UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

TEXAS INSTRUMENTS INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

> 12500 TI Boulevard P.O. Box 655474 Dallas, Texas 75265-5474 (Address of principal executive offices including zip code)

TI EMPLOYEES 2005 STOCK PURCHASE PLAN (Full title of the plan)

Joseph F. Hubach, Senior Vice President, Secretary and General Counsel Texas Instruments Incorporated 12500 TI Boulevard P.O. Box 660199 Dallas, Texas 75265-0199 (Name and address of agent for service) 972-995-3773 (Telephone number, including area code, of agent for service)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered**	Proposed Maximum Offering Price Per Share*	Proposed Maximum Aggregate Offering Price*	Amount of Registration Fee*
Common Stock (\$1 par value)	10,000,000	\$ 30.815	\$ 308,150,000	\$ 36,269.26

^c Computed on the basis of the average of the high and low prices for the common stock on July 25, 2005, which is used in the estimated offering price solely for the purpose of determining the registration fee in accordance with Rule 457 under the Securities Act of 1933.

** Plus an indeterminate number of additional shares which may be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

75-0289970 (I.R.S. Employer Identification No.)

PART II

Item 3. Incorporation of Documents by Reference

The following documents have been filed by the Company with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Exchange Act of 1934 (the "Exchange Act") and are incorporated herein by reference and made a part of this registration statement:

1. The Company's Annual Report on Form 10-K for the year ended December 31, 2004;

2. The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005;

3. The Company's Current Reports on Form 8-K filed January 25, 2005, March 7, 2005, April 18, 2005, June 7, 2005, June 10, 2005 and July 25, 2005; and

4. The description of the Company's common stock contained in its Registration Statements on Form 10 filed with the Commission pursuant to Section 12 of the Exchange Act, and of the preferred stock purchase rights contained in the Company's Registration Statement on Form 8-A filed on June 23, 1998, together with any amendment or report filed with the Commission for the purpose of updating such descriptions.

All documents filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated herein by reference and to be a part hereof from the date of filing of such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities

Not Applicable.

Item 5. Interests of Named Experts and Counsel

Not Applicable.

Item 6. Indemnification of Directors and Officers

The General Corporation Law of the State of Delaware, at Section 145, provides, in pertinent part, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving

at the request of the corporation as the director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful. In addition, the indemnification of expenses (including attorneys' fees) is allowed in derivative actions, except no indemnification is allowed in respect to any claim, issue or matter as to which any such person has been adjudged to be liable to the corporation, unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought decides that indemnification is proper. To the extent that any such person succeeds on the merits or otherwise, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith. The determination that the person to be indemnified met the applicable standard of conduct, if not made by a court and if such person is a director or officer at the time of such determination, is made by the directors of the corporation by a majority vote of the directors not party to such an action, suit or proceeding even though less than a quorum, by a committee of such directors designated by a majority vote of such directors even though less than a quorum, or, if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion or by the stockholders. Expenses may be paid in advance upon the receipt, in the case of officers and directors, of undertakings to repay such amount if it shall ultimately be determined that the person is not entitled to be indemnified by the corporation as authorized in this section. A corporation may purchase indemnity insurance.

The above described indemnification and advancement of expenses, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and inure to the benefit of such person's heirs, executors and administrators.

Article VI, Section 2 of the Company's By-laws provides that the Company shall indemnify its officers and directors for such expenses, judgments, fines and amounts paid in settlement to the full extent permitted by the laws of the State of Delaware.

Section 102(b)(7) of the Delaware General Corporation Law, as amended, permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. Article Seventh of the Company's Restated Certificate of Incorporation contains such a provision.

Under insurance policies of the Company, directors and officers of the Company may be indemnified against certain losses arising from certain claims, including claims under the Securities Act of 1933, which may be made against such persons by reason of their being such directors or officers.

Item 7. Exemption from Registration Claimed Not Applicable.

Item 8. Exhibits

5 Opinion of Joseph F. Hubach, Esq.

23(a) Consent of Ernst & Young LLP.

