I hereby certify that I have compared the annexed copy with the original document filed by the Department of State and that the same is correct transcript of said original.

JAN - 5 1993

Witness my hand and seal of the Department of State on

[Signature]

Secretary of State
RESTATED CERTIFICATE OF INCORPORATION
OF
THE INSTITUTE OF ELECTRICAL AND
ELECTRONICS ENGINEERS, INCORPORATED

UNDER SECTION 805 OF THE NEW YORK NOT-FOR-PROFIT
CORPORATION LAW

The undersigned, being the President and Assistant Secretary of The
Institute of Electrical and Electronics Engineers, Incorporated, do hereby certify:

FIRST: The name of this Corporation is The Institute of Electrical and
Electronics Engineers, Incorporated.

SECOND: The Certificate of Consolidation of The Institute of Electrical and
Electronics Engineers, Incorporated, was filed by the Department of
State on January 2, 1963. The said Corporation was formed under the
Membership Corporation Law of the State of New York as the
American Institute of Electrical Engineers, the certificate of
incorporation of which was filed on March 16, 1896. It changed its
name to The Institute of Electrical and Electronics Engineers,
Incorporated, when it consolidated by such Certificate of Consolidation
with the Institute of Radio Engineers, Incorporated, the certificate of
incorporation of which was filed on August 23, 1913. Such
consolidation is referred to herein as the "Consolidation". The
American Institute of Electrical Engineers and The Institute of Radio
Engineers, Incorporated are referred to herein as the "Constituent
Corporations".

THIRD: The amendments to the Certificate of Incorporation of the Corporation
effected by this Restated Certificate of Incorporation are: (i) to more
accurately describe, in paragraph 5 of the Restated Certificate of
Incorporation, the purposes of the Corporation and to confirm that the
Corporation's activities shall be educational and scientific within the
meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as
amended, (ii) to designate the Secretary of State, as agent of the
Corporation, upon whom process against it may be served and to
provide the post office address to which a copy of such process may be
mailed, and (iii) to update, and clarify the text of the Certificate of
Incorporation and in some instances, remove certain references to the
Consolidation throughout the Certificate of Incorporation. All such
amendments are authorized by the Not-For-Profit Corporation Law. To accomplish the foregoing amendments, the Certificate of Incorporation has been amended and restated in its entirety as set forth in Article Fifth of this Restated Certificate of Incorporation.

FOURTH: The amendment and restatement of the Certificate of Incorporation was authorized at a meeting held on December 7, 1992, at which a quorum of the members of the Corporation entitled to vote thereon was present, by at least a majority vote as provided in paragraph (c) of Section 613 of the Not-For-Profit Corporation Law of the members entitled to vote on the amendment and restatement of the Certificate of Incorporation, in accordance with Section 613(d), Section 802 and Section 805 of the New York Not-For-Profit Corporation Law.

FIFTH: The text of the Certificate of Incorporation is hereby restated and amended in its entirety to read as follows:

1. The name of the Corporation is THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INCORPORATED.

2. The character of the Corporation’s scope is transnational and the territory in which its operations are to be conducted is the entire world. In addition to its world-wide operations, the Corporation may engage in activities directed to the interests and needs of members residing in a particular country or area of the world.

3. The principal office of the Corporation is to be located in the City, County and State of New York.

4. The number of directors shall be not less than nine (9) nor more than fifty (50).

5. The purposes and objects of the Corporation are:

   (a) To engage exclusively in scientific and educational activities within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, directed toward the advancement of the theory and practice of electrical, electronics, communications and computer engineering, as well as computer science, the allied branches of engineering and the related arts and sciences; means to these ends include, but are not limited to, the holding of meetings for the reading and discussion of professional papers, and the publication and circulation of works of literature, science and
art pertaining thereto and any other activities necessary, suitable and proper for the fulfillment of these objectives, including, but not limited to, activities such as professional activities, and collaboration with public bodies and with other societies for the benefit of the engineering community and the general public. The Corporation shall not engage in collective bargaining on such matters as salaries, wages, benefits and working conditions, customarily dealt with by labor unions. The Corporation shall strive to enhance the quality of life for all people throughout the world through the constructive application of technology in its field of competence. It shall endeavor to promote understanding of the influence of such technology on the public welfare;

