## Statement of Considerations

REQUEST BY SEMIKRON INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS TO SUBJECT INVENTIONS MADE UNDER A CONTRACT ENTITLED "SUBCONTRACT RE: U.S. DOE COOPERATIVE AGREEMENT NUMBER DE-FC02-00EE50632"; W(A)-00-014, CH1030.

Semikron Inc. (Semikron) has requested an advance waiver of domestic and foreign patent rights to inventions its employees may conceive or first actually reduce to practice in the performance of its subcontract under DOE Cooperative Agreement No. DE-FC02-00EE50632. This agreement, referred to in the waiver petition as the "AIPM Contract" arises from the Automotive Integrated Power Module (AIPM) Project.

As brought out in the attached waiver petition, the scope of the work is to develop and test a 42 V and 450 V power module with integrated protection and control circuitry for the automotive industry, including high volume manufacturing readiness and capability.

Referring to paragraphs 5 and 6 of Semikron's waiver petition, Semikron owns the Skiip and Skim pressure contact technology, which is protected by German patent DE 41,222,428 and U.S. Patent Number 5,296,739. Semikron is established in several markets including battery driven vehicles, elevators and industrial drives. Semikron has developed, produced and sold power semiconductor devices, modules, driver circuits and accessories for 49 years. One of the core competencies of Semikron are subsystems for driving electric motors of medium to high power. These subsystems contain power semiconductors, DC link and DC link capacitors, cooling means, driver circuits, sensors and sensor circuits, power supply circuits, interfaces, electrical and mechanical connectors and housing.

Referring to paragraphs 7 and 8 of Semikron's waiver petition, Semikron will make a 50% financial contribution to further develop the technology it brings to the agreement. Semikron's share of the total approved budget is \$8,737,017. Semikron brings to the AIPM project all the technology for developing and producing power semiconductor dies, packaged devices, modules, driver and power supply circuits, ASICs for digital and analog functions, accessories and power electronic subsystems, including the needed software and manufacturing know how.

Semikron has agreed to the terms of the usual advance patent waiver and background data licensing provisions. Those advance patent wavier provisions include a Government license, march-in rights and preference for U.S. industry provisions comparable to those set out in 35 U.S.C. 202-204, as well as a U.S. Competitiveness Clause which requires that products embodying a waived invention or produced through this use of a waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. Semikron has also agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Additionally, should Semikron or other entity receiving

rights in any waived invention undergo a change in ownership amounting to a controlling interest, the waiver, assignment, license or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

The grant of this waiver is not anticipated to result in any adverse effects on competition or the public health, safety and welfare. This area of technology is highly competitive on both the national and international scale, and since Semikron already holds a background patent position, it is anticipated that it will be able to successfully commercialize the results of this agreement.

Considering the foregoing, and in view of the statutory objectives to be attained and the factors to be considered, it has been determined that this advance waiver of patent rights will best serve the interest of the United States and the general public. Subject to Semikron contributing at least fifty percent (50%) cost sharing, in aggregate over the term of this agreement, it is recommended that the waiver be granted.


Thomas G. Anderson **Assistant Chief Counsel** Office of Intellectual Property Law

Date: 6 8 00

Joy Alwan Pater Attorney

Office of Intellectual Property Law

Date: 6 June 00

Based on the foregoing Statement of Consideration, it is determined that the interest of the United States and the general public will be best served by a waiver of the United States and foreign rights as set forth therein, and therefore the waiver is granted. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

Robert S. Kirk **Acting Director** Office of Advance Automotive **Technologies EE-32** 5G-030/FORS

CK 9K194 for RAS phone with RAS APPROVAL:

Paul A. Gottlieb Assistant General Counsel

for Technology Transfer and

Intellectual Property

Date: 7 - 18 - 8 (

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## WAIVER ACTION - ABSTRACT

REQUESTOR: Semikron Inc.

DE-FC02-00EE50632

CONTRACT SCOPE OF WORK: Development and demonstration a 42 V and 450V power module with integrated protection and control circuitry for the automotive industry.

RATIONAL FOR DECISION: Granting of the waiver will provide the incentive to commercialize the invention in a fashion which will benefit the public in the shortest practical time.

DISPOSITION: