

Quantinuum H-Series Product Change Notification

Title of Change:	H1-2 upgrade to 20 qubits
Date of Change:	July 17th, 2023
Contact Information:	QCSupport@quantinuum.com
Products Impacted:	H1-2 quantum computer and H1-2 emulator
Changes to Product Data Sheet:	NO <input type="checkbox"/> YES <input checked="" type="checkbox"/>
Changes to Subscription Contract:	NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>
Changes to Interface:	All <input checked="" type="checkbox"/> Quantinuum API <input type="checkbox"/> Microsoft <input type="checkbox"/>
Description and Purpose:	<p>The purpose of this notification is to:</p> <ol style="list-style-type: none"> 1) Notify customers that the H1-2 quantum computer has been upgraded to N=20 qubits. 2) The H1-2 emulator has been upgraded to use the N=20 compiler and the error coefficients will be updated to values representative of H1-2 performance. <p>See additional information below for more details.</p>
Reason / Motivation for Change:	N=20 upgrade to H1-2 quantum computer
Action Required by Customers:	None

Additional Information:

1) Notification of H1-2 quantum computer upgrade to N=20 qubits

Going forward the H1-2 quantum computer (target: H1-2) will be available with 5 parallel gate zones and can support up to 20 qubits.

Prior to commercial availability the Quantinuum System Model H1 Product Data Sheet will be updated to reflect the H1-2 specifications, including typical, minimum, and maximum performance parameters. The updated Product Data Sheet will be posted [\[here\]](#) and on the user portal.

2) Notification of H1-2 emulator update to reflect H1-2 upgrade

The H1-2 emulator will receive an update to reflect N=20 qubits available on the H1-2 quantum computer. In addition, the error parameters in the Quantinuum System Model H1 Emulator Product Data Sheet will be updated to reflect the current state of the H1-2 quantum computer. The updated Emulator Product Data Sheet will be posted [\[here\]](#) and on the user portal.

In summary, the impact to customers of launching the 20-qubit H1-2 quantum computer is:

- H1-2 has been upgraded to 5 parallel gate zones with 20 qubits.
- The H1-2 Emulator will be updated to reflect the changes on the H1-2 quantum computer.
- The Quantinuum System Model H1 Product Data Sheet and Emulator product data sheet will be updated to reflect the H1-2 specifications, including typical, minimum, and maximum performance parameters.

Access to the H1-2 N=20 quantum computer is included in your current access and availability will be communicated via the operations calendar.