I, Subhadeep Banik, of Ecole Polytechnique Fédérale de Lausanne, INF 239, Station 14, CH-1015 Lausanne, Switzerland, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT;
- \(\time\) to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, may be covered by the following U.S. and/or foreign patents: none;
- \(\overline{\pi}\) I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment I do hereby agree to provide the statements required by Sections 2.4.2 and 2.4.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed: Sulluder Banh
Title: DR. SUBHADEEP BANIK

Date:

13 FEB 2019

LAUSANNE, SWITZERLAND

Statement by Reference/Optimized/Additional Implementations' Owner(s)

I, Subhadeep Banik, of Ecole Polytechnique Fédérale de Lausanne, INF 239, Station 14, CH-1015 Lausanne, Switzerland, am the owner or authorized representative of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may Signed: Sulladur Bind
Title: DR. Subhadeer BANIK
Date: 13 FEB 2019
Place: LAUSANNE, SWITZERLAND be copyrighted or copyrightable.

I, Andrey Bogdanov, of Richard Petersens Plads 322, 2800 Kgs. Lyngby, Denmark, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

\checkmark	I do not hold and do not intend to hold any patent or patent application with a claim which
	may cover the cryptosystem, reference implementation, or optimized implementations that
	I have submitted, known as SUNDAE-GIFT ;
	to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as <u>SUNDAE-GIFT</u> , may be covered by the following U.S. and/or foreign patents: <u>none</u> ;

☐ I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

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I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed: Party Anothers or Title: Associate Anothers or Date: 13 Feb 2019
Place: Kgs. Lyngby

Statement by Reference/Optimized/Additional Implementations Owner(s)

I, Andrey Bogdanov, of Richard Petersens Plads 322, 2800 Kgs. Lyngby, Denmark, am the owner or authorized representative of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed: N. Rosen

Title: Associate Professor

Date: 13 Feb 2019

Place: legs. Lyngby

I, Thomas Peyrin, of SPMS, Nanyang Technological University, 21 Nanyang Link, Singapore 637371, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

- ✓ I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT;
- U to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as <u>SUNDAE-GIFT</u>, may be covered by the following U.S. and/or foreign patents: none;
- □ I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

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Signed:

Title: Or

Date: 08/03/2019

Place: SINGAPORE

Statement by Reference/Optimized/Additional Implementations' Owner(s)

I, Thomas Peyrin, of SPMS, Nanyang Technological University, 21 Nanyang Link, Singapore 637371, am the owner or authorized representative of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed:

Title:

Dr. 08/03/2019 Date:

Place:

I, Yu Sasaki, of 3-9-11 Midori-cho Musashino-shi Tokyo 180-8585 Japan, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

- I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT;
- □ to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, may be covered by the following U.S. and/or foreign patents: none;
- ☐ I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted crypto system is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment I do hereby agree to provide the statements required by Sections 2.4.2 and 2.4.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

yn Sauch.

Or.

28 Feb. 2019

Tokyo Japan

Title:

I. Siang Meng Sim, of 21 Nanyang Link, Singapore 637371, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

I do not hold and do not intend to hold any patent or patent application with a claim which may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT;

□ to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, may be covered by the following U.S. and/or foreign patents: none;

□ I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted crypto to to system is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

I acknowledge that NIST will announce any selected cryptosystem(s) and proceed to publish the draft standards for public comment I do hereby agree to provide the statements required by Sections 2.4.2 and 2.4.3, below, for any patent or patent application identified to cover the practice of my cryptosystem, reference implementation or optimized implementations and the right to use such implementations for the purposes of the public review and evaluation process.

I acknowledge that, during the lightweight crypto evaluation process, NIST may remove my cryptosystem from consideration for standardization. If my cryptosystem (or the derived cryptosystem) is removed from consideration for standardization or withdrawn from consideration by all submitter(s) and owner(s), I understand that rights granted and assurances made under Sections 2.4.1, 2.4.2 and 2.4.3, including use rights of the reference and optimized implementations, may be withdrawn by the submitter(s) and owner(s), as appropriate.

