J.P.Morgan

Trading Authorization Request

J.P. Morgan Securities LLC Member FINRA and SIPC

You can submit this form and any attachments by:

Secure MessageFor instructions on how to submit this request by secure message, visit www.chase.com/ brokerageforms.

(800) 805-3909

Mail

J.P. Morgan Securities LLC Attn: Account Processing Mail Code: IL-0291 10 S. Dearborn St. Chicago, IL 60603

If you need help, contact our Client Service Center at (800) 392-5749 or submit a secure message through chase.com.

Use this form to

 Authorize a non-account holder (an Authorized Agent) to trade in an investment account, or to both trade and distribute funds from an account.

What you need to know

- If there is a joint account holder on this account, then both the primary and joint account holders must sign this form.
- Authorized Agents have the ability to review all account information online, by phone or in a branch.
- To designate more than one Authorized Agent, submit a separate copy of this form for each Authorized Agent.
- If the Authorized Agent is given authority to distribute funds in Section 2, the distribution will be made to the account holder's address of record or to the account holder's linked bank account.
- For your protection, we may call you at the number on file for your account to confirm this transaction before it is processed.
- The Authorized Agent cannot be an employee of JPMorgan Chase & Co. or an affiliate unless permitted as an exception under the company's policy.
- If you have added (a) a new Authorized Agent who directly or indirectly owns more than 10% of the equity interest of the entity client or (b) a new individual with significant responsibility for managing the entity client, please contact your financial advisor(s).

1.	Tell us about your account	
	Account Holder Name	Account Number
2.	What Is Your Request?	
	Add - I'd like to add an Authorized Agent to this account.	
	Replace - I'd like to override all existing authorizations on this ac Agent information.	count and substitute new Authorized
	Remove - I'd like to remove an Authorized Agent from this account	nt.
	If adding or replacing authorization, what level of authority will the complete if you are removing Authorized Agent authority.)	agent have on this account? (Do not
	 Trading Authorization 	
	Trading and Disbursement Authorization	
	Optional duplicate mailing instructions. Select all that apply.	
	Mail duplicate account statements to agent	
	Mail duplicate trading confirmations to agent	

If you select "Remove." then only complete the

Authorized Agent Name and SSN/TIN fields in Section 3. Be sure to also complete Section 8.

Disbursement authority is not available for IRAs. Any other selection made for an IRA will default to "Trading Authorization."



Trading Authorization Request

	Authorized Agent Name
	Social Security or Tax ID Number (TIN) Date of Birth (month/day/year) Phone Number
ized Agent must	
e United States.	Logal/Decidential Address (no DO Doy or "In care of" address)
	Legal/Residential Address (no PO Box or "In care of" address)
	City State ZIP Code
	Authorized Agent Mailing Address is the same as the Legal/Residential Address. (If selected, it is no necessary to provide the Mailing Address below.)
	Mailing Address
	City State ZIP Code
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Your Account Number

Your Name

J.P.Morgan

Trading Authorization Request

Is the Authorized Agent emp	loyed by FINRA? provide the following informa	tion	
No Yes; II yes, piease	provide the following illiornia	LIOII.	
Name of Person	Employer Name		Attention/In care of:
Employee Address Line 1		City	State
Employee Address Line 2		Country	ZIP Code
	loyed by, or a spouse of, or fin		
	n (other than JPMorgan Chase provide the following informa		or an investment advisor?
1			1.1
Name of Person	Employer Name		Attention/In care of:
Employee Address Line 1		City	State
Employee Address Line 1		City	State
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Your Account Number

If you are filling this form out by hand, you will have to fill in the Authorized Agent's name. If you are filling out this form electronically, the Authorized Agent's name will automatically populate.

