

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934**

**Date of Report (Date of Earliest Event Reported): July 23, 2024**

**MKS Instruments, Inc.**  
(Exact name of registrant as specified in its charter)

**Massachusetts**  
(State or other jurisdiction  
of incorporation)

**000-23621**  
(Commission  
File Number)

**04-2277512**  
(I.R.S. Employer  
Identification No.)

**2 Tech Drive, Suite 201, Andover,  
Massachusetts**  
(Address of principal executive offices)

**01810**  
(Zip Code)

**Registrant's telephone number, including area code: 978-645-5500**

**Not Applicable**  
**Former name or former address, if changed since last report**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Securities registered pursuant to Section 12(b) of the Act:**

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, no par value	MKSI	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 1.01 Entry into a Material Definitive Agreement.**

On July 23, 2024 (the “Effective Date”), MKS Instruments, Inc., a Massachusetts corporation (the “Company”), entered into the Fourth Amendment to Credit Agreement (the “Fourth Amendment”), which amends the Credit Agreement, dated as of August 17, 2022, by and among the Company, the lenders and letter of credit issuers party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent (as amended from time to time, including by the First Amendment to Credit Agreement, dated October 3, 2023, by the Second Amendment to Credit Agreement, dated January 22, 2024, by the Third Amendment to Credit Agreement, dated February 13, 2024 and by the Fourth Amendment, the “Credit Agreement”). The Fourth Amendment (i) refinanced the Company’s existing senior secured tranche B term loans with a new \$2,650 million senior secured tranche B term loan (the “USD Tranche B”) and a new €800 million senior secured tranche B term loan (the “Euro Tranche B”), (ii) decreased the applicable margin for the USD Tranche B from 2.50% to 2.25% with respect to SOFR borrowings and from 1.50% to 1.25% with respect to base rate borrowings, (iii) decreased the applicable margin for the Euro Tranche B from 3.00% to 2.75% and (iv) extended the period during which a 1.00% prepayment premium may be required if the Company prepays any loans under the USD Tranche B or the Euro Tranche B in connection with a repricing transaction until the date that is six months following the Effective Date. The repriced USD Tranche B loans and Euro Tranche B loans were issued without original issue discount. In connection with the execution of the Fourth Amendment, the Company paid customary fees and expenses of JPMorgan Chase Bank, N.A.

In addition, immediately prior to the effectiveness of the Fourth Amendment, the Company made a voluntary prepayment of approximately \$110 million, consisting of \$69 million principal amount of USD Tranche B loans and €38 million principal amount of Euro Tranche B loans.

The foregoing description of the Fourth Amendment does not purport to be complete and is qualified in its entirety by reference to the full text of the Fourth Amendment, which is filed as Exhibit 10.1 to this Current Report on Form 8-K and incorporated herein by reference.

**Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.**

The disclosure under Item 1.01 of the Current Report on Form 8-K is incorporated herein by reference.

**Item 7.01 Regulation FD Disclosure.**

On July 23, 2024, the Company issued a press release announcing the execution of the Fourth Amendment. A copy of the press release is attached as Exhibit 99.1 to this Current Report. The information in this Item 7.01 of this Current Report on Form 8-K, including the press release attached hereto as Exhibit 99.1, is being furnished pursuant to Item 7.01 and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, except as expressly set forth in such filing.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	<a href="#">Fourth Amendment to Credit Agreement, dated as of July 23, 2024, by and among MKS Instruments, Inc., as parent borrower, the other loan parties party thereto, JPMorgan Chase Bank, N.A., as administrative agent, and each lender party thereto</a>
99.1	<a href="#">Press Release dated July 23, 2024</a>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

July 23, 2024

MKS Instruments, Inc.

By: /s/ Kathleen F. Burke

Name: Kathleen F. Burke

Title: Executive Vice President, General Counsel &  
Secretary

**FOURTH AMENDMENT TO CREDIT AGREEMENT**

This FOURTH AMENDMENT TO CREDIT AGREEMENT (this “Amendment”), dated as of July 23, 2024, is entered into by and among MKS INSTRUMENTS, INC., a Massachusetts corporation, as Parent Borrower (the “Parent Borrower”), the other Loan Parties party hereto, JPMORGAN CHASE BANK, N.A. (“JPM”), in its capacity as Administrative Agent, and each 2024-1 Term B Participating Lender (as defined below) party hereto (including pursuant to an executed 2024-1 Dollar Term B Participation Notice (as defined below) or an executed 2024-1 Euro Term B Participation Notice (as defined below), as applicable), under that certain Credit Agreement, dated as of August 17, 2022, among the Parent Borrower, JPM, as Administrative Agent, Collateral Agent and an L/C Issuer, the Lenders party thereto from time to time and the other Persons party thereto from time to time (as amended, restated, amended and restated, supplemented and otherwise modified prior to the date hereof, the “Existing Credit Agreement”, and as amended by this Amendment, and as otherwise amended, restated, amended and restated, supplemented and otherwise modified from time to time, the “Credit Agreement”). Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to them in the Credit Agreement.

**WITNESSETH**

WHEREAS, reference is made to that certain Engagement Letter, dated as of June 17, 2024 (as amended, modified, supplemented or waived from time to time, the “Engagement Letter”), between the Parent Borrower and JPM (the “Engagement Party”);

WHEREAS, the Parent Borrower has appointed each of JPM, Barclays Bank PLC, BofA Securities, Inc., Citibank, N.A., HSBC Securities (USA) Inc., Mizuho Bank, Ltd., Morgan Stanley Senior Funding, Inc. and PNC Bank, National Association as Joint Lead Arrangers and Joint Lead Bookrunners for this Amendment and the transactions contemplated hereby (each in such capacities, a “2024-1 Lead Arranger”);

WHEREAS, as of the date hereof and prior to giving effect to this Amendment, the Parent Borrower has previously obtained under the Existing Credit Agreement 2023-1 Dollar Term B Loans denominated in Dollars with respect to which the aggregate principal amount of \$2,649,518,987.34 remains outstanding (the “Existing 2023-1 Dollar Term B Loans”) and Initial Euro Term B Loans denominated in Euros with respect to which the aggregate principal amount of €800,000,000.00 remains outstanding (the “Existing Initial Euro Term B Loans”, and together with the Existing 2023-1 Dollar Term B Loans, the “2024-1 Repriced Term B Loans”); and each Lender holding a 2024-1 Repriced Term B Loan immediately prior to the effectiveness of this Amendment, an “Existing Term B Lender”);

WHEREAS, pursuant to Section 2.18 of the Existing Credit Agreement, the Parent Borrower, the Administrative Agent and each Lender providing Specified Refinancing Debt may amend the Existing Credit Agreement pursuant to a Refinancing Amendment to add new term loan facilities to the Facilities to refinance all or any portion of any Term Loan Tranche then outstanding;