(b) To organize and form regions, councils, sections, subsections, technical societies, society chapters, student branches, student branch chapters and other groups of members, and to provide for specifications and operating rules for any such groups;

(c) To receive, acquire, hold and maintain any property, real or personal, without limitation as to amount or value, for any of the Corporation's objects, by way of bequest, devise, gift, grant, purchase, or lease, to invest and reinvest the same, to control the income therefrom, and to expend or otherwise dispose of all or any portion of its funds and property, including the income, interest, or principal, subject, however, to any directions or limitations placed upon the same by donors or testators;

(d) To have all of the general powers enumerated in Section 202 of the Not-for-Profit Corporation Law together with the power to solicit grants and contributions for any corporate purpose and the power to maintain a fund or funds of real and/or personal property for any corporate purposes, and the right to exercise all other powers which are, or hereafter may be, conferred by law upon a corporation organized for the above purposes, or which are incidental to the conferred powers;

(e) To do any and all things necessary or proper in connection with or incidental to any of the foregoing.
Nothing herein shall authorize the Corporation, directly or indirectly, to engage in
or include among its purposes any of the activities mentioned in Section 404(b)
through (v) of the Not-for-Profit Corporation Law.

6. No substantial part of the activities of the Corporation shall be the
covering on of propaganda, or otherwise attempting to influence legislation and the
Corporation shall not participate in, or intervene in, any political campaign on
behalf of (or in opposition to) any candidate for public office.

7. In the event of the dissolution of the Corporation, the Board of
Directors shall dispose of its net assets, in trust, however, to further the purposes
expressed herein, or for one or more exempt purposes, and subject to the order of a
Justice of the Supreme Court.

8. In furtherance and not in limitation of the powers conferred by
statute, the Board of Directors, if the Constitution or By-Laws so provide, may
designate one or more committees which, to the extent provided in the
Constitution or By-Laws of the Corporation, or by resolution or resolutions of the
Board of Directors, shall have and may exercise the powers of the Board in the
management of the business and affairs of the Corporation that may be delegated to
such committee or committees, such committee or committees to have such name
or names as may be stated in the Constitution or By-Laws, or as may be determined
from time to time by resolution or resolutions of the Board of Directors.

9. The Corporation may in its Constitution and By-Laws confer
powers and authorities upon its Board of Directors in addition to the powers and
authorities expressly conferred by the statutes of the State of New York or by this
certificate. All the powers of the Corporation, insofar as the same may be lawfully
vested in the Board of Directors, are hereby conferred upon the Board of Directors of
the Corporation.

10. Members, delegates and directors of the Corporation shall have
the power to hold their respective meetings within or without the State of New
York; and the Corporation shall have the power to maintain offices and keep the
books of the Corporation within or without the State of New York, at such place or
places as may from time to time be designated by the Board of Directors.

11. No officer, director or member of the Corporation shall receive or
be lawfully entitled to receive any part of the net earnings thereof or any pecuniary
profit from the operations thereof, except such reasonable compensation for services
in effecting one or more of its purposes as the Board of Directors may determine.

12. Each director of the Corporation shall be indemnified by the
Corporation against reasonable expenses actually and necessarily incurred by him in
connection with the defense of any action, suit, or proceeding in which he is made a party by reason of his being or having been a director of the Corporation, except in relation to matters as to which he shall be adjudged in such action, suit, or proceeding to be liable for wilful negligence, misfeasance, or misconduct in the performance of his duties as director; such right of indemnification shall not be deemed exclusive of any other right to which he may be entitled under any by-law, agreement, vote or otherwise.

