

**Corporate
 Authority Certificate and Trading Authorization
 For Brokerage Accounts**
 (For use by Corporations Only)

- Complete all sections, sign and return.

Account Number(s)

Account Title:

Advisor (if applicable):

I, _____, being the _____ of _____ a corporation duly organized and validly existing under the laws of _____, and having its chief executive office or its only place of business at _____ (the "Corporation"), in the name and on behalf of the Corporation, hereby:

- (a) represent, and warrant that I am a duly authorized representative of the Corporation and am authorized to execute this Certificate on behalf of the Corporation;
- (b) certify that below is a true, complete and correct copy of the resolutions¹ (the "Resolutions") duly adopted by the Board of Directors of the Corporation as of _____, which resolutions have not been amended, modified, revoked or rescinded since their adoption to and including the date hereof;

RESOLVED, that _____ (the "Corporation") is hereby authorized and directed to establish and maintain one or more accounts, including margin accounts (if the Corporation is authorized to open a margin account, the Corporation has checked the box at the end of the Certificate), (each, an "Account"), and to engage in any of the transactions hereinafter described, in each case, with or through J.P. Morgan Securities LLC, J.P. Morgan Clearing Corp., J.P. Morgan Markets Limited and/or any of their now or hereafter existing affiliated entities (collectively, "JP Morgan"), through an Account or otherwise, with JP Morgan acting as principal or agent in such transactions;

RESOLVED, that the Corporation is hereby authorized and empowered to purchase (including on a forward or when-issued basis or on margin) hold, finance, pledge, exercise, convert, tender, redeem, exchange, transfer, assign, sell (including on a short, when-issued or forward basis), enter into, write, issue, terminate, amend and otherwise deal and trade, singly or in combination, in the following: any and all forms of securities, evidences of interest, participation, or indebtedness, instruments of any issuer (whether publicly registered or exempt from registration) transactions and investments, including, but not limited to common or preferred stock, scrip, warrants and rights; bills, notes, bonds or debentures of any coupon, (including "zero coupon" or maturity; certificates of deposit, bank notes or deposit notes; commercial paper, money market instruments; listed and/or over-the-counter options, commodities, commodity futures, options on futures (including single stock futures contracts and other securities futures products), transactions in foreign currencies; limited partnership interests and other interests in hedge funds, buyout funds, real estate investment trusts, venture capital funds, private equity funds and private equity investment vehicles; whole mortgage loans, any and all interests and participations in mortgage loans, mortgage-backed and asset backed securities; any kind of derivative investment, including interest rate, currency, credit, equity or other swap transactions; repurchase and reverse* repurchase transactions, buy/forward sale transactions, dollar rolls, secured lending transactions and any instrument or interest generally regarded as an investment or hedge, secured or unsecured, or any transaction, that is similar to any of those described above (including an option with respect to any of them) (each of the foregoing, an "Activity");

RESOLVED, that each of the directors, officers, employees and agents of the Corporation listed below ("each, an Authorized Person") is hereby individually authorized for and on behalf of the Corporation by oral, written, electronic or other means to: (1) give to and receive from JP Morgan oral, written or electronic instructions, confirmations, notices or demands with respect to any Account, Activity or transaction; (2) bind the Corporation to enter into and perform any transaction or agreement, amendment or modification thereof, relating to any Account, Activity or transaction involving the Corporation; (3) lend or borrow money or securities and secure the repayment thereof with the property of the Corporation; (4) pay in cash or by check or by credit or debit card or draft drawn upon the funds of the Corporation any sums required to be paid in connection with any Account, Activity or transaction; (5) order the transfer of record of any securities, funds or other property to any name and to accept delivery of any securities, funds or other property; (6) direct the sale or exercise of any rights with respect to any securities or other property; (7) agree to any terms or conditions or execute or otherwise assent to any document or agreement affecting any Account, Activity or transaction; (8) endorse any securities or other property in order to pass title thereto (or any interest therein); (9) direct JP Morgan to surrender any securities or other property for the purpose of effecting any exchange or conversion thereof; (10) appoint any other person or persons to do any and all things which such director, officer, employee or agent of the Corporation is hereby empowered to do; and (11) generally, take all such action as such director, officer, employee or agent of the Corporation may deem necessary or desirable to implement or facilitate the trading activities described herein;

AUTHORIZED PERSONS

<u>Name of Director, Officer or Employee of Corporation or Agent</u>	<u>Title / Position</u>	<u>Specimen Signature</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

¹ Please ensure that the resolutions set forth in the certificate are identical to the resolutions adopted by the Corporation.
 * Unless representation (d) below provides to the contrary.