WHEREAS, pursuant to Section 2.18 of the Existing Credit Agreement, the Parent Borrower desires to refinance (i) the Existing 2023-1 Dollar Term B Loans with, and create a new Class of, 2024-1 Dollar Term B Loans (as defined below) in an aggregate principal amount of \$2,649,518,987.34, and (ii) the Existing Initial Euro Term B Loans with, and create a new Class of, 2024-1 Euro Term B Loans (as defined below) in an aggregate principal amount of €800,000,000.00;

WHEREAS, on the Fourth Amendment Effective Date (as defined below), each Existing Term B Lender executing and delivering (i) a 2024-1 Dollar Term B Participation Notice (a “2024-1 Dollar Term B Participation Notice”) in substantially the form attached as Annex B hereto (or such other form as the

Administrative Agent may approve) or (ii) a 2024-1 Euro Term B Participation Notice (a “2024-1 Euro Term B Participation Notice”) in substantially the form attached as Annex C hereto (or such other form as the Administrative Agent may approve), as applicable, and, in each case, electing the “cashless settlement option” therein (each such Lender in such capacity, a “2024-1 Dollar Term B Converting Lender” or a “2024-1 Euro Term B Converting Lender”, as applicable, and collectively, the “2024-1 Term B Converting Lenders”) shall be deemed to have exchanged the outstanding principal amount of its 2024-1 Repriced Term B Loans, or such lesser amount as the Engagement Party may allocate in connection with the syndication of the 2024-1 Term B Loans (as defined below), for an equal principal amount of 2024-1 Term B Loans under the Credit Agreement;

WHEREAS, on the Fourth Amendment Effective Date (as defined below), each Existing Term B Lender executing and delivering a 2024-1 Euro Term B Participation Notice and electing the “cash settlement option” therein shall purchase 2024-1 Euro Term B Loans under the Credit Agreement in an outstanding principal amount equal to its Existing Initial Euro Term B Loans, or such lesser amount as the Engagement Party may allocate in connection with the syndication of the 2024-1 Euro Term B Loans;

WHEREAS, on the Fourth Amendment Effective Date, each Person that executes and delivers a direct counterpart of this Amendment as a (i) 2024-1 Dollar Term B Participating Lender (each such Person in such capacity, a “2024-1 Dollar Term B Funding Lender” and, together with each 2024-1 Dollar Term B Converting Lender executing and delivering a 2024-1 Dollar Term B Participation Notice, the “2024-1 Dollar Term B Participating Lenders”), or (ii) 2024-1 Euro Term B Participating Lender (each such Person in such capacity, a “2024-1 Euro Term B Funding Lender” and, together with each 2024-1 Euro Term B Converting Lender executing and delivering a 2024-1 Euro Term B Participation Notice, the “2024-1 Euro Term B Participating Lenders”, and together with the 2024-1 Dollar Term B Participating Lenders, the “2024-1 Term B Participating Lenders”), will make available 2024-1 Term B Loans, in Dollars or Euros, as applicable, to the Parent Borrower in an aggregate principal amount equal to its 2024-1 Dollar Term B Commitment (as defined below) or 2024-1 Euro Term B Commitment (as defined below), as applicable, the proceeds of which will be used by the Parent Borrower, in part, to repay in full the outstanding principal amount of the 2024-1 Repriced Term B Loans;

WHEREAS, in order to effect the 2024-1 Term B Loans and the 2024-1 Term B Commitments (as defined below), the Parent Borrower, the Administrative Agent, each 2024-1 Term B Participating Lender and the other parties party hereto have agreed to make certain amendments to the Existing Credit Agreement as set forth herein;

WHEREAS, (a) the 2024-1 Term B Participating Lenders are willing to grant the extension of credit contemplated hereby, in each case on the terms and subject to the conditions of this Amendment and the Credit Agreement, and (b) to the extent such consent is required, the Administrative Agent and the Parent Borrower consents to each of the 2024-1 Term B Participating Lenders providing the 2024-1 Dollar Term B Loans or 2024-1 Euro Term B Loans, as applicable, being Lenders under the Credit Agreement; and

WHEREAS, each Loan Party party hereto expects to realize substantial direct and indirect benefits as a result of this Amendment becoming effective and the consummation of the transactions contemplated hereby and agrees to reaffirm its obligations pursuant to the Credit Agreement, the Collateral Documents, and the other Loan Documents to which it is a party.

**AGREEMENT**

NOW, THEREFORE, in consideration of the premises and mutual agreements herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

**ARTICLE I  
2024-1 DOLLAR TERM B LOANS AND 2024-1 EURO TERM B LOANS**

Section 1.01 2024-1 Dollar Term B Loans and 2024-1 Euro Term B Loans. Subject to the terms and conditions set forth herein and the occurrence of the Fourth Amendment Effective Date:

(a) (i) the 2024-1 Dollar Term B Loans effected hereby shall constitute a new Class of Term Loans under the Credit Agreement, which Class of Term Loans shall be titled “2024-1 Dollar Term B Loans”, and (ii) the 2024-1 Euro Term B Loans effected hereby shall constitute a new Class of Term Loans under the Credit Agreement, which Class of Term Loans shall be titled “2024-1 Euro Term B Loans”, and together with the 2024-1 Dollar Term B Loans, the “2024-1 Term B Loans” thereunder, and shall have the following terms and conditions:

- (i) the Applicable Rate for (i) the 2024-1 Dollar Term B Loans shall be (A) 2.25% per annum for Term Benchmark Loans, (B) 2.25% per annum for RFR Loans and (C) 1.25% per annum for Base Rate Loans, and (ii) the 2024-1 Euro Term B Loans shall be 2.75% per annum for Term Benchmark Loans;
- (ii) the Floor (i) with respect to 2024-1 Dollar Term B Loans shall be 0.50% per annum, and (ii) with respect to 2024-1 Euro Term B Loans shall be 0.00% per annum;
- (iii) clause (b) of the definition of Adjusted Term SOFR Rate and clause (b)(ii) of the definition of Adjusted Daily Simple RFR shall each be deemed to be 0% with respect to the 2024-1 Dollar Term B Loans;
- (iv) the Maturity Date in respect of the 2024-1 Term B Loans shall be the earliest of (i) the seventh anniversary of the Closing Date, (ii) the date of termination in whole of the 2024-1 Term B Commitments pursuant to Section 2.06(a) of the Credit Agreement prior to any 2024-1 Term B Borrowing and (iii) the date that the 2024-1 Term B Loans are declared due and payable pursuant to Section 8.02 of the Credit Agreement;
- (v) the 2024-1 Term B Loans borrowed, converted or exchanged under this Section 1.01 and subsequently repaid or prepaid may not be reborrowed. The 2024-1 Term B Loans may be made, converted and/or continued, as applicable, as Term Benchmark Loans, RFR Loans or Base Rate Loans, to the extent permitted by and on the terms and conditions applicable to Term Loans under the Credit Agreement;
- (vi) the Parent Borrower shall repay to the Administrative Agent for the ratable account of the applicable Term Lenders holding 2024-1 Term B Loans the aggregate original principal amount of the 2024-1 Term B Loans in consecutive, equal, quarterly installments as follows payable on the last Business Day of each fiscal quarter of the Borrowers set forth below (which installments shall, to the extent applicable, be reduced as a result of the application of prepayments in

accordance with the order of priority set forth in Sections 2.05 and 2.06 of the Credit Agreement, or be increased as a result of any increase in the amount of 2024-1 Term B Loans pursuant to Section 2.14 of the Credit Agreement (such increased amortization payments to be calculated in the same manner (and on the same basis) as the schedule set forth below for 2024-1 Term B Loans made as of the Fourth Amendment Effective Date)):

