

Parameter	Value
Channels	8
Voltage	3.3
Latency	$< 100\text{ ns}$

* See website for more details