RESOLVED, that each of the Authorized Persons listed above is hereby individually authorized, for and on behalf of the Corporation, to execute or otherwise assent to or enter into on behalf of the Corporation all agreements, confirmations, releases, assignments, powers of attorney or other documents in connection with any Account, Activity or transaction, including without limitation, to execute and deliver instructions to JP Morgan to receive or deliver funds or securities, whether free or versus payment, or trade or non-trade related (including to any Authorized Persons);

RESOLVED, that notwithstanding the foregoing resolutions, any person with actual or apparent authority is authorized and empowered by the Corporation to undertake any Activity;

RESOLVED, that all actions previously taken by any director, officer, employee, Authorized Person or agent of the Corporation in connection with or related to the matters set forth in or reasonably contemplated or implied by the foregoing resolutions be, and each of them hereby is, adopted, ratified, confirmed and approved in all respects as the acts and deeds of the Corporation;

RESOLVED, that, JP Morgan may rely on the certifications, representations, warranties, and agreements contained in this Certificate until the close of business on the second business day after JP Morgan receives written notice of the modification or revocation thereof at its offices at Client Services NY1-H051, Three MetroTech Center, Brooklyn, New York 11245-0001 marked to the attention of: (i) Global Clearing Services-New Accounts (if the Corporation's account is maintained by the Global Clearing Services Department and the Corporation engages in equities/prime brokerage), (ii) Fixed Income Clearing Services Managing Director (if the Corporation's account is maintained by the Global Clearing Services Department and the Corporation engages in fixed income trading) and (iii) Documentation Department (if the Corporation's account is maintained by the Private Client Services Department or any other JP Morgan department) or any other address that has been provided by JP Morgan specifically for such purpose and in each case with a copy to the Corporation's account executive or relationship manager(s) at JP Morgan, provided, that JP Morgan may rely on such certifications, representations, warranties, covenants and agreements with respect to any transaction entered into prior to the effectiveness of such modification or revocation;

RESOLVED, that, JP Morgan, their successors and assigns and their respective affiliates, directors, officers, agents and employees (the "Released Parties") are hereby released and forever discharged from, and against, any and all liabilities, responsibilities, obligations, claims, costs, damages, expenses (including attorneys' fees and expenses), penalties judgments or awards incurred or suffered by the Released Parties in connection with their reliance on this Certificate; the Corporation acknowledges that the release and discharge set forth herein are in addition to, and in no way limit or restrict, any rights which any of the Released Parties may have under any other agreement(s) between the Corporation and any of the Released Parties or under any federal or state statutes, laws, rules or regulations; and agree that this release and discharge shall survive the revocation of this Certificate with respect to transactions entered into prior to the effectiveness of such revocation;

(c) represent and warrant that the Corporation **[check the correct statement or cross out the incorrect statement]**

- has more than one officer, director or employee
- (i) has only one officer, director and employee and that person is the sole beneficial owner of the Corporation, and
(ii) the Corporation has provided evidence of such sole ownership to JP Morgan (attached hereto);

(d) represent and warrant that the Resolutions **[check the correct statement or cross out the incorrect statement]**

- authorize the Corporation to engage in margin transactions credited or debited to an account at JP Morgan
- do not authorize the Corporation to engage in margin transactions credited or debited to an account at JP Morgan; and

(e) represent and warrant that the Resolutions **[check the correct statement or cross out the incorrect statement]**

- authorize each Authorized Person to order the trade and non-trade related free delivery of funds and securities to themselves and third parties.
- do not authorize each Authorized Person to order the trade and non-trade related free delivery of funds and securities to themselves and third parties.

IN WITNESS WHEREOF the Corporation, through the undersigned, has executed this Certificate and affixed the seal of the Corporation as of the ____ day of _____, _____.

BY*: _____
Signature

(Typed or Printed Name) (Title)

[CORPORATE SEAL]

Mark here if a corporate seal has not been adopted by the Corporation and is not required in the applicable jurisdiction.

*** This Certificate must be executed by a person or entity duly authorized by the Corporation to do so. The person executing this Certificate shall not be one of the persons authorized to act for the Corporation pursuant to the Resolutions referred to in clause (b) above unless (i) the Corporation has provided evidence that the Corporation has only one officer, director or employee or (ii) the cross certification appearing below is completed.**

Cross Certification**

I, _____, the undersigned _____ of the Corporation hereby affirm and ratify each of the certifications, representations, warranties, covenants, and agreements contained in this Certificate.

IN WITNESS WHEREOF the Corporation, through the undersigned, has executed this Certificate as of the ____ day of _____, _____.

By: _____

****The Cross-Certification should be completed by a person authorized to act for the Corporation pursuant to the Resolutions set forth in this Certificate.**

** Unless representation (e) below provides to the contrary.