

LETTER OF ASSURANCE FOR ESSENTIAL PATENTS

Please return via mail,
e-mail (.pdf), or FAX to:

Secretary, IEEE-SA Standards Board Patent Committee
Institute of Electrical and Electronics Engineers, Inc.
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A. PATENT HOLDER/ORGANIZATION:

Legal Name of Organization: Texas Instruments Incorporated

B. PATENT HOLDER'S CONTACT FOR LICENSE APPLICATION:

Name & Department: Robby Holland - Licensing Manager
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Telephone: 972-917-4367 Fax: 972-917-4418 E-mail: r-holland3@ti.com
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C. IEEE STANDARD or PROPOSED IEEE STANDARD:

Number: IEEE P1149.7
Title: Standard for Reduced-pin and Enhanced-functionality Test Access Port and Boundary Scan Architecture

D. PATENT HOLDER'S POSITION REGARDING LICENSING ESSENTIAL PATENT RIGHTS:

In accordance with Clause 6 of the *IEEE-SA Standards Board Bylaws*, the Patent Holder hereby declares that its licensing position with respect to any patent(s) and/or patent application(s) that it may hold or control, the use of which would be essential to create a compliant implementation of either mandatory or optional portions of the [Proposed] IEEE Standard identified above, is as follows (*check one box only*):

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3. The Patent Holder is unwilling to grant licenses according to the provisions of either 1 or 2 above.
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If the Patent Holder owns or controls patent(s) and/or application(s) that it believes may be essential to create a compliant implementation of the [Proposed] IEEE Standard, please specify the following:

Patent/Application Number: See page 3 attached
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Patent/Application Number: _____

Title: _____

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Title: _____

Use additional pages, as necessary.

E. SIGNATURE:

Print name of authorized person: Lawrence J. Bassuk

Title of authorized person: Senior Patent Counsel

Signature of authorized person: [Signature] Date: 19 Sep 2006

Note: This assurance applies from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable upon acceptance by the IEEE-SA Standards Board Patent Committee.

The IEEE Patent Policy and the procedures used to execute that policy are documented in the IEEE-SA Standards Board Bylaws and the IEEE-SA Standards Board Operations Manual, available at <http://standards.ieee.org/resources/index.html#guides>. These documents must be read and understood before completing and submitting this form.

JLB

IEEE P1149.7 -TI LoA

If the Patent Holder owns or controls patent(s) and/or application(s) that it believes may be essential to create a compliant implementation of the [Proposed] IEEE Standard, please specify the following:

Patent Publication Number: 2006-0,156,069

Title: BDX DATA IN STABLE STATE

Patent Publication Number: 2006-0,156,067

Title: USING ZERO BIT SCAN AS A CONTROL EVENT

Patent Publication Number: 2006-0,156,070

Title: LOCATING AND LABELING DEVICE IN A MULTI DROP CONFIGURATION

Patent Publication Number: 2006-0,161,815

Title: MULTIPLE TEST ACCESS PORT PROTOCOLS SHARING COMMON SIGNALS

Patent Publication Number: 2006-0,156,068

Title: CONVEYING STATE DATA THROUGH STATE TRANSITIONS AND NUMBER OF STAYS IN STATES

Patent Application Number: TI Docket TI-62049, filed 2/9/2006

Title: SYSTEM AND METHOD FOR SHARING A COMMUNICATIONS LINK BETWEEN MULTIPLE COMMUNICATIONS PROTOCOLS

Patent Application Number: TI Docket TI-60796, filed 06/12/2006

Title: SYSTEM AND METHOD FOR IMPROVED PERFORMANCE AND OPTIMIZATION OF DATA EXCHANGES OVER A COMMUNICATIONS LINK