

JEDEC PATENT POLICY

8.2 Patent Policy

8.2.1 Definitions

“Affiliate” means an entity owned or controlled by a Committee Member, or which controls or is under common control with a Committee Member for so long as such control exists. For purposes of this definition, control means the ownership of greater than 50% of the voting securities of that Committee Member.

“Patents” mean all classes or types of patents other than design patents (including, without limitation, originals, divisions, continuations, continuations-in-part, extensions or reissues), and applications for these classes or types of patents throughout the world.

“Essential Patent Claims” means those Patent claims the use of which would necessarily be infringed by the use, sale, offer for sale or other disposition of a portion of a product in order to be compliant with the required portions of a final approved JEDEC Standard. Essential Patent Claims do not include Patent claims covering aspects that are not required to comply with a JEDEC Standard, or are required only for compliance with sections that are marked “example,” “non-normative,” or otherwise indicated as not being required for compliance, or related to underlying enabling technologies or manufacturing techniques not specified in the standard.

“Essential Patent” means a Patent containing one or more Essential Patent Claims.

“Potentially Essential Patent” means a Patent that is reasonably believed by a subject person to contain one or more Essential Patent Claims.

“Potential Licensees” means all JEDEC Committee Members and non-members.

“Committee Member” means an entity that Participates in a JEDEC committee and its Affiliates.

“Representative” means an individual who represents a Committee Member. The term includes entities that have not formally joined the committee or task group, if they Participate.

“Participate” or “Participated” or “Participation” means (a) joining a JEDEC committee or task group involved in the development of or amendments to a Standard; or (b) attending more than one meeting of such committee or task group (in person or by telephone) within a one-year period. “Participate” includes being present at any point in a meeting of a committee or task group even if the individual or entity has not formally joined the committee or task group.

“Contribution” means any submitted material, proposal or other submission offered by a Committee Member in the process of developing a Standard for the purpose of incorporating such submitted material, proposal, or other submission into a Standard, provided that such submitted material, proposal, or other submission either (a) exists in a tangible form of expression (including in electronic media); or (b) is a verbal statement that is memorialized in written documentation (such as a proposed Standard or submitted material) and is either confirmed or not objected to by such Committee Member within thirty (30) calendar days after its receipt of or access to such memorialization, including without limitation, via posting on the JEDEC website.

“Disclosure of Potentially Essential Patents” or to “Disclose Potentially Essential Patents” means disclosure to JEDEC in a writing in the following form:

(a) for issued patents, disclose the patent owner, assignee (if available at time of disclosure) name, address and intellectual property rights (“IPR”) contact person; name or title of the patent; the patent number; the country or countries of issuance, and the Standard(s) on which the submitter of the disclosure believes an Essential Patent Claim may read,

(b) for published applications, disclose the patent application owner, assignee (if available at time of disclosure) name, address and IPR contact person; name or title of the patent; the patent application number; the country or countries of filing, and the Standard(s) on which the submitter of the disclosure believes an Essential Patent Claim may read, and

(c) for unpublished pending applications, disclose the name or title of the patent application, the patent application owner or assignee (if available at time of disclosure) name, address and the IPR contact person; the patent application number; the general subject matter of such unpublished application(s) and the Standard(s) on which the submitter of the disclosure believes an Essential Patent claim may read. Nothing herein precludes broader disclosure of unpublished patent applications on a voluntary basis or pursuant to a non-disclosure agreement.

Disclosure of a patent is deemed to include all patents claiming priority of a single filing. The listing of foreign equivalents is optional and at the discretion of the patent holder.

If any of a Committee Member’s disclosed patent or patent application contains Essential Patent Claims which, if licensed, would require a payment of royalties or other material consideration to an unaffiliated third party, the Committee Member must also note this fact in its disclosure statement.

“Standards” include both proposed and adopted JEDEC technical specification. Standards include publications and package outlines, provided that they are adopted (or intended to be adopted) by the JEDEC Board of Directors and have the effect of Standards. Standards work includes activities in JEDEC committees and task groups.