<u>Date</u>	<u>Amount</u>
The last Business Day of each fiscal quarter of the Parent Borrower ending prior to the Maturity Date for 2024-1 Term B Loans, commencing with the fiscal quarter ending September 30, 2024	With respect to the 2024-1 Dollar Term B Loans, 0.3865043571656% of the aggregate initial principal amount of 2024-1 Dollar Term B Loans on the Fourth Amendment Effective Date
	With respect to the 2024-1 Euro Term B Loans, 0.2666139238% of the aggregate initial principal amount of 2024-1 Euro Term B Loans on the Fourth Amendment Effective Date

provided, however, that (i) if the date scheduled for any principal repayment installment is not a Business Day, such principal repayment installment shall be repaid on the next preceding Business Day, and (ii) the final principal repayment installment of 2024-1 Term B Loans shall be repaid on the Maturity Date for 2024-1 Term B Loans and in any event shall be in an amount equal to the aggregate principal amount of all 2024-1 Term B Loans outstanding on such date;

(vii) if the Borrowers, in connection with, or resulting in, any Repricing Event (A) make a voluntary prepayment of any 2024-1 Term B Loans pursuant to Section 2.05(a) of the Credit Agreement, (B) make a repayment of any 2024-1 Term B Loans pursuant to Section 2.05(b)(iii) of the Credit Agreement or (C) effect any amendment with respect to any 2024-1 Term B Loans, in each case, on or prior to the date that is six months after the Fourth Amendment Effective Date, the applicable Borrowers shall pay to the Administrative Agent, for the ratable account of the applicable Term Lenders (x) with respect to clauses (A) and (B), a prepayment premium in an amount equal to 1.00% of the principal amount of such 2024-1 Term B Loans prepaid and (y) with respect to clause (C), a prepayment premium in an amount equal to 1.00% of the principal amount of the affected 2024-1 Term B Loans held by the applicable Term Lenders not consenting to such amendment;

(viii) the Borrowers shall use the proceeds of the 2024-1 Term B Loans to refinance the 2024-1 Repriced Term B Loans and to pay any fees, commissions and expenses in connection therewith, and, to the extent that any proceeds remain after application of the foregoing, for working capital and for general corporate purposes of the Borrowers and their Restricted Subsidiaries;

(ix) except as otherwise expressly set forth herein, (x) the 2024-1 Dollar Term B Loans shall have identical terms as the Existing 2023-1 Dollar Term B Loans and (y) the 2024-1 Euro Term B Loans shall have identical terms as the Existing Initial Euro Term B Loans and, in each case, shall otherwise be subject to the provisions, including any provisions restricting the rights, or regarding the obligations, of the Loan Parties or any provisions regarding the rights of the Term Lenders, of the Credit Agreement and the other Loan Documents applicable to Existing 2023-1 Dollar Term B Loans or Existing Initial Euro Term B Loans, as applicable (including as to maturity, Guarantors, Collateral (and ranking) and payment priority); and

(x) each reference to “Specified Refinancing Debt”, “Initial Term B Loans”, “Initial Term Facilities”, “Initial Term Loans”, “Term B Loan Facility”, “Term Loan B Tranche” or “Term Loan Tranche” in the Credit Agreement or the other Loan Documents shall be deemed to include each of the 2024-1 Dollar Term B Loans and the 2024-1 Euro Term B Loans, and all other terms will have correlative meanings *mutatis mutandis*. Each reference to “Initial Term B Commitment”, “Initial Term Commitment” and “Term Loan B Tranche” in the Credit Agreement or the other Loan Documents shall be deemed to include the commitments of the 2024-1 Term B Participating Lenders under their respective 2024-1 Term B Commitments and all other related terms will have correlative meanings *mutatis mutandis*. Each reference to “Lender” or “Term Lender” shall be deemed to include each 2024-1 Term B Participating Lender and all other terms will have correlative meanings *mutatis mutandis*.

(b) Upon the occurrence of the Fourth Amendment Effective Date, all then outstanding 2024-1 Repriced Term B Loans shall be refinanced in full as follows:

(i) with respect to each 2024-1 Term B Converting Lender, (A) the outstanding principal amount of Existing 2023-1 Dollar Term B Loans of such 2024-1 Term B Converting Lender, or such lesser amount as the Engagement Party shall allocate, in its sole discretion, to such 2024-1 Term B Converting Lender in connection with the syndication of the 2024-1 Dollar Term B Loans, shall be deemed to be exchanged for an equal principal amount of 2024-1 Dollar Term B Loans under the Credit Agreement (collectively, the “Converted 2024-1 Dollar Term B Loans”) and (B) the outstanding principal amount of Existing Initial Euro Term B Loans of such 2024-1 Term B Converting Lender, or such lesser amount as the Engagement Party shall allocate, in its sole discretion, to such 2024-1 Term B Converting Lender in connection with the syndication of the 2024-1 Euro Term B Loans, shall be deemed to be exchanged for an equal principal amount of 2024-1 Euro Term B Loans under the Credit Agreement (collectively, the “Converted 2024-1 Euro Term B Loans”), and together with the Converted 2024-1 Dollar Term B Loans, the “Converted 2024-1 Term B Loans”);

(ii) each 2024-1 Dollar Term B Funding Lender and 2024-1 Euro Term B Funding Lender, as applicable, severally agrees to make a new Term Loan to the Parent Borrower on the Fourth Amendment Effective Date (collectively, the “New 2024-1 Term B Loans” and, together with the Converted 2024-1 Term B Loans, the “2024-1 Term B Loans” and each either a “2024-1 Dollar Term B Loan” or “2024-1 Euro Term B Loan”, as applicable) to the Parent Borrower on the Fourth Amendment Effective Date in Dollars or Euros, as applicable, in the principal amount not to exceed the amount opposite such 2024-1 Dollar Term B Funding Lender’s or 2024-1 Euro Term B Funding Lender’s name on Annex A hereto (as to any 2024-1 Dollar Term B Funding Lender, its “2024-1 Dollar Term B Commitment”, and as to any 2024-1 Euro Term B Funding Lender, its “2024-1 Euro Term B Commitment”, and together with the 2024-1 Dollar Term B Commitment, collectively, the “2024-1 Term B Commitments”);



