

OMB APPROVAL

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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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

1. Name and Address of Reporting Person* <u>Barker Ellen</u>	2. Date of Event Requiring Statement (Month/Day/Year) 01/19/2017	3. Issuer Name and Ticker or Trading Symbol <u>TEXAS INSTRUMENTS INC [TXN]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>Sr. Vice President</u>	5. If Amendment, Date of Original Filed (Month/Day/Year)
(Last) (First) (Middle) <u>12500 TI BOULEVARD</u>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person
(Street) <u>DALLAS TX 75243</u>			
(City) (State) (Zip)			

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
<u>Common Stock</u>	<u>30,066⁽¹⁾</u>	<u>D</u>	

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				
<u>NQ Stock Option (Right to Buy)</u>	<u>(2)</u>	<u>01/26/2022</u>	<u>Common Stock</u>	<u>15,000</u>	<u>32.36</u>	<u>D</u>
<u>NQ Stock Option (Right to Buy)</u>	<u>(3)</u>	<u>01/25/2023</u>	<u>Common Stock</u>	<u>17,500</u>	<u>32.8</u>	<u>D</u>
<u>NQ Stock Option (Right to Buy)</u>	<u>(4)</u>	<u>01/23/2024</u>	<u>Common Stock</u>	<u>19,065</u>	<u>44.09</u>	<u>D</u>
<u>NQ Stock Option (Right to Buy)</u>	<u>(5)</u>	<u>01/28/2025</u>	<u>Common Stock</u>	<u>19,762</u>	<u>53.94</u>	<u>D</u>
<u>NQ Stock Option (Right to Buy)</u>	<u>(6)</u>	<u>01/29/2026</u>	<u>Common Stock</u>	<u>21,231</u>	<u>52.93</u>	<u>D</u>

Explanation of Responses:

- Includes 27,279 shares subject to terms of restricted stock units awarded under the Issuer's long-term incentive plans.
- The option becomes exercisable in four equal annual installments beginning on January 26, 2013.
- The option becomes exercisable in four equal annual installments beginning on January 25, 2014.
- The option becomes exercisable in four equal annual installments beginning on January 23, 2015.
- The option becomes exercisable in four equal annual installments beginning on January 28, 2016.
- The option becomes exercisable in four equal annual installments beginning on January 29, 2017.

/s/ Muriel C. McFarling,
Attorney in Fact

01/26/2017

** 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 5 (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.

AUTHORIZATION

I hereby authorize Cynthia Hoff Trochu, Cynthia H. Grimm, Muriel C. McFarling, Jane S. Nahra, Erin E. Hilton, and David M. Hanes or any one of them to sign and file on my behalf any and all forms required by the Securities and Exchange Commission pursuant to Section 16 of the Securities Exchange Act of 1934 (the Exchange Act) relating to the reporting of beneficial ownership of equity securities of Texas Instruments Incorporated (the Company), and of changes in such beneficial ownership, as well as any and all representation letters that may be required in connection with sales by me of equity securities of the Company, together with any and all amendments to the foregoing. This authorization shall be effective on and after the date set forth below and shall continue in effect, unless earlier revoked by me in writing, until I am no longer required to file such forms and letters provided, however, that this authorization shall be deemed revoked with respect to any individual named above upon such individual's termination of active service with the Company.

I acknowledge that the persons authorized hereunder are not assuming, nor is the Company assuming, any of my responsibilities to comply with Section 16 of the Exchange Act and other relevant securities laws.

Dated as of the 20th day of January 2017.

/s/ Ellen Barker