“RAND” means reasonable and non-discriminatory licensing terms and conditions.

8.2.2 General Provisions

8.2.2.1 Committee Members

All Committee Members, as a condition of committee membership or committee Participation, agree to abide by JEDEC rules and procedures, including this JEDEC patent policy (“Patent Policy”). This commitment also applies to entities that Participate in JEDEC Committees or task groups, whether or not they have formally joined as JEDEC members.

All Committee Members, as a condition of committee membership and Participation, agree to Disclose Potentially Essential Patents, as set forth more fully in Section 8.2.3 and to offer to license their Essential Patent Claims to all Potential Licensees on RAND terms and conditions, if and as consistent with Sections 8.2.3 and 8.2.4 below.

The disclosure and licensing obligations of Committee Members and Participants are limited to Standards developed in the particular JEDEC committees in which and while they Participate.

As JEDEC members, Committee Members and Representatives are encouraged, but not required, both to Disclose their Potentially Essential Patents and to license their Essential Patent Claims on RAND terms and conditions for Standards developed in all other JEDEC committees in which they are not Committee Members. Such disclosure shall be in the format described in Section 8.2.3 and be made to the JEDEC Legal Department.

Committee Members and Representatives are encouraged, but not required, to Disclose the Potentially Essential Patents of other entities, including other Committee Members and third-parties.

Committee Members and Representatives are encouraged, but not required, to bring Patent Policy issues or concerns with respect to the Disclosure of Potentially Essential Patents and the licensing of Essential Patent Claims to the attention of the JEDEC Board of Directors for resolution under Section 9.2.

8.2.2.2 Committees

JEDEC committees and task groups shall not consider any matters or proposals that are outside the approved scope of such committees or task groups. Furthermore, JEDEC committees and task groups are encouraged to use best efforts to avoid proposals for Standards that are within the approved scope of such committees and task groups and that would be likely to cause Committee Members to terminate their membership in the committee or task group for the purpose of discontinuing their disclosure or RAND licensing obligations.

JEDEC committees and task groups shall keep track of all notices, disclosures and licensing assurances with respect to Potentially Essential Patents and to review, on a periodic basis, the list of prior disclosures of Potentially Essential Patent Claims.

JEDEC committees and task groups shall consider reasonable work-arounds and technical alternatives (but are not required to implement such work-arounds or alternatives) within the earlier of: a) balloting or b) one-hundred twenty (120) calendar days of receiving Notice of Refusal to offer Licenses on RAND Terms.

JEDEC committees and task groups are encouraged, but not required, to resolve patent policy issues before balloting. Unresolved issues relating to Potentially Essential Patents may be submitted to the JEDEC Board of Directors for resolution under Section 9.2. The sole remedy for any issues or concerns about deviations from approved scope shall be an appeal to the JEDEC Board of Directors made prior to approval of the subject draft specification for resolution under Section 9.2.

8.2.3 Disclosure of Potentially Essential Patents

At each committee meeting, the chairperson should call to the attention of all those present the requirements contained in the JEDEC Legal Guides and the obligation of all Representatives to inform the committee of any personal knowledge they have of any Potentially Essential Patents that are owned or controlled by that Committee Member and to call for the Disclosure of Potentially Essential Patents by Representatives. Annex A provides information to be displayed at the beginning of the committee meeting to satisfy the requirement. Additionally, all Representatives should be asked to read the

statement attached to each JEDEC sign-in/attendance roster; see Annex B for patent policy application guidelines.

All Committee Members must Disclose Potentially Essential Patents, known to their Representative(s) to be Potentially Essential Patents, that are owned or controlled by that Committee Member to the personal knowledge of the Representatives. However, neither Committee Members and nor Representatives shall have any obligation to conduct a search for Potentially Essential Patents.

Disclosure of Potentially Essential Patents by a Representative or the Committee Member being represented shall be made as early as reasonably possible. The Disclosure of Potentially Essential Patents shall be in accordance with the definition of Disclosure of Potentially Essential Patents in Section 8.2.1 above. Initial disclosure by a Committee Member or Representative may be made in a meeting of the committee or task group. The Representative is responsible for ensuring that such disclosure is properly recorded in the meeting minutes.