(iii) the outstanding principal amount of the 2024-1 Repriced Term B Loans of each Existing Term B Lender that is not a 2024-1 Term B Converting Lender shall be repaid in full in cash;

(iv) to the extent that any 2024-1 Term B Converting Lender is allocated a principal amount of 2024-1 Repriced Term B Loans that is less than the full outstanding principal amount of the 2024-1 Repriced Term B Loans of such Lender, then the 2024-1 Repriced Term B Loans of such Lender shall be repaid in cash in an amount equal to the difference between the outstanding principal amount of the 2024-1 Repriced Term B Loans of such Lender and the principal amount of 2024-1 Term B Loans allocated to such Lender;

(v) promptly following the Fourth Amendment Effective Date, but not later than 45 days following the Fourth Amendment Effective Date (as may be extended from time to time by JPM, in its capacity as the Engagement Party), each 2024-1 Euro Term B Participating Lender that has executed a 2024-1 Euro Term B Participation Notice and has elected the “cash settlement option” therein shall purchase, or shall cause one or more of its Affiliates and/or Approved Funds to purchase (via assignment and assumption), 2024-1 Euro Term B Loans from the 2024-1 Euro Term B Funding Lenders as directed by JPM, in its capacity as the Engagement Party, in a principal amount equal to the outstanding principal amount of the Existing Initial Euro Term B Loans of such 2024-1 Euro Term B Participating Lender, or such lesser amount as the Engagement Party shall allocate, in its sole discretion, to such 2024-1 Euro Term B Participating Lender in connection with the syndication of the 2024-1 Euro Term B Loans; and

(vi) the exchange of outstanding 2024-1 Repriced Term B Loans for 2024-1 Term B Loans by 2024-1 Term B Converting Lenders shall be effected by book entry in such manner, and with such supporting documentation, as may be reasonably determined by the Administrative Agent.

(c) With respect to 2024-1 Term B Loans exchanged pursuant to Section 1.01(b)(i) above, (i) on the Fourth Amendment Effective Date, there shall commence an initial Interest Period with respect to such 2024-1 Dollar Term B Loans or 2024-1 Euro Term B Loans, as applicable, that shall end on the last day of the Interest Period applicable to the 2024-1 Dollar Term B Loans or 2024-1 Euro Term B Loans, as applicable, funded on the Fourth Amendment Effective Date or, in the event that there are multiple such Interest Periods, as allocated among such Interest Periods as the Administrative Agent, in consultation with the Parent Borrower, shall direct and (ii) for purposes of the definition of All-In Yield in the Credit Agreement, such 2024-1 Term B Loans shall be deemed to have been issued with the same upfront fees and/or original issue discount, if any, applicable to the 2024-1 Dollar Term B Loans or 2024-1 Euro Term B Loans, as applicable, funded on the Fourth Amendment Effective Date.

(d) Pursuant to Section 2.18 of the Existing Credit Agreement, on the Fourth Amendment Effective Date, subject to the terms and conditions set forth herein, including without limitation Article III hereof, each 2024-1 Term B Participating Lender hereby agrees to provide 2024-1 Term B Loans on the terms and conditions set forth herein. It is understood and agreed that all 2023-1 Term B Loans exchanged or funded on the Fourth Amendment Effective Date shall, from and after the funding thereof, be deemed to be and treated as “Term Loans” and “Term B Loans” for all purposes of the Credit Agreement. The aggregate amount of the 2024-1 Dollar Term B Commitments on the Fourth Amendment Effective Date is \$2,649,518,987.34 and the aggregate amount of the 2024-1 Euro Term B Commitments on the Fourth Amendment Effective Date is €800,000,000.00.

(e) Substantially simultaneously with the Borrowing of the 2024-1 Term B Loans on the Fourth Amendment Effective Date, the Parent Borrower shall apply the proceeds thereof to refinance the 2024-1 Repriced Term B Loans in full.

(f) The provisions of this Section 1.01 shall apply notwithstanding anything to the contrary contained in Section 2.02 of the Existing Credit Agreement or the Credit Agreement.

Section 1.02 Certain Agreements and Consents.

(a) By execution and delivery by a Lender of a 2024-1 Dollar Term B Participation Notice or 2024-1 Euro Term B Participation Notice, as applicable, such Lender consents to the modifications to the Existing Credit Agreement and the other Loan Documents effected by this Amendment or as the Administrative Agent and the Parent Borrower shall reasonably agree to reflect the provisions of this Amendment and the transactions contemplated hereby, including, as applicable, the exchange of such Lender's 2024-1 Repriced Term B Loans for 2024-1 Term B Loans as contemplated hereby.

(b) Each 2024-1 Term B Participating Lender party hereto (i) agrees, to the extent not already a Lender, to become a party to the Credit Agreement as a Lender, (ii) confirms that it has received a copy of the Existing Credit Agreement and the other Loan Documents, together with copies of the financial statements referred to therein and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Amendment, (iii) agrees that it will, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it shall deem appropriate at the time, make or continue to make its own credit decisions in taking or not taking action under the Credit Agreement, (iv) appoints and authorizes Administrative Agent and Collateral Agent to take such action as agent on its behalf and to exercise such powers under the Credit Agreement and the other Loan Documents as are delegated to Administrative Agent and Collateral Agent, as the case may be, by the terms thereof, together with such powers as are reasonably incidental thereto, and (v) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the Credit Agreement are required to be performed by it as a Lender.

(c) Each 2024-1 Term B Participating Lender agrees to waive any entitlement to any breakage loss or expenses due under Section 3.06 of the Existing Credit Agreement with respect to any repayment or exchange of any of its 2024-1 Repriced Term B Loans on the Fourth Amendment Effective Date pursuant to this Amendment.

(d) Upon the occurrence of the Fourth Amendment Effective Date, all Notes, if any, evidencing the 2024-1 Repriced Term B Loans shall be deemed cancelled, and any Lender may request that its 2024-1 Term B Loans be evidenced by a Note pursuant to Section 2.11(a) of the Credit Agreement.

(e) This Amendment shall be deemed to constitute (x) any request and/or notice relating to the 2024-1 Term B Commitments set forth in Section 2.18 of the Existing Credit Agreement and (y) a notice of prepayment relating to the 2024-1 Repriced Term B Loans as required by Section 2.05 of the Existing Credit Agreement; and the Parent Borrower hereby authorizes and directs the Administrative Agent to deliver a copy of this Amendment to the Lenders.

