

MEMORANDUM OF UNDERSTANDING

SEMATECH

This Memorandum of Understanding (MOU) is entered into by and between SEMATECH, Inc. (SEMATECH) and the U.S. Department of Defense (DoD) to implement the National Defense Authorization Act for Fiscal Years 1988 and 1989, Public Law No. 100-180, part F of title II, sections 271-276 (1987), and the Department of Defense Appropriation Act, 1988, Public Law No. 100-202 (1987).

PARTIES

SEMATECH is a consortium of United States firms that manufacture or use semiconductor devices and that are organized to strengthen the capabilities of the United States semiconductor industry in semiconductor manufacturing technology so as to enable the United States industry to meet commercial and defense needs for future semiconductor devices. SEMATECH was established for the purposes of conducting research concerning advanced semiconductor manufacturing techniques and developing techniques to adapt manufacturing expertise to a variety of semiconductor products.

The DoD is an executive department of the United States. The Secretary of Defense has delegated to the Director of the Defense Advanced Research Projects Agency (DARPA) the authority to enter

into this MOU and to implement the provisions of Public Law No. 100-180 and Public Law No. 100-202.

FINDINGS AND PURPOSES

Congress has found that it is in the national economic and security interest of the United States to provide financial assistance to SEMATECH for research and development activities in the field of semiconductor manufacturing. In order to further this finding, Congress appropriated funds to be used for grants for the purpose of encouraging the semiconductor industry in the United States to:

- (1) Conduct research on advanced semiconductor manufacturing techniques;
- (2) develop techniques to use manufacturing expertise for the manufacture of a variety of semiconductor products.

This MOU provides the terms of reference for DoD to make grants to SEMATECH to achieve these purposes.

THE PARTIES AGREE THAT

- (1) SEMATECH shall have -

(a) a charter agreed to by all representatives of the semiconductor industry that are participating members of SEMATECH; and

(b) an annual operating plan that is developed in consultation with the Secretary of Defense and the Advisory Council on Federal Participation in SEMATECH.

(2) The total amount of funds made available to SEMATECH by Federal, State, and local government agencies for any fiscal year for the support of research and development activities of SEMATECH shall not exceed 50 percent of the total cost of such activities.

(3) SEMATECH, in conducting research and development activities funded in whole or in part by grants made by DoD pursuant to this MOU, shall cooperate with and draw on the expertise of the national laboratories of the Department of Energy and of colleges and universities in the United States in the field of semiconductor manufacturing technology.

(4) DoD shall be permitted to use intellectual property, trade secrets, and technical data owned and developed by SEMATECH in the same manner as a participant in SEMATECH, and to transfer such intellectual property, trade secrets, and technical data to DoD contractors for use in connection with DoD requirements;

provided that DoD may not transfer such property to any person for commercial use.

(5) SEMATECH shall take all steps necessary to maximize the expeditious and timely transfer of technology developed and owned by SEMATECH to the participants in SEMATECH in accordance with the agreement between SEMATECH and those participants and for the purpose of improving manufacturing productivity of United States semiconductor firms.

ACCESS TO RECORDS AND AUDIT

(1) An independent, commercial auditor shall be retained by SEMATECH (A) to determine the extent to which the funds made available to SEMATECH by the United States for the research and development activities of SEMATECH have been expended in a manner that is consistent with the purposes of Section 271-276 of Public Law No. 100-180 (1987), the charter of SEMATECH, the annual operating plan of SEMATECH, and this MOU; and (B) to submit to the Secretary of Defense, SEMATECH, and the Comptroller General of the United States an annual report containing the findings and determinations of such auditor, not later than 60 days after the close of the Grantee's fiscal year.

(2) The General Accounting Office and the Inspector General of the Department of Defense shall have direct access to sufficient

records and information of SEMATECH concerning SEMATECH operations and expenditures, as they determine, to ensure full accountability for federal funds.

PRINCIPAL RESEARCH FACILITY

The location of the principal site for SEMATECH research facilities, as determined by SEMATECH, is Austin, Texas. DoD agrees, and fully concurs, with this site for such facilities.

GRANTS

(1) Grants to SEMATECH by DoD shall be made in accordance with section 6304 of title 31, United States Code, part F of title II of Public Law No. 100-180 and any other acts that authorize and appropriate funds for the purpose of making grants to SEMATECH, and this MOU.

(2) This MOU shall be incorporated into and made a part of any grant by DoD to SEMATECH.