13. Nothing contained in this Restated Certificate of Incorporation shall authorize or empower the Corporation to perform or engage in any acts or practices prohibited in Section 340 of the General Business Law or other anti-monopoly statute of this state.

14. As of January 2, 1963, each member of the Constituent Corporations shall have the highest grade of membership in the Corporation as was, at such time, held by him in either of the Constituent Corporations; and each member of the Constituent Corporations then entitled to vote therein shall possess the power to vote in the Corporation for the election of directors and for all other purposes conferred upon voting members by the laws of the State of New York, this Restated Certificate of Incorporation, the Constitution and the By-Laws of the Corporation.

15. Except as provided in paragraph 16 hereof, as of January 2, 1963, the separate existence of the Constituent Corporations is terminated.

16. Except as provided under the Estates Powers and Trusts Law governing the disposition of property for charitable purposes, a devise, bequest, gift or grant contained in the will of a person dying domiciled in the State of New York, or in any other instrument executed under the laws of said State, taking effect on or after January 2, 1963, to or for either of the Constituent Corporations, shall inure to the benefit of the Corporation; and so far as it is necessary for that purpose, or for the purpose of a like result with respect to a devise, bequest, gift, or grant governed by the law of any other jurisdiction, the existence of each Constituent Corporation shall be deemed to continue in and through the Corporation.

17. As of January 2, 1963, all rights, privileges, and interests of each of the Constituent Corporations, all the property, real, personal, and mixed, and all the debts due on whatever account to either or them, and other things in action belonging to either of them, shall be deemed to be transferred to and vested in the Corporation without further act or deed, and all claims, demands, property, and every other interest, whether vested or contingent, shall be as effectually the property of the Corporation as they were of the Constituent Corporations, and the title to all real estate, taken by deed or otherwise under the laws of the State of New York vested in either of the Constituent Corporations, shall not be deemed to revert
or be in any way impaired by reason of the Consolidation but shall be vested in the Corporation.

18. As of January 2, 1963, the Corporation shall be deemed to have assumed and shall be liable for all the liabilities and obligations of the Constituent Corporations, in the same manner as if the Corporation had itself incurred such liabilities or obligations.

19. The Corporation is a corporation as defined under subparagraph (a)(5) in Section 102 of the New York Not-for-Profit Corporation Law, is a Type B not-for-profit corporation as defined under Section 201 of the New York Not-for-Profit Corporation Law and is formed not for pecuniary profit or financial gain.

20. The Secretary of State is hereby designated as agent of the Corporation upon whom process against it may be served. The post office address to which the Secretary shall mail a copy of any process against the Corporation served upon it is: The Institute of Electrical and Electronics Engineers, Incorporated, 345 East 47th Street, New York, New York 10017.

IN WITNESS WHEREOF, we have subscribed this document on this 7th day of December, 1992 and do hereby affirm, under penalties of perjury, that the statements contained therein have been examined by us and are true and correct.

Merrill Buckley, President
The Institute of Electrical and Electronics Engineers, Incorporated

Eric Herz, Assistant Secretary
The Institute of Electrical and Electronics Engineers, Incorporated
Restated Certificate of Incorporation

of

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INCORPORATED

Under Section 805 of the Not-for-Profit Corporation Law

STATE OF NEW YORK
DEPARTMENT OF STATE

FED JAN-5 1998

TAX S
BY: SCB

Dorsey & Whitney
350 Park Avenue
New York, NY 10022

930105000280
I, STANLEY PARNES, a Justice of the Supreme Court of the State of New York, First Judicial District, do hereby approve the foregoing Restated Certificate of Incorporation of THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INCORPORATED and consent that the same be filed.