(f) The Administrative Agent and each 2024-1 Term B Participating Lender hereby waives the requirement under Section 2.02(a) of the Credit Agreement to provide a Committed Loan Notice not less than three (3) Business Days prior to the Borrowing of the 2024-1 Term B Loans on the Fourth Amendment Effective Date; provided, for the avoidance of doubt, that the Parent Borrower shall provide such Committed Loan Notice on or before the Fourth Amendment Effective Date in accordance with Section 3.02.

**ARTICLE II  
AMENDMENTS**

Section 2.01 Upon the occurrence of the Fourth Amendment Effective Date:

- (a) Section 1.01 of the Credit Agreement shall be amended by amending the definition of “Repricing Event” contained therein by replacing each reference to “2023-1 Dollar Term B Loans” therein with a reference to “2024-1 Term B Loans”;
- (b) Section 2.05(a)(iii) of the Credit Agreement shall be amended by replacing the reference to “six months after the Second Amendment Effective Date” therein with a reference to “six months after the Fourth Amendment Effective Date”, replacing each reference to “2023-1 Dollar Term B Loans” therein with a reference to “2024-1 Dollar Term B Loans”, and replacing each reference to “Initial Euro Term B Loans” therein with a reference to “2024-1 Euro Term B Loans”;
- (c) Section 3.08(c) of the Credit Agreement shall be amended by replacing the reference to “six months after the Second Amendment Effective Date” therein with a reference to “six months after the Fourth Amendment Effective Date”, replacing each reference to “2023-1 Dollar Term B Loans” therein with a reference to “2024-1 Dollar Term B Loans” and replacing each reference to “Initial Euro Term B Loans” therein with a reference to “2024-1 Euro Term B Loans”;
- (d) the 2024-1 Dollar Term B Loans and 2024-1 Euro Term B Loans shall be deemed incorporated into the Credit Agreement *mutatis mutandis* each as a new Class of Term Loans on the terms and conditions set forth in Sections 1.01 and 1.02 of this Amendment (including, without limitation, Sections 1.01 (*Definitions*), 2.01 (*The Loans*), 2.02 (*Borrowings, Conversions and Continuations of Loans*), 2.05 (*Prepayments*), 2.07 (*Repayment of Loans*), 2.14 (*Incremental Facilities*), 2.22 (*Extension of Term Loans and Revolving Credit Commitments*), 3.08 (*Replacement of Lenders under Certain Circumstances*) and 5.07 (*Use of Proceeds*) of the Credit Agreement); and
- (e) each 2024-1 Lead Arranger shall constitute an additional “Arranger” under the Credit Agreement and shall, in such capacity, be entitled to the benefits applicable to the Arrangers thereunder.

Section 2.02 In furtherance of the foregoing, Schedule 2.01 of the Existing Credit Agreement (*Commitments and Pro Rata Shares*) is hereby amended to reflect the 2024-1 Term B Commitments of the 2024-1 Term B Participating Lenders set forth on Annex A hereto.

**ARTICLE III  
CONDITIONS PRECEDENT**

The effectiveness of this Amendment and the commitments and obligations of each 2024-1 Term B Participating Lender under this Amendment shall be subject to the satisfaction or waiver (by the Administrative Agent) of each of the following conditions (the date of satisfaction or waiver of such condition being referred to herein as the “Fourth Amendment Effective Date”):

Section 3.01 Execution. The Administrative Agent shall have received a counterpart of this Amendment (which may, in the case of a 2024-1 Term B Participating Lender, be provided in the form of an executed 2024-1 Dollar Term B Participation Notice or 2024-1 Euro Term B Participation Notice, as applicable) and the other documents related to or contemplated thereby, executed and delivered by a duly authorized officer of the Parent Borrower, each other Loan Party, each 2024-1 Term B Participating Lender and the Administrative Agent.

Section 3.02 Committed Loan Notice. The Administrative Agent shall have received a Committed Loan Notice as required by Section 2.02(a) of the Credit Agreement.

Section 3.03 Corporate Documents. The Administrative Agent shall have received: (a) a certificate of a Responsible Officer of the Parent Borrower dated the Fourth Amendment Effective Date, certifying (i) that either (A) the Organization Documents for the Parent Borrower have not been amended since the Closing Date or (B) attached thereto is a true and complete copy of each Organization Document of the Parent Borrower certified (to the extent applicable) as of a recent date by the Secretary of State of the state of its organization, (ii) that attached thereto is a true and complete copy of resolutions adopted by the applicable governing body of the Parent Borrower authorizing the execution, delivery and performance of the Amendment or any other document delivered in connection herewith to which the Parent Borrower is a party, and that such resolutions have not been modified, rescinded or amended and are in full force and effect and (iii) either (A) as to the incumbency and specimen signature of each officer executing this Amendment or any other document delivered in connection herewith on behalf of the Parent Borrower or (B) that there has been no change to the officers of such Person that previously executed an incumbency specimen on the Closing Date; and (b) a certificate as to the good standing of the Parent Borrower in its jurisdiction of organization as of a recent date (to the extent such concept exists), from such Secretary of State.

Section 3.04 Costs and Expenses. (a) The Parent Borrower shall have paid, or shall cause to have paid substantially concurrently with the Borrowing of 2024-1 Term B Loans, in cash to the Administrative Agent, for the ratable account of the Existing Term B Lenders, all accrued and unpaid interest on the 2024-1 Repriced Term B Loans through the Fourth Amendment Effective Date and (b) all costs, fees and expenses (including legal fees and expenses) and other compensation due and payable to the Administrative Agent, the Engagement Party and the 2024-1 Term B Participating Lenders required to be paid pursuant to the Engagement Letter, in each case to the extent invoiced at least three (3) Business Days prior to the Fourth Amendment Effective Date, shall have been paid, or shall be paid substantially concurrently with, the Borrowing of 2024-1 Term B Loans (which amounts may be offset against the proceeds of the 2024-1 Term B Loans).

Section 3.05 Fourth Amendment Effective Date Certificate. The Administrative Agent shall have received a certificate, duly executed by a Responsible Officer of the Parent Borrower, certifying as to the accuracy of the representations and warranties set forth in Article IV in all material respects (and in all respects if any such representation or warranty is already qualified by materiality) on and as of the Fourth Amendment Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they are true and correct in all material respects (and in all respects if any such representation or warranty is already qualified by materiality) as of such earlier date.

Section 3.06 Know-Your-Customer. The Administrative Agent and each 2024-1 Term B Participating Lender (to the extent requested at least ten (10) Business Days in advance of the Fourth Amendment Effective Date (or such shorter time as agreed to by the Parent Borrower)) shall have received at least two (2) Business Days prior to the Fourth Amendment Effective Date all documentation and other information about the Parent Borrower and the other Loan Parties required under applicable “know your customer” and anti-money laundering rules and regulations, including a certification regarding beneficial ownership as required by 31 C.F.R. § 1010.230 (the “Beneficial Ownership Regulation”) in relation to the Parent Borrower to the extent the Parent Borrower qualifies as a “legal entity customer” under the Beneficial Ownership Regulation.

