


<b>NEW PRODUCT</b>	 A National Instruments Company	<b>Release Year</b> 2021	<b>Released Quarter</b> Q4
<b>Digilent Part Number</b> 6069-410-017 (MCC USB-1208HS-4AO)		<b>Category</b> DAQ and Data Logging	

## OVERVIEW

**Product Name:** MCC USB-1208HS-4AO High-Speed USB DAQ Device

**Product Subtitle:** 13-bit multifunction DAQ device for high-speed data acquisition applications

**Product Description:** The Measurement Computing USB-1208HS-4AO is a USB-based high-speed DAQ device and features 8 SE/4 DIFF analog inputs, 13-bit resolution, 1 MS/s sample rate, up to four analog outputs, 16 digital I/O, and one 32-bit counter. This device supports software-selectable ranges from  $\pm 5$  V to  $\pm 20$  V in differential mode, and software-selectable ranges from  $\pm 2.5$  V to  $\pm 10$  V, and 0 V to 10 V in single-ended mode. This device is USB-powered and requires no external power.

The USB-1208HS-4AO provides four 12-bit analog outputs. The output range is  $\pm 10$  V. Each output can update at a maximum rate of 1 MS/s.

The USB-1208HS-4AO has an external clock input terminal that supports input signals up to 1 MHz to pace A/D conversions from an external source. Also included is an external clock input terminal that supports input signals up to 1MHz to pace D/A conversions from an external source.

Users can program each of the 16 TTL-level digital I/O lines for either input or output.

The device supports two 32-bit TTL-level counters that accept frequency inputs of up to 20 MHz.

The USB-1208HS-4AO include a pulse width modulation (PWM) timer output with a software-selectable frequency range up to 20 MHz.

Software support includes DAQami, an optional out-of-the-box application for data logging, visualization, and signal generation. Data can be viewed in real-time or post-acquisition on user-configurable displays. Drivers are included for the most popular applications and programming languages including Visual C++®, Visual C#®, Visual Basic®.NET, DASyLab®, LabVIEW™, MATLAB®, and Python™.


**Key Search Terms:** Measurement Computing, DAQ, data acquisition, USB DAQ, high speed DAQ, analog, TTL, PWM, C++, C#, Visual Basic.Net, DASyLab, LabVIEW, MATLAB, Python

**Video Link:** N/A

**Datasheet:** <https://www.mccdaq.com/PDFs/specs/USB-1208HS-Series-data.pdf>

**Demo / Project Links:**

- [MCC Software Overview](#)
- [MCC Software Downloads](#)
- [MCC example programs](#)
- [USB-1208HS-4AO Manual](#)

<p><b>Features</b></p> <ul style="list-style-type: none"> <li>• 8 SE/4 DIFF analog inputs</li> <li>• 13-bit resolution</li> <li>• 1 MS/s sample rate</li> <li>• <math>\pm 20</math> V, <math>\pm 10</math> V, <math>\pm 5</math> V, <math>\pm 2.5</math> V, 0-10 V input ranges</li> <li>• Four 12-bit analog outputs</li> <li>• 16 digital I/O</li> <li>• Two counter inputs</li> <li>• One timer output</li> <li>• No external power required. USB cable is included</li> </ul>	<p><b>Product Image</b></p> 
<p><b>3 Target Applications</b></p> <ul style="list-style-type: none"> <li>• NA</li> </ul>	<p><b>Image Links:</b></p> <ul style="list-style-type: none"> <li>• <a href="https://drive.google.com/file/d/1l6tql1aAfGjLVYAxzn86z9Nogco7dbT/view?usp=sharing">https://drive.google.com/file/d/1l6tql1aAfGjLVYAxzn86z9Nogco7dbT/view?usp=sharing</a></li> <li>• <a href="https://drive.google.com/file/d/1JLKMcb2FgMEO7ettAWJ20ig56p6Z7Tvc/view?usp=sharing">https://drive.google.com/file/d/1JLKMcb2FgMEO7ettAWJ20ig56p6Z7Tvc/view?usp=sharing</a></li> <li>• <a href="https://drive.google.com/file/d/1D6Ea80G-bwegHfzImHZu76dUT-wtkh7t/view?usp=sharing">https://drive.google.com/file/d/1D6Ea80G-bwegHfzImHZu76dUT-wtkh7t/view?usp=sharing</a></li> </ul> <p><b>Related Products</b></p> <ul style="list-style-type: none"> <li>• MCC USB-1608GX (PN: 6069-410-010)</li> <li>• MCC USB-1608GX-2AO (PN: 6069-410-011)</li> </ul>