The Representative or Committee Member shall document all known Potentially Essential Patents in either: a) License Assurance/Disclosure Forms Annex A.3 below or b) Notice of Refusal to offer Licenses on RAND Terms forms Annex A.4 below. Such disclosures or notices of known Potentially Essential Patents shall be delivered to the JEDEC Legal Department within thirty (30) calendar days of draft specification completion in order to be effective.

8.2.3.1 Disclosure of unwillingness to license work of a committee

If a Committee Member knows that it would not be willing to offer to license Essential Patent Claims arising from the Contributions of another Committee Member on RAND terms to all Potential Licensees consistent with Section 8.2.4, the Committee Member shall notify the committee chair in writing as early as reasonably possible but no later than thirty (30) calendar days after completion of the draft specification in the form of the Notice of Refusal to offer Licenses on RAND Terms form Annex A.4 below. The committee shall consider working around the material or other technical alternatives with a goal of resolving the concern if at all possible. The Committee Member may (at its own discretion) withdraw its notification of Refusal to License at any time. However, if the Committee Member wishes to maintain its position that it would Refuse to License the work of the committee, the Committee Member must withdraw from the committee no later than one-hundred twenty (120) calendar days after providing notice of its unwillingness to license.

8.2.4 RAND Patent Licensing Commitment

Subject to the terms and conditions of Section 8.2.4, each Committee Member, as a condition of Participation, agrees to offer to license on RAND terms, to all Potential Licensees, such Committee Member's Essential Patent Claims for the use, sale, offer for sale or other disposition of a portion of a product in order to be compliant with the required portions of a final approved JEDEC Standard issued during the period of membership in that committee. The licensing commitment does not apply to Essential Patents of a Committee Member where notice of a Refusal to License has been given by the Committee Member in accordance with Section 8.2.3.1.

This commitment applies to any Standard that was pending in the committee or task group while the Committee Member Participated in that committee or task group. If a Committee Member terminates its committee membership, the commitment does not apply with respect to any new proposal or

Standard introduced in the committee or task group after the Committee Member provided notice to the JEDEC Legal Department terminating its committee membership. If and as necessary, questions whether or not a particular proposal is a new Standard or merely a continuation of a prior Standard will be addressed in the first instance by the JEDEC Legal Department in accordance with Section 8.2.10.

Certain exceptions apply to the licensing requirement. A Committee Member will not be required to license or continue to license its Essential Patent Claims to a Potential Licensee for a particular Standard if: (i) such Potential Licensee does not agree to grant a license to all other Potential Licensees under such Potential Licensee's Essential Patent Claims of that Standard on RAND terms and conditions for the approved Standard and/or (ii) such Potential Licensee has commenced or has threatened to commence patent litigation targeting such Committee Member's products that are meant to comply with that Standard.

8.2.5 Licensing Assurance/Disclosure Form

A Committee Member or Representative agrees to offer the following licensing options for an Essential Patent Claim.

For any Essential Patent Claims held or controlled by the entity, pending or anticipated to be filed, which are or may be required to implement a Standard that may result from the JEDEC Standard Activity, the entity hereby makes one of the following commitments:

- (i) A license will be offered, without compensation, under reasonable terms and conditions that are free of any unfair discrimination to applicants desiring to utilize the license for the purpose of implementing the JEDEC Standard, subject to the terms and conditions of Section 8.2.4; *or*
- (ii) A license will be offered, to applicants desiring to utilize the license for the purpose of implementing the JEDEC Standard under reasonable terms and conditions that are free of any unfair discrimination, subject to the terms and conditions of Section 8.2.4.

If a Committee Member, at its discretion, elects not to submit a License Assurance/Disclosure Form at or before the time the ballot closes and does not otherwise provide notice of an unwillingness to license in accordance with Section 8.2.3.1, the Committee Member and its Affiliates will be deemed to have agreed to offer to grant licenses on RAND terms and conditions for all of its Essential Patent Claims of the balloted Standard, if and as consistent with Section 8.2.4.