Notwithstanding anything to the contrary herein, for purposes of determining compliance with the conditions specified in Article III, each 2024-1 Term B Participating Lender that has signed this Agreement (which may, in the case of a 2024-1 Term B Participating Lender, be signed in the form of an executed 2024-1 Dollar Term B Participation Notice or 2024-1 Euro Term B Participation Notice, as applicable) shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a 2024-1 Term B Participating Lender unless the Administrative Agent shall have received notice from such 2024-1 Term B Participating Lender prior to the proposed Fourth Amendment Effective Date, specifying its objection thereto.

#### **ARTICLE IV REPRESENTATIONS AND WARRANTIES**

To induce the other parties hereto to enter into this Amendment, and to induce each 2024-1 Term B Participating Lender to make the Loans and provide the Commitments pursuant to the term hereof, each Loan Party hereby represents and warrants to the Administrative Agent, the Collateral Agent and each Lender (including each 2024-1 Term B Participating Lender) that, as of the Fourth Amendment Effective Date:

Section 4.01 Existence, Qualification and Power. Each Loan Party (subject, in the case of clause (c), to the Legal Reservations and Section 5.03 of the Credit Agreement) (a) is a Person duly organized, formed or incorporated, validly existing and in good standing (to the extent such concept is applicable to such entity in its relevant jurisdiction of formation) under the Laws of the jurisdiction of its incorporation or organization, (b) has all requisite power and authority to (i) own or lease its assets and carry on its business as currently conducted and (ii) execute, deliver and perform its obligations under the Amendment, (c) is duly qualified and is authorized to do business and in good standing (to the extent such concept is applicable to such entity in its relevant jurisdiction of formation) under the Laws of each jurisdiction where its ownership, lease or operation of properties or the conduct of its business requires such qualification and (d) has all requisite governmental licenses, authorizations, consents and approvals to operate its business as currently conducted; except in each case, referred to in clauses (a) (other than with respect to the Borrowers), (b)(i), (b)(ii) (other than with respect to the Borrowers), (c) and (d), to the extent that any failure to be so or to have such would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

Section 4.02 Due Authorization; No Conflict. The execution, delivery and performance by each Loan Party of this Amendment and the consummation of the transactions contemplated hereby (a) have been duly authorized by all necessary corporate or other organizational action, (b) do not contravene the terms of any of such Person's Organization Documents, (c) do not conflict with or result in any breach or contravention of, or the creation of any Lien (other than Permitted Liens) under, any Contractual Obligation to which such Person is a party or any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Person or its property is subject and (d) do not violate any Law; except, in each case, to the extent that such violation would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

Section 4.03 Due Execution; Binding Effect. This Amendment has been duly executed and delivered on behalf of each Loan Party (subject, in each case, to the Legal Reservations and Section 5.03 of the Credit Agreement). Subject to the Legal Reservations, this Amendment constitutes a legal, valid and binding obligation of such Loan Party, enforceable against such Loan Party in accordance with its terms.

Section 4.04 Solvency. After giving effect to the transactions contemplated by this Amendment and the Credit Agreement, the Parent Borrower and its Subsidiaries, on a consolidated basis, are Solvent.

Section 4.05 Representations and Warranties. The representations and warranties of each Loan Party set forth in Article V of the Existing Credit Agreement and in each other Loan Document are true and correct in all material respects (and in all respects if any such representation or warranty is already qualified by materiality), except to the extent that such representations and warranties specifically refer to an earlier date, in which case they are true and correct in all material respects (and in all respects if any such representation or warranty is already qualified by materiality) as of such earlier date and the representations and warranties contained in Sections 5.05(a) and (b) of the Existing Credit Agreement are deemed to refer to the most recent financial statements furnished pursuant to Sections 6.01(a) and (b), respectively, of the Existing Credit Agreement, prior to the Fourth Amendment Effective Date.

Section 4.06 No Default or Event of Default. No Default or Event of Default has occurred and is continuing.

## **ARTICLE V MISCELLANEOUS**

Section 5.01 Execution of this Amendment. This Amendment is executed and shall be construed as an amendment to the Existing Credit Agreement, and, as provided in the Existing Credit Agreement, this Amendment forms a part thereof. The Loan Parties and the other parties hereto acknowledge that this Amendment shall constitute a “Refinancing Amendment” and a “Loan Document” for all purposes of the Credit Agreement and the other Loan Documents.

Section 5.02 No Waiver; Effect on Loan Documents. This Amendment is made in modification of, but not extinguishment of, the obligations set forth in the Existing Credit Agreement and, except as specifically modified pursuant to the terms of this Amendment, the terms and conditions of the Existing Credit Agreement remain in full force and effect. Nothing herein shall limit in any way the rights and remedies of the Administrative Agent and the Secured Parties under the Existing Credit Agreement and the Loan Documents. Except to the extent permitted or provided for herein, the execution, delivery and performance by the Administrative Agent and the Lenders party hereto of this Amendment shall not constitute a waiver, forbearance or other indulgence with respect to any Default or Event of Default now existing or hereafter arising or in any way limit, impair or otherwise affect the rights and remedies of the Administrative Agent or the Lenders under the Loan Documents.

Section 5.03 Counterparts. This Amendment may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart. Delivery of an executed signature page of this Amendment by facsimile transmission or electronic transmission (including “pdf”) shall be as effective as delivery of a manually executed counterpart hereof. The words “execution,” “signed,” “signature,” and words of like import in this Amendment shall be deemed to include electronic signatures or electronic records, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

Section 5.04 Entire Agreement. The Engagement Letter, this Amendment and the other Loan Documents embody the entire agreement of the parties and supersede all prior agreements and understandings relating to the subject matter hereof involving any Loan Party and any of the Administrative Agent, any Lender or any of their respective Affiliates. Upon the effectiveness of this Amendment as set forth in Article III of this Amendment, this Amendment shall be binding upon and inure to the benefit of the parties hereto and, subject to and in accordance with Section 10.07 of the Existing Credit Agreement, their respective successors and assigns.

Section 5.05 Governing Law; Waiver of Jury Trial. This Amendment and the rights and obligations of the parties hereto shall be governed by, and construed in accordance with, the law of the State of New York. Sections 10.15(b), 10.15(c) and 10.16 of the Existing Credit Agreement are hereby incorporated by reference herein, *mutatis mutandis*.

Section 5.06 Severability. Any provision of this Amendment being held illegal, invalid or unenforceable in any jurisdiction shall not affect any part of such provision not held illegal, invalid or unenforceable, any other provision of this Amendment or any part of such provision in any other jurisdiction.

