As filed with the Securities and Exchange Commission on July 15th 1997 Registration No.

> 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)

Delaware75-0289970(State or other jurisdiction of
incorporation or organization)(I.R.S. Employer
Identification No.)

13500 North Central Expressway P.O. Box 655474 Dallas, Texas 75265-5474 (Address of principal executive offices including zip code)

> TEXAS INSTRUMENTS LONG-TERM INCENTIVE PLAN (Full title of the plans)

Richard J. Agnich, Senior Vice President, Secretary and General Counsel Texas Instruments Incorporated 13500 North Central Expressway P.O. Box 655474 Dallas, Texas 75265-5474 (Name and address of agent for service)

(972)995-2551 (Telephone number, including area code, of agent for service)

CALCULATION OF REGISTRATION FEE

Title 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) 350,000 \$90.3125 \$31,609,375 \$9,578.60

*Computed on the basis of the average of the high and low prices for Common Stock on July 8, 1997, which is used as the estimated offering price solely for the purpose of determining the registration fee in accordance with Rule 457 under the Securities Act of 1933.

The contents of the Company's previously filed Registration Statement on Form S-8, File No. 33-61154, covering shares of Texas Instruments Incorporated common stock, par value \$1.00, issuable under the Texas Instruments Long-Term Incentive Plan, is hereby incorporated by reference herein.

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 15th day of July, 1997.

TEXAS INSTRUMENTS INCORPORATED
(Registrant)

By:/s/ WILLIAM A. AYLESWORTH

William A. Aylesworth Senior Vice President, Treasurer and Chief Financial Officer

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 15th day of July, 1997.

Signature Title ------*JAMES R. ADAMS -----Chairman of the Board; Director James R. Adams *DAVID L. BOREN ----------Director David L. Boren *JAMES B. BUSEY IV -----. Director James B. Busey IV *THOMAS J. ENGIBOUS President; Chief Executive -----Officer; Director Thomas J. Engibous -----Director Gerald W. Fronterhouse - -----Director David R. Goode *WAYNE R. SANDERS ----------Director _ _ _ _ _ Wayne R. Sanders *GLORIA M. SHATTO -----Director Gloria M. Shatto *WILLIAM P. WEBER -----Vice Chairman; Director William P. Weber *CLAYTON K. YEUTTER - -----Director Clayton K. Yeutter /s/ WILLIAM A. AYLESWORTH Senior Vice President; Treasurer; -----William A. Aylesworth Chief Financial Officer; Chief Accounting Officer *By: /s/ WILLIAM A. AYLESWORTH William A. Aylesworth Attorney-in-fact INDEX TO EXHIBITS Exhibit Number Exhibit Certificate of Amendment to Restated Certificate of Incorporation of 4 the Registrant (incorporated by reference to Exhibit 3 to the

Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1996).

- 5 Opinion of Richard J. Agnich, Esq.
- 23(a) Consent of Independent Auditors.
- 23(b) Consent of Richard J. Agnich, Esq. (included in Exhibit 5).
- 24 Powers of Attorney for the Directors of the Company.

EXHIBIT 5

July 15, 1997

Board of Directors Texas Instruments Incorporated 13500 North Central Expressway Dallas, Texas 75265

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

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 350,000 shares of common stock of Texas Instruments Incorporated ("TI") to be issued pursuant to awards granted under the Texas Instruments Long-Term Incentive 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 350,000 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 abovereferenced Registration Statement.

Sincerely,

/s/ RICHARD J. AGNICH

Richard J. Agnich Senior Vice President, Secretary and General Counsel

CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Texas Instruments Long-Term Incentive Plan of our report dated January 22, 1997, 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, 1996 and the related financial statement schedule included therein, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP Ernst & Young LLP

July 14, 1997 Dallas, Texas

EXHIBIT 24

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints THOMAS J. ENGIBOUS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the others, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 1st day of July, 1997.

/s/ JAMES R. ADAMS James R. Adams

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, THOMAS J. ENGIBOUS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the others, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 attorneysin-fact and agents or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 7th day of July, 1997.

/s/ DAVID L. BOREN David L. Boren

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, THOMAS J. ENGIBOUS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the others, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 attorneysin-fact and agents or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 2nd day of July, 1997.

/s/ JAMES B. BUSEY IV James B. Busey IV KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the other, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 2nd day of July, 1997.

/s/ THOMAS J. ENGIBOUS

Thomas J. Engibous

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, THOMAS J. ENGIBOUS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the others, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 attorneysin-fact and agents or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 3rd day of July, 1997.

/s/ WAYNE R. SANDERS Wayne R. Sanders

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, THOMAS J. ENGIBOUS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the others, her true and lawful attorneys-in-fact and agents, with full and several power of substitution, for her and in her name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 she might or could do in person, hereby ratifying and confirming all that said attorneysin-fact and agents or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 1st day of July, 1997.

/s/ GLORIA M. SHATTO Gloria M. Shatto

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, THOMAS J. ENGIBOUS, RICHARD J. AGNICH and WILLIAM A. AYLESWORTH, and each of them, with full power to act without the others, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 attorneysin-fact and agents or any of them, or their or his substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 1st day of July, 1997.

/s/ WILLIAM P. WEBER William P. Weber

EXHIBIT 24

POWER OF ATTORNEY

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IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 2nd day of July, 1997.

/s/ CLAYTON K. YEUTTER Clayton K. Yeutter

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned constitutes and appoints JAMES R. ADAMS, THOMAS J. ENGIBOUS and RICHARD J. AGNICH, and each of them, with full power to act without the other, his true and lawful attorneys-in-fact and agents, with full and several power of substitution, for him and in his name, place and stead, in any and all capacities, to sign a Registration Statement on Form S-8 in connection with the registration of 350,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Long-Term Incentive Plan, a Registration Statement on Form S-8 in connection with the registration of 5,000,000 shares of common stock of Texas Instruments Incorporated for issuance under the TI Employees 1997 Stock Purchase Plan, a Post-Effective Amendment No. 1 to a Registration Statement on Form S-8 in connection with shares of common stock of Texas Instruments Incorporated registered for issuance under the TI Employees 1988 Stock Option Purchase Plan and a Registration Statement on Form S-8 in connection with the registration of 100,000 shares of common stock of Texas Instruments Incorporated for issuance under the Texas Instruments Restricted Stock Unit Plan for Directors, and any or all amendments or supplements to such Registration Statements, 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 substitutes, may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney on this 1st day of July, 1997.

/s/ WILLIAM A. AYLESWORTH

William A. Aylesworth