Your Name



Trading Authorization Request

6. Authorization

The terms "I" or "my" refer to the owner of the above listed investment account (Account) and will deemed to be plural if there are multiple owners on the Account. Based on your current offering and any trading approvals applicable to my Account, I hereby authorize the person whose signature appears in Section 7 (Authorized Agent) to give orders for my Account to buy (including on a forward or when-issued basis or on margin and securities lending), sell (including short, when-issued and forward sales), exchange, borrow, lend, convert, tender, trade or otherwise acquire or dispose of stocks; bonds; securities; options (including uncovered option writing); any other securities and commodities; and contracts relating to the same (including foreign futures, foreign options, over-the-counter foreign currency, spot, forward and foreign currency option contracts) and other investments, on margin and securities lending or otherwise (including the purchase and/or sale of option contracts and margin transactions if I have previously applied for and received such features on my Account), and to enter into repurchase and reverse repurchase transactions for and at the risk of my Account all in accordance with the applicable terms and conditions of J.P. Morgan Securities LLC (JPMS) and/or any of its now or hereafter existing affiliated entities. If so empowered under this document, my Authorized Agent shall also have authority to request disbursements of funds and/or securities from my Account, provided that such funds and/or securities will only be delivered to and issued in my name. Funds may also be sent directly to a bank account preauthorized by me. If my Authorized Agent engages in either margin or option transactions, I recognize the inherent risks involved and am fully prepared financially to undertake such risks. I understand that options may be traded with a greater degree of frequency than stocks or bonds due to their short-term nature and further understand that a commission will be charged to my Account each time a transaction occurs. I hereby agree to pay for all trades in my Account placed by my Authorized Agent by settlement date and to indemnify and hold JPMS harmless from and to pay JPMS promptly on demand, any and all losses arising there from or debit balance due thereon.

JPMS is authorized to follow instructions of my Authorized Agent concerning transactions in my Account. I hereby ratify and confirm any and all transactions with JPMS made by my Authorized Agent or for my Account whether before or after executing this authorization and that all acts and transactions of my Authorized Agent are solely for my Account and responsibility. My Authorized Agent may inquire about and trade in my Account, and JPMS is authorized to follow the instructions of my Authorized Agent. Notwithstanding anything to the contrary stated herein, my Authorized Agent may not engage in any transaction for which my Account has not been approved pursuant to a request by me.

JPMS and its affiliates shall assume no responsibility for reviewing or monitoring any investment decision or activity of my Authorized Agent. My Authorized Agent is authorized to act for me and on my behalf, in the same manner and with the same force and effect as I could, with respect to such purchases, sales or transactions in the Account. If the Authorized Agent is an investment advisor, I acknowledge and agree that the Authorized Agent is solely responsible for making or recommending investments. JPMS or its affiliates did not select, endorse or recommend the Authorized Agent and makes no determination as to the suitability of the investments recommended or entered into by such Authorized Agent on my behalf. I hereby agree to indemnify and hold JPMS, its successors, affiliates, assigns, officers, directors, agents and employees (the **Indemnified Parties**), harmless from, and to pay the Indemnified Parties promptly on demand, in connection with their reliance on this authorization and my other obligations set forth herein for (i) any and all losses, liabilities, damages, claims, costs expenses or financial obligations (including attorneys' fees and expenses) incurred by the Indemnified Parties which may arise from the acts or omissions of my Authorized Agent with respect to my Account; and (ii) any action taken by the Indemnified Parties at the direction of my Authorized Agent in accordance with terms of this authorization.

This authorization is a continuing one and shall not be affected by the subsequent disability or incompetence of the undersigned and shall remain in full force and effect until the close of business on the second business day after JPMS or its affiliates are notified in writing of my death, dissolution or insolvency (or, if two accountholders sign, the death, dissolution or insolvency of either one), or unless modified or revoked through written notice delivered to J.P. Morgan Securities LLC, Attention: Account Processing, Mail Code: IL1-0291, 10 S. Dearborn St., Chicago, IL 60603, and shall inure to the benefit of JPMS, its affiliates or any successor firm or firms, and their successors and assigns. Such revocation, however, shall not affect any prior liability in any way resulting from any transactions initiated before receipt of the revocation. Furthermore, it is understood this authorization and indemnity are an addition to and in no way restrict any rights which may exist by law or under any other agreement(s) between me and JPMS or its affiliates. This authorization and indemnity shall be construed, administered and enforced according to the laws of Ohio, and shall inure to the benefit of JPMS and of any successor firm(s) irrespective of any change(s) at any time in the personnel thereof for any cause whatsoever, and to the benefit of the affiliates and the assigns of JPMS or any successor firm(s). This authorization supersedes any prior trading authorization that I may have executed with regard to my Account and is in addition to (but in no way limits or restricts) any rights which any of the Indemnified Parties may have under any other agreement(s) between me and any of the Indemnified Parties or under any federal or state statutes, laws, rules or regulations. This indemnity shall survive termination of this authorization with respect to transactions entered into during its term.