Signed: Title: Dr.

Date: 25 Feb 2019
Place: Singapore, Singapore

Statement by Reference/Optimized/Additional Implementations Owner(s)

I, Siang Meng Sim, of 21 Nanyang Link, Singapore 637371, am the owner-or authorized representative of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed:

Title: Dr.

Date: 25 Feb 2019
Place: Singapore, Singapore

I, Elmar Tischhauser, of Tuborg Boulevard 12, 2900 Hellerup, Denmark, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as SUNDAE-GIFT, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

may cover the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as <u>SUNDAE-GIFT</u> ;
to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as <u>SUNDAE-GIFT</u> , may be covered by the following U.S. and/or foreign patents: <u>none</u> ;
I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or

I do not hold and do not intend to hold any patent or patent application with a claim which

foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none. I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standard-

ization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted crypto system is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystems specifications (e.g., to protect against a newly discovered vulnerability).

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Signed: Flor Turing Title: Chief Cryptographer
Date: 13 2 2019
Place: Hellerup

Statement by Reference/Optimized/Additional Implementations Owner(s)

I, Elmar Tischhauser, of Tuborg Boulevard 12, 2900 Hellerup, Denmark, am the owner or authorized representative of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed: Few 10

Chief (19ptographer 13.2 2019

Date:

Helleng Place:

I, <u>Yosuke Todo</u>, of <u>3-9-11</u>, <u>Midori-cho</u>, <u>Musashino-shi</u>, <u>Tokyo 180-8585 Japan</u>, do hereby declare that the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as <u>SUNDAE-GIFT</u>, is my own original work, or if submitted jointly with others, is the original work of the joint submitters.

I further declare that (check at least one of the following):

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- □ to the best of my knowledge, the practice of the cryptosystem, reference implementation, or optimized implementations that I have submitted, known as <u>SUNDAE-GIFT</u>, may be covered by the following U.S. and/or foreign patents: <u>none</u>;
- ☐ I do hereby declare that, to the best of my knowledge, the following pending U.S. and/or foreign patent applications may cover the practice of my submitted cryptosystem, reference implementation or optimized implementations: none.

I do hereby acknowledge and agree that my submitted cryptosystem will be provided to the public for review and will be evaluated by NIST, and that it might not be selected for standardization by NIST. I further acknowledge that I will not receive financial or other compensation from the U.S. Government for my submission. I certify that, to the best of my knowledge, I have fully disclosed all patents and patent applications which may cover my cryptosystem, reference implementation or optimized implementations. I also acknowledge and agree that the U.S. Government may, during the public review and the evaluation process, and, if my submitted cryptosystem is selected for standardization, during the lifetime of the standard, modify my submitted cryptosystem's specifications (e.g., to protect against a newly discovered vulnerability).

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Signed: 藤堂 样介

Title: Ph.D. in Engineering

Date: 11 Feb. 2019

Place: Tokyo, JAPAN

Statement by Reference/Optimized/Additional Implementations' Owner(s)

I, <u>Yosuke Todo</u>, of <u>3-9-11</u>, Midori-cho, Musashino-shi, Tokyo 180-8585 Japan, am the owner or authorized representative of the owner of the submitted reference implementation, optimized and additional implementations and hereby grant the U.S. Government and any interested party the right to reproduce, prepare derivative works based upon, distribute copies of, and display such implementations for the purposes of the lightweight cryptography public review and evaluation process, and implementation if the corresponding cryptosystem is selected for standardization and as a standard, notwithstanding that the implementations may be copyrighted or copyrightable.

Signed: 藤堂 洋介

Title: Ph.D. in Engineering

Date: 11 Feb. 2019

Place: Tokyo, JAPAN