[Signature]

Justice of the Supreme Court of the State of New York, First Judicial District

STANLEY PARNES
FILING RECEIPT

ENTITY NAME: THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INCORPORATED

DOCUMENT TYPE: CERTIFICATE OF CHANGE (DOM. NFP) PROCESS

SERVICE COMPANY: CSC NETWORKS/PRENTICE HALL

FILED: 11/19/1996 DURATION: ******** CASH#: 981119000653 FILM #: 981119000638

ADDRESS FOR PROCESS

THE CORPORATION
3 PARK AVENUE, 17TH FLOOR
NEW YORK, NY 10016

REGISTERED AGENT

FILER FEES 55.00 PA YMENTS 55.00

FILING : 20.00 CASH : 0.00
TAX : 0.00 CHECK : 0.00
CERT : 0.00 BILLED: 55.00
COPIES : 10.00
HANDLING: 25.00

REFUND: 0.00

035081MSE

DOS-1025 (11/89)
State of New York
Department of State

I hereby certify that the annexed copy has been compared with the original document in the custody of the Secretary of State and that the same is a true copy of said original.

Witness my hand and seal of the Department of State on

Nov 20 1998

[Signature]

Special Deputy Secretary of State
Certificate of Change of
The Institute of Electrical and Electronics Engineers, Incorporated

Under Section 803-A of the Not-For-Profit Corporation Law

FIRST: The name of the Corporation is: The Institute of Electrical and Electronics Engineers, Incorporated (the “Corporation”).

SECOND: The Certificate of Incorporation of the Corporation was filed by the Department of State on March 16, 1896.

THIRD: The change in the Certificate of Incorporation effected by this Certificate of Change is as follows:

"To change the post office address to which the Secretary of State shall mail a copy of any service of process against the Corporation."

FOURTH: To accomplish the foregoing change, Article 6 of the Certificate of Incorporation, relating to the post office address is hereby stricken out in its entirety, and the following new Article 6 is substituted in lieu thereof:

"6. The Secretary of the State of New York is hereby designated as agent of the Corporation upon whom process against it may be served. The post office address to which the Secretary of State shall mail a copy of any process against the Corporation served upon him to: 3 Park Avenue, 17th Floor, New York, New York 10016."

FIFTH: The foregoing change was approved by the Board of Directors.

IN WITNESS WHEREOF, the undersigned has executed, signed and acknowledged this Certificate of Change this November, 1998.

Signed on November 15, 1998
The Institute of Electrical and Electronics Engineers, Incorporated

By: [Signature]
Name: Joseph Bordogna
Title: IEEE President

0001_12
CERTIFICATE OF CHANGE

OF

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INCORPORATED

Under Section 803-A of the Not-for-Profit Corporation Law

FILLED BY: Ms. Jessie A. Clarke
Dorsey & Whitney L.L.P.
250 Park Avenue, Suite 1500
New York, NY 10177
035081ME

STATE OF NEW YORK
DEPARTMENT OF STATE

FILED NOV 19 1998
TAXES BY:

BILLED
State of New York
Department of State

I hereby certify that the annexed copy has been compared with the original document in the custody of the Secretary of State and that the same is a true copy of said original.

Witness my hand and seal of the Department of State on JUL 15 1999

Special Deputy Secretary of State

DOS-1356 (5/96)
FILED: 11/13/1997 DURATION: ****** CASH #: 971113000567 FILM #: 971113000530

ADDRESS FOR PROCESS
THE CORPORATION
345 EAST 47TH STREET
NEW YORK, NY 10017

REGISTERED AGENT

FILER

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DORSEY & WHITNEY
250 PARK AVENUE
NEW YORK, NY 10177

FEEs
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FILING: 30.00
TAX: 0.00
CERT: 0.00
COPIES: 10.00
HANDLING: 25.00

PAYMENTS
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CASH: 0.00
CHECK: 65.00
BILLED: 0.00

total: 65.00

REFUND: 0.00
State of New York
Department of State

I hereby certify that the annexed copy has been compared with the original document in the custody of the Secretary of State and that the same is a true copy of said original.