8.2.6 Reference to patented products in JEDEC standards and publications

The following notice shall be included inside the front cover of all JEDEC Standards in which Essential Patent Claims are or may be involved:

"The user's attention is called to the possibility that compliance with this document may implicate the use of an invention covered by patent rights."

"By publication of this document, no position is taken with respect to the infringement or validity of any patents. However, JEDEC has received statements of a willingness to offer a license certain rights on reasonable and nondiscriminatory terms and conditions to applicants desiring to obtain such a license. Details may be obtained from JEDEC."

8.2.7 Special legal disclaimer

The Board has the discretion to approve the issuance of a standard for which a patent owner or applicant has not provided written assurance that the Essential Patent Claims will be licensed, subject to special legal disclaimers.

When determining whether to approve the issuance of such a standard, the Board shall consider whether the committee used diligent efforts, if appropriate under the circumstances, to develop a standard that does not require the use of the Essential Patent Claim(s).

A special legal disclaimer might include the following language:

“Notice: JEDEC has received information that certain patents or patent applications may be essential to this standard. However, as of the publication date of this standard, no statements regarding an assurance or refusal to license such patents or patent applications have been provided. JEDEC does not make any determination as to the validity or relevancy of such patents or patent applications. Anyone making use of the standard assumes all liability resulting from such use. JEDEC and its members disclaim any representation or warranty, express or implied, relating to the standard and its use.”

If the Board determines that:

- (1) the claim by the patent owner or applicant that an identified patent or patent application may be essential to implement a Standard is a reasonable claim, and
- (2) there is a credible indication that the patent owner or applicant is unwilling or unable to grant licenses, with or without compensation, on RAND terms,

then the Board **shall not** approve the issuance of the standard except as provided above in this Section 8.2.7. In its discretion, the Board may seek the advice of an independent outside patent attorney or consultant in making the determinations in subsections (1) and/or (2) above.

8.2.8 Miscellaneous

The Patent Policy applies equally to situations involving the Essential Patent Claims that are discovered after adoption of the Standard.

JEDEC makes no representation as to the reasonableness of any terms or conditions of the license agreements offered by such patent rights holders, and all negotiations regarding such terms and conditions must take place between the individual parties outside the context of JEDEC.

To the extent that Potentially Essential Patent Claims are disclosed with respect to a JEDEC Standard, information regarding the parties who have asserted patent rights in the Standard may be obtained from the JEDEC Corporate Office.

It is possible that other patent rights that have not been disclosed to JEDEC may be implicated by implementation of or compliance with a JEDEC Standard. JEDEC is not responsible for identifying patent claims for which a license may be required in order to implement a JEDEC Standard, and takes no

position and conducts no inquiries with respect to the legal validity or scope of those patents or patent claims that are brought to its attention.

8.2.9 Violations

If a Committee Member or Representative materially violates this Patent Policy and the violation is not cured within thirty (30) days following notification of the violation by the JEDEC Corporate Office, the JEDEC Board of Directors may in its discretion suspend the Committee Member or Representative's right to Participate in JEDEC. If the Committee Member is allowed to continue Participation and engages in another material violation of this Policy, the JEDEC Board of Directors may in its discretion revoke the Committee Member or Representative's right to Participate in JEDEC.

8.2.10 Interpretation and Governing Law

The obligations and rights of parties to this agreement in the conduct of committee meetings and the approval of standards as set forth in this Patent Policy will be interpreted in the first instance by the JEDEC Legal Department. When specifically requested by a Committee Member or Representative, interpretations by the Legal Department will be in writing. Written interpretations by the Legal Department can be appealed by a Committee Member or Representative to the JEDEC Board of Directors. The Board of Directors will make a final decision on appeal, as determined in their reasonable and good faith judgment. The final decision will be in writing.

In no event will JEDEC or the JEDEC Board make a determination that a Patent is or is not a Potentially Essential Patent or that a Patent Claim is or is not an Essential Patent Claim.