Section 5.07 Headings. Section headings herein are included herein for convenience of reference only and shall not affect the interpretation of this Amendment.

Section 5.08 Reaffirmation of Obligations. Each Loan Party, subject to the terms and limits contained herein and in the Loan Documents, (a) has incurred or guaranteed the Secured Obligations, including, without limitation, all obligations with respect to the 2024-1 Term B Loans (collectively, the "Obligations") and all of its Obligations shall remain in full force and effect on a continuous basis after giving effect to this Amendment, (b) acknowledges and agrees that nothing in this Amendment shall constitute a novation or termination of such Obligations and (c) has created Liens and security interests in favor of the Administrative Agent and/or the Collateral Agent on certain of its Collateral to secure its obligations hereunder. Each Loan Party hereby acknowledges that it has reviewed the terms and provisions of this Amendment and consents to this Amendment. Each Loan Party hereby confirms that each Loan Document to which it is a party or is otherwise bound and all Collateral encumbered thereby will continue to guarantee or secure, as the case may be, to the fullest extent possible in accordance with the Loan Documents, the payment and performance of the Obligations, as the case may be, including without limitation the payment and performance of all such applicable Obligations that are joint and several obligations of each Loan Party now or hereafter existing.

*[Remainder Of Page Intentionally Left Blank]*

**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

**MKS INSTRUMENTS, INC.**, as Parent Borrower

By: /s/ John T.C. Lee

Name: John T.C. Lee

Title: President and Chief Executive Officer

Signature Page to Fourth Amendment to Credit Agreement (MKS)



**NEWPORT CORPORATION**, as a Guarantor

By: /s/ Michelle M. McCarthy

Name: Michelle M. McCarthy

Title: President and Treasurer

**ELECTRO SCIENTIFIC INDUSTRIES, INC.**, as a Guarantor

By: /s/ Michelle M. McCarthy

Name: Michelle M. McCarthy

Title: President and Treasurer

**ATOTECH MANUFACTURING, INC.**, as a Guarantor

By: /s/ Michelle M. McCarthy

Name: Michelle M. McCarthy

Title: President and Chief Executive Officer

**PHOTON CONTROL (USA) INC.**, as a Guarantor

By: /s/ Michelle M. McCarthy

Name: Michelle M. McCarthy

Title: President and Treasurer

**ATOTECH USA, LLC**, as a Guarantor

By: /s/ Michelle M. McCarthy

Name: Michelle M. McCarthy

Title: President

Signature Page to Fourth Amendment to Credit Agreement (MKS)

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**JPMORGAN CHASE BANK, N.A.**

as Administrative Agent

By: /s/ Timothy D. Lee

Name: Timothy D. Lee

Title: Executive Director

**JPMORGAN CHASE BANK, N.A.**

as a 2024-1 Term B Participating Lender

By: /s/ Timothy D. Lee

Name: Timothy D. Lee

Title: Executive Director

Signature Page to Fourth Amendment to Credit Agreement (MKS)

## Commitments and Pro Rata Shares

## 2024-1 Term B Participating Lenders:

2024-1 Dollar Term B Participating Lender	2024-1 Dollar Term B Commitments	2024-1 Dollar Term B Loan Facility Pro Rata Share
JPMorgan Chase Bank, N.A.	\$2,649,518,987.34 less the aggregate principal amount of Existing 2023-1 Dollar Term B Loans exchanged for 2024-1 Dollar Term B Loans by 2024-1 Dollar Term B Converting Lenders	100% less the percentage represented by (x) the aggregate principal amount of Existing 2023-1 Dollar Term B Loans exchanged for 2024-1 Dollar Term B Loans by 2024-1 Dollar Term B Converting Lenders divided by (y) the aggregate principal amount of the 2024-1 Dollar Term B Loans made available to the Parent Borrower on the Fourth Amendment Effective Date
<b>Total:</b>	<b>\$ 2,649,518,987.34</b>	<b>100%</b>
2024-1 Euro Term B Participating Lender	2024-1 Euro Term B Commitments	2024-1 Euro Term B Loan Facility Pro Rata Share
JPMorgan Chase Bank, N.A.	€800,000,000.00 less the aggregate principal amount of Existing Initial Euro Term B Loans exchanged for 2024-1 Euro Term B Loans by 2024-1 Euro Term B Converting Lenders	100% less the percentage represented by (x) the aggregate principal amount of Existing Initial Euro Term B Loans exchanged for 2024-1 Euro Term B Loans by 2024-1 Euro Term B Converting Lenders divided by (y) the aggregate principal amount of the 2024-1 Euro Term B Loans made available to the Parent Borrower on the Fourth Amendment Effective Date
<b>Total:</b>	<b>€ 800,000,000.00</b>	<b>100%</b>

**2024-1 Dollar Term B Participation Notice**

This 2024-1 Dollar Term B Participation Notice (this “2024-1 Dollar Term B Participation Notice”) is referred to in, and is deemed to be a signature page to, the Fourth Amendment (the “Amendment”) to that certain Credit Agreement, dated as of August 17, 2022 (as amended, restated, amended and restated, supplemented and otherwise modified from time to time immediately prior to the effectiveness of the Amendment, the “Existing Credit Agreement”) and the Existing Credit Agreement, as amended by the Amendment and as otherwise amended, restated, amended and restated, supplemented and otherwise modified from time to time, the “Credit Agreement”), by and among MKS INSTRUMENTS, INC., a Massachusetts corporation, as Parent Borrower (the “Parent Borrower”), JPMORGAN CHASE BANK, N.A. (“JPM”), in its respective capacities as Administrative Agent, Collateral Agent, and L/C Issuer, and each Lender from time to time party thereto. Capitalized terms used but not defined in this 2024-1 Dollar Term B Participation Notice have the meaning assigned to such terms in the Amendment or the Credit Agreement, as applicable.

By executing this 2024-1 Dollar Term B Participation Notice, the undersigned institution agrees to the terms of the Amendment and the Existing Credit Agreement as amended thereby and agrees to be a 2024-1 Dollar Term B Participating Lender. In addition, please inform your JPM salesperson of your election. Lenders that do not inform their salesperson may have their election nullified at JPM’s discretion.

**Name of Institution:** \_\_\_\_\_

Executing as a 2024-1 Dollar Term B Participating Lender:  
By: \_\_\_\_\_  
Name:  
Title:  
For any institution requiring a second signature line:  
By: \_\_\_\_\_  
Name:  
Title:

The above-named Lender elects to consent and agree to the Amendment and continue as a 2024-1 Dollar Term B Participating Lender under the Credit Agreement after giving effect to the Amendment. By choosing this option, the above-named Lender hereby (i) elects to exchange (on a cashless basis) 100% of the outstanding principal amount of Existing 2023-1 Dollar Term B Loans of such Lender for an equal principal amount of 2024-1 Dollar Term B Loans under the Credit Agreement and (ii) acknowledges and agrees that the Engagement Party may, in its sole discretion, elect to exchange (on a cashless basis) less than 100% of the outstanding principal amount of such Lender’s Existing 2023-1 Dollar Term B Loans, in which case the difference between such outstanding principal amount of such Lender’s Existing 2023-1 Dollar Term B Loans and such Lender’s allocated amount shall be prepaid on the Fourth Amendment Effective Date.