23(b) Consent of Joseph F. Hubach, Esq. (included in Exhibit 5).

24 Power of Attorney (included on signature pages).

Item 9. Undertakings

The Company hereby undertakes:

(1) To file, during any period in which offers or sales are being made of the securities registered hereby, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that the undertakings set forth in paragraphs 1(i) and 1(ii) above do not apply if the information required to be included in a posteffective amendment by those paragraphs is contained in periodic reports filed by the Company pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The Company hereby further undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Company's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Company pursuant to the provisions set forth or described in Item 6 of this registration statement, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in a successful defense of any action, suit or proceeding) is asserted against the Company by such director, officer or controlling person in connection with the securities registered hereby, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dallas and State of Texas, on the 27th day of July, 2005.

TEXAS INSTRUMENTS INCORPORATED (Registrant)

By: /s/ KEVIN P. MARCH

KEVIN P. MARCH Senior Vice President and Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints RICHARD K. TEMPLETON, JOSEPH F. HUBACH and KEVIN P. MARCH, and each of them, with full power to act without the others, his or her true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-8 under the Securities Act of 1933 and any or all amendments or supplements to such Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his or her substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities indicated on the 20th day of July, 2005.

Signature	Title
/s/ JAMES R. ADAMS	Director
James R. Adams	
/s/ DAVID L. BOREN	Director
David L. Boren	
/s/ DANIEL A. CARP	Director
Daniel A. Carp	
/s/ CARRIE S. COX	Director
Carrie S. Cox	
/s/ THOMAS J. ENGIBOUS	Chairman of the Board; Director
Thomas J. Engibous	
	Director
Gerald W. Fronterhouse	

David R. Goode

/s/ PAMELA H. PATSLEY

Pamela H. Patsley

/s/ WAYNE R. SANDERS

Wayne R. Sanders

/s/ RUTH J. SIMMONS

Ruth J. Simmons

/s/ RICHARD K. TEMPLETON

Richard K. Templeton

/s/ CHRISTINE TODD WHITMAN

Christine Todd Whitman

/s/ KEVIN P. MARCH

Kevin P. March

Director

Director

Director

Director

President; Chief Executive Officer; Director

Director

7

Senior Vice President; Chief Financial Officer; Chief Accounting Officer

INDEX TO EXHIBITS

Exhibit Number	Exhibit
5	Opinion of Joseph F. Hubach, Esq.
23(a)	Consent of Ernst & Young LLP.
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24	Power of Attorney (included on signature pages).

Board of Directors Texas Instruments Incorporated 12500 TI Boulevard Dallas, Texas 75243

Re: Texas Instruments Incorporated Registration Statement (Form S-8)

Ladies and Gentlemen:

This opinion of counsel is given in connection with a Registration Statement (Form S-8) being filed by you with the Securities and Exchange Commission relating to 10,000,000 shares of common stock of Texas Instruments Incorporated ("TI") to be issued under the TI Employees 2005 Stock Purchase Plan (the "Plan").

As Senior Vice President, Secretary and General Counsel of TI, I am familiar with all corporate action taken or expected to be taken with respect to the Plan and the common stock expected to be issued thereunder.

I am pleased to advise that the 10,000,000 shares of common stock of TI, when issued and delivered in accordance with the terms of the Plan and applicable Delaware General Corporation Law, will be duly authorized, validly issued, fully paid and nonassessable.

I hereby consent to the use of this opinion as an exhibit to the above-referenced Registration Statement.

Sincerely,

/s/ JOSEPH F. HUBACH

Joseph F. Hubach

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the TI Employees 2005 Stock Purchase Plan of our reports dated February 17, 2005, with respect to the consolidated financial statements of Texas Instruments Incorporated incorporated by reference in its Annual Report (Form 10-K) for the year ended December 31, 2004, and Texas Instruments Incorporated management's assessment of the effectiveness of internal control over financial reporting of Texas Instruments Incorporated, and the related financial statement schedule included therein, filed with the Securities Exchange Commission.

/s/ ERNST & YOUNG LLP Ernst & Young LLP

July 28, 2005 Dallas, Texas