The Patent Policy will be interpreted and governed under the laws of the State of New York.

9 Appeals

[9.1 Intentionally Omitted]

9.2 Appeals not related to ANSI/JEDEC standards and publications

All appeals related to standard or publication development are initially directed to the JEDEC office. The provision for appeals is important for the protection of all parties involved within the JEDEC standards development process. An appeals mechanism safeguards both those who are directly and or materially affected by the process and the standards developing organization. The following appeals procedures shall be used for actions taken within the JEDEC standards process that are not related to the development of ANSI/JEDEC standards and publications.

9.2.1 Right of appeal

Committee Members or Participants who have directly and or materially affected interests and who have been or will be adversely affected by the activities of another Committee Member or Representative, a JEDEC committee, or a JEDEC standard or publication have the right to appeal technical or procedural actions or inactions.

The burden of proof to show an adverse effect shall be on the appellant. Appeals shall be directed to the JEDEC office in accordance with the appeals procedures as defined in this section.

9.2.2 Criteria for appeals mechanism

The following general criteria are encompassed in these appeals procedures:

- a) Appeals shall be addressed promptly and a decision made expeditiously;
- b) The right of the involved parties to present their cases shall not be denied;
- c) These procedures shall provide for participation by all parties concerned without imposing an undue burden on them;
- d) Consideration of appeals shall be fair and unbiased and shall fully address the concerns expressed; and
- e) Records of appeals shall be kept and made available upon request. The JEDEC office may levy an appropriate charge to cover the cost of reproduction, handling, and distribution of materials.

9.2.3 Appeals procedures

The following subsections outline the JEDEC Appeals Procedures for appeals that are not related to ANSI/JEDEC standards and publications.

9.2.4 Complaints

The appellant shall file a written complaint with the JEDEC office within 30 calendar days after the date of the action being appealed or at any time with respect to inaction. The complaint shall state the nature of the objection(s) including any adverse effects, the section(s) of these procedures or the Standard(s) that are at issue, action(s) or instances of inaction that are at issue, and the specific remedial action(s) that would satisfy the appellant's concerns. Previous efforts to resolve the objection(s) and the outcome of each shall be noted.

9.2.5 Response

Within 30 calendar days after receipt of the complaint, the respondent(s) shall respond in writing to the appellant, specifically addressing each allegation of fact in the complaint to the extent of the respondent's knowledge.

Complaints that are technical in nature shall be referred to the appropriate JEDEC committee having jurisdiction over the material for review and possible action. Complaints that are non-technical or procedural in nature shall be referred to the JEDEC Board for review and possible action. Complaints that relate to the patent policy shall be referred to the JEDEC Board for review and possible action.

9.2.6 Hearing

If the appellant and the respondent are unable to resolve the written complaint informally in a manner consistent with these procedures within 30 calendar days, the JEDEC office shall schedule a hearing with an impartial appeals panel consisting of three individuals appointed by the committee or the JEDEC Board, as appropriate, on a date agreeable to all parties, giving at least 10 calendar days' notice. Hearing on the complaint will take place in person or by telephone.

9.2.7 Conduct of the hearing

The appellant has the burden of demonstrating adverse effects, improper actions or inactions, and the efficacy of the requested remedial action.

9.2.8 Decision

The appeal disposition shall be documented by the JEDEC appeals panel. A record of the appeals shall be kept by JEDEC and made available to the involved parties.

Appeal dispositions on complaints that are technical in nature may be further appealed to the appropriate JEDEC committee. Appeal dispositions on complaints that are non-technical or procedural in nature may be further appealed to the JEDEC Board of Directors.

Annex A.3 License Assurance/Disclosure Form
See Sections 8.2.3 and 8.2.5 of the JEDEC Patent Policy

Part 1

Date: _____

Entity Name: _____

Address: _____

IPR Contact: _____

Phone: _____

Email: _____

Part 2

Identify the relevant JEDEC Standard:

Part 3

For Issued Patents:

Patent No: _____

Patent Name or Title: _____

Country of Issuance: _____

For Published Patent Applications:

Published Patent Application No. : _____

Patent Application Name or Title: _____

Country of Filing: _____

For Unpublished Patent Applications:

Subject Matter of Patent Application:

You must complete Part 4 if the entity holds a Patent or has applied for a Patent on an invention the use of which is or may be required to comply with a Standard that may result from the JEDEC Standard Activity.

