

**CONSOLIDATED AUDIT TRAIL (“CAT”)  
CLOCK SYNCHRONIZATION CERTIFICATION**

**BY**

Interactive Brokers LLC

[Industry Member]

**TO**

**PARTICIPANTS OF THE CAT NMS PLAN**

18 / 02 / 21

[DD/MM/YY]

**CLOCK SYNCHRONIZATION CERTIFICATION**

**BY**

Interactive Brokers LLC \_\_\_\_\_ hereby acknowledges that it is a member of the following national

[Industry Member]

securities exchange(s) and/or national securities association(s) (please select all that apply):

<input checked="" type="checkbox"/> BOX Exchange LLC	<input checked="" type="checkbox"/> Investors Exchange LLC	<input checked="" type="checkbox"/> NASDAQ MRX, LLC
<input checked="" type="checkbox"/> Cboe BYX Exchange, Inc.	<input checked="" type="checkbox"/> Long-Term Stock Exchange, Inc.	<input checked="" type="checkbox"/> NASDAQ PHLX LLC
<input checked="" type="checkbox"/> Cboe BZX Exchange, Inc.	<input type="checkbox"/> MEMX LLC	<input checked="" type="checkbox"/> The NASDAQ Stock Market LLC
<input checked="" type="checkbox"/> Cboe C2 Exchange, Inc.	<input checked="" type="checkbox"/> Miami International Securities Exchange LLC	<input checked="" type="checkbox"/> New York Stock Exchange LLC
<input checked="" type="checkbox"/> Cboe Exchange, Inc.	<input checked="" type="checkbox"/> MIAX PEARL, LLC	<input checked="" type="checkbox"/> NYSE American LLC
<input checked="" type="checkbox"/> Cboe EDGA Exchange, Inc.	<input checked="" type="checkbox"/> MIAX Emerald, LLC	<input checked="" type="checkbox"/> NYSE Arca, Inc.
<input checked="" type="checkbox"/> Cboe EDGX Exchange, Inc.	<input checked="" type="checkbox"/> NASDAQ BX, Inc.	<input checked="" type="checkbox"/> NYSE Chicago, Inc.
<input checked="" type="checkbox"/> Financial Industry Regulatory Authority, Inc.	<input checked="" type="checkbox"/> NASDAQ GEMX, LLC	<input checked="" type="checkbox"/> NYSE National, Inc.
	<input checked="" type="checkbox"/> NASDAQ ISE, LLC	
<input type="checkbox"/> Other:		

To achieve compliance with the clock synchronization requirements of the CAT compliance rule, including any interpretive or exemptive guidance applicable to such rule, of each national securities exchange and/or national securities association identified above (the “Clock Synchronization Requirement”), the undersigned, who is duly authorized to execute this certification on behalf of Interactive Brokers LLC \_\_\_\_\_, hereby certifies that Interactive Brokers LLC \_\_\_\_\_ has:

[Industry Member]

[Industry Member]

(1) \_\_\_\_\_ synchronized its Business Clocks, other than such Business Clocks used solely for Manual Order Events or used solely for the time of allocation on Allocation Reports, at a minimum to within a fifty (50) millisecond tolerance of the time maintained by the National Institute of Standards and Technology, and maintains such synchronization; and

(2) synchronized (A) its Business Clocks used solely for Manual Order Events and (B) its Business Clocks used solely for the time of allocation on Allocation Reports at a minimum to within a one second tolerance of the time maintained by the National Institute of Standards and Technology, and maintains such synchronization.

Capitalized terms are defined as set forth in the CAT compliance rule series of each national securities exchange and national securities association.

EXECUTED as of the date first written above.

Interactive Brokers LLC

[Industry Member]

By: Tom Barkanic

Name: Tom Barkanic

Title: IS Manager

***Industry Members are not required to submit such certifications to the exchanges or FINRA. Instead, originals of such certifications must be maintained by Industry Members as part of their books and records and be available to regulators upon request. Industry Members who are members of multiple Participants need only make a single clock synchronization certification.***

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<input checked="" type="checkbox"/> Cboe Exchange, Inc.	<input type="checkbox"/> MIAX PEARL, LLC	<input type="checkbox"/> NYSE American LLC
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