FORM 4

Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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|-------------------------------------|---|
| Check this box if no longer subject | S |
| to Section 16. Form 4 or Form 5 | |
| obligations may continue. See | |

TATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|
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| hours per response | e: 0.5 | | | | | | |

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| Name and Address of Reporting Person* Bintz William J | | | | | 2. Issuer Name and Ticker or Trading Symbol AXCELIS TECHNOLOGIES INC [ACLS] | | | | | | | | CLS | | all app Direc Office | ionship of Reporting Person(s) to Issuer all applicable) Director 10% Owner Officer (give title Other (specify | | | vner |
|---|-------|--|--|-------------------------------|---|--|--|---------------------------|---------------|------------------|------------------------|---|---|--|-------------------------------|---|---|---|--|
| (Last) 108 CHE | (Fir | , | Middle) | | 3. Date of Earliest Transaction (Month/Day/Year) 05/15/2021 | | | | | | | | | A | EVP, Product Development | | | | |
| (Street) BEVERI (City) | LY MA | | 1915 Zip) | | 4. If <i>i</i> | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Indiv Line) X | | | | | |
| | | Table | I - No | on-Deriva | tive : | Secu | rities | Acc | quired | d, Di | sposed of | , or E | Benefi | icially | Own | ed | | | |
| 1. Title of Security (Instr. 3) | | | 2. Transaction Date (Month/Day/Year) | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | 3. 4. Securities Disposed Of Code (Instr. 8) | | | | | and 5) Securities Beneficially Owned Foll | | ties cially d Following | Form: | Direct Indirect str. 4) | 7. Nature of Indirect Beneficial Ownership | | |
| | | | | | | | | Code | v | Amount | (A) or (D) | Pric | e | Reported Transaction(s) (Instr. 3 and 4) | | | | (Instr. 4) | |
| Common Stock | | | | 05/15/20 | | | | F | | 1,462 | D ⁽¹⁾ | \$38 | 3.16 ⁽²⁾ | 63 | 63,151 ⁽³⁾ | | D | | |
| Common Stock | | | 05/15/20 | | | | F | | 1,399 | D ⁽¹⁾ | \$38 | 3.16 ⁽²⁾ | 16 ⁽²⁾ 61,752 ⁽⁻⁾ | | D | | | | |
| Common Stock | | | 05/16/2021 | | | | | F | | 902 | D ⁽¹⁾ | \$38 | 3.16 ⁽²⁾ | 16 ⁽²⁾ 60,850 | | D | | | |
| Common Stock | | | 05/17/2021 | | | | | F | | 1,109 | D ⁽¹⁾ | \$38 | 3.16 ⁽²⁾ | 16 ⁽²⁾ 59,741 ⁽⁶⁾ | | D | | | |
| Common Stock 05/17/ | | | | 05/17/20 |)21 | | | | A | | 7,578 | A | \$0 | .00(7) | 67,319(8) | | | D | |
| Common Stock 05. | | | 05/17/20 | 021 | | | | A | | 7,578 | A | \$0 |).00 ⁽⁹⁾ 74, | | 74,897 ⁽¹⁰⁾ | | D | | |
| | | Tal | ble II | | | | | | | | oosed of, convertib | | | | Owne | d | | | |
| Derivative Conversion Date | | 3. Transaction Date (Month/Day/Year) | Execu if any | 3A. Deemed Execution Date, | | 4. Transaction Code (Instr. 8) | | tive ties ed sed | | e Exer | rcisable and Date | 7. Title and Amount of Securities Underlying Derivative Security (Insi 3 and 4) | | 8. F Der Sec (Ins | rivative curity str. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | y D O (I | Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| Explanation | | | | | Code | v | (A) | (D) | Date Exerc | isable | Expiration Date | Title | Amour or Number of Shares | er | | | | | |

Explanation of Responses:

- 1. These shares were withheld by the Company to cover the tax withholding obligations of the executive on the vesting of restricted stock units.
- 2. Represents the closing price of the common stock on the date of the tax withholding.
- 3. Of the shares held after this first tax withholding forfeiture (and related vesting) on May 15, 2021, 32,078 were issuable on vesting of restricted stock units granted to the executive under the 2012 Equity Incentive Plan and are subject to forfeiture.
- 4. Of the shares held after this second tax withholding forfeiture (and related vesting) on May 15, 2021, 28,924 were issuable on vesting of restricted stock units granted to the executive under the 2012 Equity Incentive Plan and are subject to forfeiture
- 5. Of the shares held after this tax withholding forfeiture (and related vesting) on May 16, 2021, 26,891 were issuable on vesting of restricted stock units granted to the executive under the 2012 Equity Incentive Plan and are subject to forfeiture.
- 6. Of the shares held after this tax withholding forfeiture (and related vesting) on May 17, 2021,24,391 were issuable on vesting of restricted stock units granted to the executive under the 2012 Equity Incentive Plan and are subject to forfeiture.
- 7. These shares are issuable on vesting of restricted stock units granted under the Company's 2012 Equity Incentive Plan. Assuming continuation of employment, 25% of these restricted stock units will vest on each of May 17, 2022, May 17, 2023, May 17, 2024 and May 17, 2025.
- 8. Of the shares held after this first grant on May 17, 2021, 31,969 were issuable on vesting of restricted stock units granted to the executive under the 2012 Equity Incentive Plan and are subject to forfeiture.
- 9. In this grant under the Company's 2012 Equity Incentive Plan, the executive may earn shares of common stock, ranging from zero to 150% of the granted units. The shares are earned based on the achievement of 2021 performance goals. Assuming continuation of employment,50% of the earned shares will vest on each of February 28, 2022 and February 28, 2023. Unearned restricted stock units will forfeit on February 28, 2022.
- 10. Of the shares held after this second grant on May 17, 2021, 39,547 were issuable on vesting of restricted stock units granted to the executive under the 2012 Equity Incentive Plan and are subject to forfeiture

Remarks:

Lynnette C. Fallon, as attorney 05/18/2021 in fact for William J. Bintz

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.