Part 4

For any Essential Patent Claims held or controlled by the entity, pending or anticipated to be filed, the entity states:

___ (i) A license will be offered, without compensation, under reasonable terms and conditions that are demonstrably free of any unfair discrimination to applicants desiring to utilize the license for the purpose of implementing the JEDEC Standard; or

___ (ii) A license will be offered, with compensation, to applicants desiring to utilize the license for the purpose of implementing the JEDEC Standard under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

Part 5

For any disclosed Patent or Patent Application that contains Essential Patent Claims which, if licensed, would require a payment of royalties or other material consideration to an unaffiliated third party, provide the following information:

Name of Third Party: _____

Address: _____

IPR Contact: _____

Phone: _____

Email: _____

AGREED, ON BEHALF OF THE ENTITY:

(Signature)

(Name printed)

(Date)

Note: The committee or task group has the right to request additional technical information relating to the Patent or Patent Application in order to consider work-arounds and other technical alternatives.

RETURN THE COMPLETED FORM BY MAIL TO
JEDEC, ATTENTION: LEGAL DEPARTMENT,
3103 NORTH 10TH STREET, SUITE 240-S, ARLINGTON, VA 22201-2107
OR BY EMAIL TO JOHNK@JEDEC.ORG

Annex A.4 Notice of Refusal to Offer Licenses on RAND Terms

Part 1

Date: _____

Committee Member: _____

Entity Mailing Address: _____

IPR Contact Name: _____

IPR Contact Telephone Number: _____

IPR Contact Email Address: _____

Part 2

Identify the relevant JEDEC Standard:

Part 3

Pursuant to Section 8.2.3.1 of the JEDEC Patent Policy, the Committee Member hereby provides notice that the Committee Member is not willing to offer a license to the Potentially Essential Patents identified below on RAND terms.

Part 4

For Issued Patents (please attach additional pages as necessary):

1. Owner or assignee(if known at time of disclosure) name: _____
2. Patent Name or Title: _____
3. Patent Number: _____
4. Country of Issuance: _____
5. Portions of Proposed JEDEC Standard affected (please use reasonable efforts to identify which portions may be affected) e.g., clause, page or any other identifiable information:

For Published Patent Applications (please attach additional pages as necessary):

1. Owner or assignee(if known at time of disclosure) name: _____
2. Published Patent Application Number: _____
3. Patent Application Name or Title: _____
4. Country of Filing: _____

5. Portions of Proposed JEDEC Standard affected (please use reasonable efforts to identify which portions may be affected) e.g., clause, page or any other identifiable information:

For Unpublished Patent Applications (please attached additional pages as necessary):

1. Owner or assignee(if known at time of disclosure) name: _____
2. General Subject Matter of Patent Application: _____

3. Portions of Proposed JEDEC Standard affected (please use reasonable efforts to identify which portions may be affected) e.g., clause, page or any other identifiable information:

Section 5

By signing this Notice, the IPR Contact represents that they are authorized to complete and submit this Notice on behalf of the Committee Member. Pursuant to Section 8.2.3.1 of the JEDEC Patent Policy, the IPR Representative represents that the information provided in this Notice does not include a contribution that was contributed by the Committee Member. If the Committee Member becomes aware of any other Potentially Essential Patent not already covered by a Notice and the ballot period is open, then the Committee Member may submit additional Notices.

Signature of IPR Contact

Accepted and Agreed to:

JEDEC

Date Accepted: _____

*RETURN THE COMPLETED NOTICE BY MAIL TO
JEDEC, ATTENTION: LEGAL DEPARTMENT,
3103 NORTH 10TH STREET, SUITE 240-S, ARLINGTON, VA 22201-2107
OR BY EMAIL TO JOHNK@JEDEC.ORG*