**2024-1 Euro Term B Participation Notice**

This 2024-1 Euro Term B Participation Notice (this “2024-1 Euro Term B Participation Notice”) is referred to in, and is deemed to be a signature page to, the Fourth Amendment (the “Amendment”) to that certain Credit Agreement, dated as of August 17, 2022 (as amended, restated, amended and restated, supplemented and otherwise modified from time to time immediately prior to the effectiveness of the Amendment, the “Existing Credit Agreement” and the Existing Credit Agreement, as amended by the Amendment and as otherwise amended, restated, amended and restated, supplemented and otherwise modified from time to time, the “Credit Agreement”), by and among MKS INSTRUMENTS, INC., a Massachusetts corporation, as Parent Borrower (the “Parent Borrower”), JPMORGAN CHASE BANK, N.A. (“JPM”), in its respective capacities as Administrative Agent, Collateral Agent, and L/C Issuer, and each Lender from time to time party thereto. Capitalized terms used but not defined in this 2024-1 Euro Term B Participation Notice have the meaning assigned to such terms in the Amendment or the Credit Agreement, as applicable.

By executing this 2024-1 Euro Term B Participation Notice, the undersigned institution agrees to the terms of the Amendment and the Existing Credit Agreement as amended thereby and agrees to be a 2024-1 Euro Term B Participating Lender. In addition, please inform your JPM salesperson of your election. Lenders that do not inform their salesperson may have their election nullified at JPM’s discretion.

**Name of Institution:** \_\_\_\_\_

Executing as a 2024-1 Euro Term B Participating Lender:  
  
By: \_\_\_\_\_  
Name:  
Title:  
  
For any institution requiring a second signature line:  
  
By: \_\_\_\_\_  
Name:  
Title:

OPTION A  – CONSENT TO AMENDMENT AND CONTINUATION OF EURO TERM LOANS (CASHLESS ROLL): The above-named Lender consents and agrees to the Amendment and elects to continue as a 2024-1 Euro Term B Participating Lender under the Credit Agreement after giving effect to the Amendment. By choosing this option, the above-named Lender hereby (i) elects to exchange (on a cashless basis) 100% of the outstanding principal amount of Existing Initial Euro Term B Loans of such Lender for an equal principal amount of 2024-1 Euro Term B Loans under the Credit Agreement and (ii) acknowledges and agrees that the Engagement Party may, in its sole discretion, elect to exchange (on a cashless basis) less than 100% of the outstanding principal amount of such Lender's Existing Initial Euro Term B Loans, in which case the difference between such outstanding principal amount of such Lender's Existing Initial Euro Term B Loans and such Lender's allocated amount shall be prepaid on the Fourth Amendment Effective Date.

OPTION B  – CONSENT TO AMENDMENT VIA CASH SETTLEMENT (CASH ROLL): The above-named Lender consents and agrees to the Amendment and elects to have 100% of the outstanding principal amount of Existing Initial Euro Term B Loans of such Lender repaid or purchased on the Fourth Amendment Effective Date and agrees to promptly (but in any event, on or prior to the date that is 45 days following the Fourth Amendment Effective Date) purchase (via assignment and assumption), or cause one or more of its Affiliates and/or Approved Funds to purchase (via assignment and assumption), an equal principal amount of 2024-1 Euro Term B Loans. By choosing this option, the above-named Lender hereby acknowledges and agrees that the Engagement Party may, in their sole discretion, elect to allocate to such Lender a principal amount of 2024-1 Euro Term B Loans that is less than 100% of the outstanding principal amount of such Lender's Existing Initial Euro Term B Loans.



MKS Instruments Completes Repricing and Makes a \$110 Million  
Voluntary Prepayment on its Secured Term Loan B

Andover, MA, July 23, 2024 — MKS Instruments, Inc. (NASDAQ: MKSI), a global provider of enabling technologies that transform our world, announced today that it successfully completed the repricing of its \$2.6 billion and €0.8 billion secured tranche B term loans maturing in 2029. The repricing results in a reduction of the interest rate for the USD tranche B term loans from SOFR plus a margin of 250 basis points to SOFR plus 225 basis points and EUR tranche B term loans from EURIBOR plus a margin of 300 basis points to EURIBOR plus 275 basis points.

In addition, immediately prior to the repricing, MKS made a voluntary prepayment of \$110 million on its secured tranche B term loans, consisting of \$69 million to the USD Term Loan B and €38 million to the EUR Term Loan B.

Based on the current interest rates, the annualized cash interest savings from the combined actions is approximately \$17 million.

“We are pleased with the results of our Term Loan B repricing and today’s actions are consistent with our long-standing track record of proactively seeking opportunities to reduce costs and maximize free cash flow to repay debt,” said John T.C. Lee, President and Chief Executive Officer.

JPMorganChase, Barclays, BofA Securities., Citibank, N.A., HSBC Securities (USA) Inc., Mizuho, Morgan Stanley Senior Funding, Inc, and PNC Capital Markets LLC acted as the joint lead arrangers and joint bookrunners for the tranche B term loan repricing.

**About MKS Instruments**

MKS Instruments enables technologies that transform our world. We deliver foundational technology solutions to leading edge semiconductor manufacturing, electronics and packaging, and specialty industrial applications. We apply our broad science and engineering capabilities to create instruments, subsystems, systems, process control solutions and specialty chemicals technology that improve process performance,



optimize productivity and enable unique innovations for many of the world's leading technology and industrial companies. Our solutions are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement, and optimized connectivity. Our solutions are also critical to addressing ever-increasing performance requirements across a wide array of specialty industrial applications. Additional information can be found at [www.mks.com](http://www.mks.com).

#### **SAFE HARBOR FOR FORWARD-LOOKING STATEMENTS**

This press release contains a forward-looking statement within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27 of the Securities Act, and Section 21E of the Securities Exchange Act regarding MKS' cash interest savings. This statement is only a prediction based on current assumptions and expectations. Actual events or results, including changes in interest rates, may differ materially from those in the forward-looking statement set forth herein. Readers are referred to MKS' filings with the Securities and Exchange Commission, including its most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q for a discussion of these and other important risk factors concerning MKS and its operations. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter its forward-looking statements, whether as a result of new information, future events or otherwise.

#### Company Contact:

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