Witness my hand and seal of the Department of State on NOV 17 1997

[Signature]
Special Deputy Secretary of State
CERTIFICATE OF AMENDMENT
OF
THE CERTIFICATE OF INCORPORATION
OF
THE INSTITUTE OF ELECTRICAL AND
ELECTRONICS ENGINEERS, INCORPORATED
Under Section 803 of the Not-for-Profit Corporation Law

We, the undersigned, being the President and the Secretary of The Institute of Electrical and Electronics Engineers, Incorporated, for the purpose of amending the Certificate of Incorporation of the corporation under Section 803 of the Not-for-Profit Corporation Law, hereby certify as follows:

1. The name of the corporation is The Institute of Electrical and Electronics Engineers, Incorporated.

2. The Certificate of Consolidation of The Institute of Electrical and Electronics Engineers, Incorporated, was filed by the Department of State on January 2, 1963. The said Corporation was formed under the Membership Corporation Law of the State of New York as the American Institute of Electrical Engineers, the certificate of incorporation of which was filed on March 16, 1896. It changed its name to The Institute of Electrical and Electronics Engineers, Incorporated, when it
consolidated by such Certificate of Consolidation with the
Institute of Radio Engineers, Incorporated, the certificate of
incorporation of which was filed on August 23, 1913. The
Certificate of Incorporation of the corporation was restated and
amended in its entirety by a Restated Certificate of
Incorporation which was filed on January 5, 1993.

3. The corporation is a corporation as defined in
subparagraph (a) (5) of Section 102 of the New York Not-for-Profit
Corporation Law and the corporation is a Type B corporation under
Section 201 of said Law.

4. The Certificate of Incorporation of the
Corporation is hereby amended to permit Constitution and By-Law
provisions specifying a proportion of votes of members or
directors necessary for the transaction of any specified item of
business which is greater than the proportion prescribed by the
Not-for-Profit Corporation Law absent such provisions. The
Certificate of Incorporation is hereby amended by revising
Paragraph 9 in its entirety to read as follows:

"9. The Corporation may in its Constitution and By-
Laws confer powers and authorities upon its Board of
Directors in addition to the powers and authorities
expressly conferred by the statutes of the State of New
York or by this certificate. All the powers of the
Corporation, insofar as the same may be lawfully vested
in the Board of Directors, are hereby conferred upon
the Board of Directors of the Corporation. The
Constitution and By-Laws may contain provisions
specifying a proportion of votes of members or
directors that shall be necessary for the transaction of any specified item of business which is greater than the proportion prescribed by the Not-for-Profit Corporation Law in the absence of such provisions."

5. This amendment to the Certificate of Incorporation of The Institute of Electrical and Electronics Engineers, Incorporated was authorized by at least a majority vote as provided in paragraph (c) of Section 613 of the Not-for-Profit Corporation Law of the members entitled to vote on the amendment of the Certificate of Incorporation, in accordance with Section 603(d) and Section 802 of the New York Not-for-Profit Corporation Law.

6. The Secretary of State of the State of New York is hereby designated as agent of the corporation upon whom process against it may be served. The post office address to which the Secretary of State shall mail a copy of any process against the corporation served upon him is:

345 East 47th Street
New York, New York 10017
IN WITNESS WHEREOF, the undersigned have subscribed and verified this Certificate this 9th day of November, 1997 and do hereby affirm, under the penalties of perjury, that the statements contained herein have been examined by us and are true and correct.

Name: Charles K. Alexander
President

Name: Paul Y.S. Cheung
Secretary
CERTIFICATE OF AMENDMENT
OF
THE CERTIFICATE OF INCORPORATION
OF
THE INSTITUTE OF ELECTRICAL AND
ELECTRONICS ENGINEERS, INCORPORATED
Under Section 803 of the Not-for-Profit Corporation Law

STATE OF NEW YORK
DEPARTMENT OF STATE
FILED NOV 13 1997
TAX $ 0
BY: NEW YORK

Dorsey & Whitney
250 Park Avenue
New York, NY 10177

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