Your Name	Your Account Number



Trading Authorization Request

7. Authorized Agent Signature		
By signing this <i>Trading Authorization Request</i> , you agree that when trading f services, both the account holder(s) and you are bound by the terms and co	or the Account, including any use of nditions of the JPMS Disclosures & I	f JPMS online or other electronic nvestment Account Agreement.
Authorized Agent Signature		Date (month/day/year)
8. Account Holder Signature(s)		
I have read the provisions of this <i>Trading Authorization Request</i> carefully Agent broad rights and powers to act in my place with respect to my Accoexercise of such rights and powers fully binds me. Finally, I intend you to Authorization and do so of my own free will, untainted by duress or undu document that I do not understand, I will ask a lawyer to explain it. I undeadvice. In its sole discretion and for whatever reason, JPMS or its affiliate executing any transaction requested by a designated Agent. This authorized JPMS and its affiliates. I hereby acknowledge that I have read, understood Authorization.	ount. I understand that anything meaning on the fact that I am fully come influence from any source. If the erstand that JPMS and its affiliates as may request additional documer tation shall be applicable to all ass	ny Authorized Agent does in the npetent to make this Trading ere is anything about this do not render legal or tax ntation from me prior to sets I hold in my Account with
Primary Account Holder Signature		Date (month/day/year)
Joint Account Holder Signature		Date (month/day/year)
Primary Account Holder Identity Verification		
A notary public or other officer completing this certificate verifies only the ic is attached, and not the truthfulness, accuracy, or validity of that document.		e document to which this certificat
STATE OF	Place :	Stamp Here
COUNTY OF		
Subscribed, sworn to and acknowledged before me by		
Subscribed, Sworn to and acknowledged before the by		
Name of Document Signer (above)	,	
this day of		
Day Month Year		
Signature of Notary Public		
Signature of Notary Public	My commission expires	
Joint Account Holder Identity Verification (if applicable) A notary public or other officer completing this certificate verifies only the ic is attached, and not the truthfulness, accuracy, or validity of that document.		e document to which this certificat
STATE OF) Place !	Stamp Here
COUNTY OF) SS:	
Subscribed, sworn to and acknowledged before me by	_'	
Subscribed, short to and acidiomedged before the by		
Name of Document Signer (above)		
this day of , ,		
Day Month Year		
Signature of Notary Public	My commission expires	
Your Name	Your Account N	umber



Authorized Agent Identification Options Reference Sheet Only — do not send this page

U.S. Citizen Primary ID*					
U.S. State-issued ID (with photo)	U.S. Military/Veteran's ID (with photo)	U.S. Tribal or Bureau of Indian Affairs ID (with photo)			
U.S. Passport (with photo)					

Resident Alien

Primary ID**

Passport (with photo) Matricula/Consular Card Permanent Resident Card/Green Card (with photo)

^{*} A Social Security card may only be used as a Primary ID if the client is a minor, senior or person with a disability.

^{**} A Permanent Resident Card (Green Card) with photo must be used as the Primary ID if one has been issued. If one has not been issued, a Resident Alien may use a Matricula/Consular Card or Passport (with photo). Non-U.S. citizens without a Permanent Resident Card (Green Card) with photo must provide a Primary or Secondary ID displaying their current U.S. residential address. EXCEPTION: When the client provides a Passport as Primary ID and a Student INS Form I-20, ICE Form I-20 or DS-2019 as Secondary ID, the IDs are not required to display his/her current U.S. residential address.