CONSTRUCTION

As provided by section 272(c) of title II of Public Law No. 100-180, this MOU shall not be considered to be a contract for the purpose of any law or regulation relating to the formation,

content, and administration of contracts, and such provisions of law and regulation shall not apply with respect to this MOU.

TERM

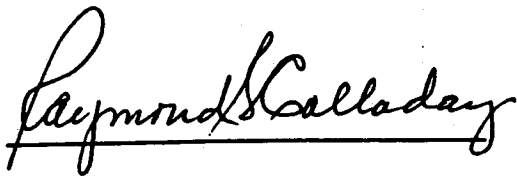
This MOU shall be effective when signed by both parties. Its provisions, independent of any grants, shall remain in effect for one year; provided that when incorporated into any grant by DoD, it shall remain in effect for the purpose of that grant for the duration of that grant instrument. This MOU may be extended by the parties by mutual agreement.

This MOU is executed this
12 day of May, 1988.

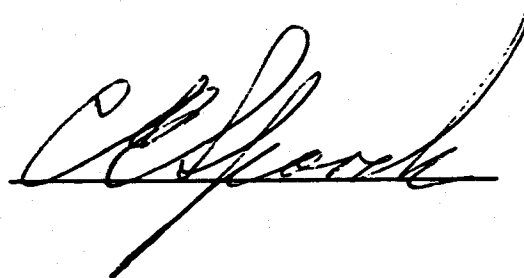
This MOU is executed this
12 day of May, 1988.

FOR THE DEPARTMENT
OF DEFENSE

FOR SEMATECH, Inc.



Dr. Raymond S. Colladay
Director, Defense Advanced
Research Projects Agency



Charles E. Sporck
Chairman of the Board
SEMATECH

JILA
Agt. / Misc

AMENDMENT
TO
MEMORANDUM OF UNDERSTANDING
SEMATECH

By mutual agreement, the Parties extend the Memorandum of Understanding ("MOU"), executed by the Parties on May 12, 1988, pursuant to the authority of the National Defense Authorization Act of Fiscal Years 1988 and 1989, Public Law 100-180, part F of title II, section 276(b) (1987), in accordance with the following terms and conditions:

1. TECHNOLOGY COOPERATION AND INFORMATION EXCHANGE

SEMATECH and the Department of Defense through the Defense Advanced Research Projects Agency ("DARPA") shall seek to continue to cooperate in the area of semiconductor research and development. To this end, SEMATECH and DARPA shall:

- exchange information and assessments regarding the future technology challenges facing the semiconductor industry, the special semiconductor technology needs and capabilities that are a priority for the civilian and military sectors, and the anticipated investment levels in semiconductor technology on an industry-wide and government-wide basis; and
- continue to participate in the formulation of a national semiconductor technology roadmap.

2. SEMICONDUCTOR TECHNOLOGY COUNCIL

SEMATECH and DARPA shall continue to support the efforts of the Semiconductor Technology Council as appropriate and as requested by the co-chairman of the council.

3. DARPA PARTICIPATION IN SEMATECH

DARPA representatives shall be eligible to attend and observe meetings of the SEMATECH Board of Directors, meetings of certain SEMATECH Technical Advisory Boards, and special SEMATECH training sessions. In addition, SEMATECH and DARPA may, consistent with the requirements and procedures of each organization, extend special access to information to representatives of the other organization for purposes of advancing the development of semiconductor technology.

4. ACTION IN THE NATION INTEREST


SEMATECH and DARPA shall take such other actions as the Parties may agree are appropriate and in the defense and economic interests of the United States.

5. SUSPENSION OF CERTAIN TERMS AND CONDITIONS

All terms and conditions of the MOU shall be suspended as of the date hereof except (i) as pertains to any activity occurring or to any assets in existence before the date hereof and (ii) for paragraphs 1 through 4 as set forth in this Amendment.

This amendment to the MOU shall be effective when signed by both Parties. It shall remain in effect unless terminated by either party, with or without cause, upon ninety (90) days prior written notice to the other party.

FOR THE DEPARTMENT OF DEFENSE

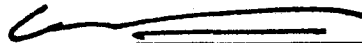


(Signature)

R. Timothy Arnold
Director, Contracts Management Directorate
Defense Advanced Research Projects Agency
Office of Management Operations

Date: 2/24/98

FOR SEMATECH INC.



(Signature)

Mark Melliar-Smith
President and Chief Executive Officer

Date: 2/10/98