



Dear customer

ROHM Co., Ltd. ("ROHM"), on the 1st day of April, 2024,
has absorbed into merger with 100%-owned subsidiary of LAPIS Technology Co., Ltd.

Therefore, all references to "LAPIS Technology Co., Ltd.", "LAPIS Technology"
and/or "LAPIS" in this document shall be replaced with "ROHM Co., Ltd."

Furthermore, there are no changes to the documents relating to our products other than
the company name, the company trademark, logo, etc.

Thank you for your understanding.

ROHM Co., Ltd.
April 1, 2024

Bluetooth® low energy Module (MK71511/MK71521) Application Note

Bluetooth Certification

Issue Date: Oct. 12, 2020

NOTES

- 1) The information contained herein is subject to change without notice.
- 2) When using LAPIS Technology Products, refer to the latest product information (data sheets, user's manuals, application notes, etc.), and ensure that usage conditions (absolute maximum ratings, recommended operating conditions, etc.) are within the ranges specified. LAPIS Technology disclaims any and all liability for any malfunctions, failure or accident arising out of or in connection with the use of LAPIS Technology Products outside of such usage conditions specified ranges, or without observing precautions. Even if it is used within such usage conditions specified ranges, semiconductors can break down and malfunction due to various factors. Therefore, in order to prevent personal injury, fire or the other damage from break down or malfunction of LAPIS Technology Products, please take safety at your own risk measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. You are responsible for evaluating the safety of the final products or systems manufactured by you.
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- 5) The Products are intended for use in general electronic equipment (AV/OA devices, communication, consumer systems, gaming/entertainment sets, etc.) as well as the applications indicated in this document. For use of our Products in applications requiring a high degree of reliability (as exemplified below), please be sure to contact a LAPIS Technology representative and must obtain written agreement: transportation equipment (cars, ships, trains, etc.), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems, etc. LAPIS Technology disclaims any and all liability for any losses and damages incurred by you or third parties arising by using the Product for purposes not intended by us. Do not use our Products in applications requiring extremely high reliability, such as aerospace equipment, nuclear power control systems, and submarine repeaters, etc.
- 6) The Products specified in this document are not designed to be radiation tolerant.
- 7) LAPIS Technology has used reasonable care to ensure the accuracy of the information contained in this document. However, LAPIS Technology does not warrant that such information is error-free and LAPIS Technology shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.
- 8) Please use the Products in accordance with any applicable environmental laws and regulations, such as the RoHS Directive. LAPIS Technology shall have no responsibility for any damages or losses resulting non-compliance with any applicable laws or regulations.
- 9) When providing our Products and technologies contained in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, including without limitation the US Export Administration Regulations and the Foreign Exchange and Foreign Trade Act..
- 10) Please contact a ROHM sales office if you have any questions regarding the information contained in this document or LAPIS Technology's Products.
- 11) This document, in part or in whole, may not be reprinted or reproduced without prior consent of LAPIS Technology.

(Note) "LAPIS Technology" as used in this document means LAPIS Technology Co., Ltd.

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<https://www.lapis-tech.com/en/>

Preface

This document describes how to register a product using a Qualified Design Identification number (QDID) of our qualified design when selling a device equipped with MK71511 or MK71521, 2.4 GHz-band radio communication module conforming to Bluetooth® low energy, as a Bluetooth product.

【Note】

This document is being made based on information on April 2020. There will be a possibility that the contents change with a renewal in Bluetooth SIG website and change in the Bluetooth Certification Procedure from now on.

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1. QDID of acquired certification

QDID of MK71511/MK71521 module and softdevice of Nordic is shown below.

●MK71511/MK71521 module

Declaration ID	QDID	Product Type	Company	Products	Specification Name	Listing Date
D049594	146733	Component (Tested)	LAPIS Semiconductor Co., Ltd.	MK71511	5.2	2020-04-17
D049595	146740	Component (Tested)	LAPIS Semiconductor Co., Ltd.	MK71521	5.2	2020-04-17

●SoftDevice of Nordic

Declaration ID	QDID	Product Type	Company	Products	Specification Name	Listing Date
D047610	145831	End Product	Nordic Semiconductor ASA	nRF52 Series with S112 v8.0.0 nRF52 - S112	5.2	2020-02-20
D047608	145823	End Product	Nordic Semiconductor ASA	nRF52 Series with S132 v8.0.0 nRF52 S132	5.2	2020-02-20
D043342	145787	End Product	Nordic Semiconductor ASA	nRF52 Series with SD S140 v8.0.0 nRF52 - S140	5.2	2020-02-19

Please search QDID of acquired certification with the following URL.

<https://launchstudio.bluetooth.com/Listings/Search>

Back to Bluetooth.com

Search

[Get help on this step](#)

View previously qualified designs and declared products.

This listing search is the same search that is available on the Bluetooth website, and by submitting a search query, you agree to the [Bluetooth Website Terms of Use](#). You also acknowledge that Bluetooth listing information is a service that is provided for information only, and Bluetooth does not guarantee the accuracy or completeness of the information provided in the search results.

[Advanced Search](#)

Search...

Declaration ID	QDID(s)	Company	Products	Specification Name	Listing Date
0 listing(s) found					

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2. Bluetooth SIG members registration

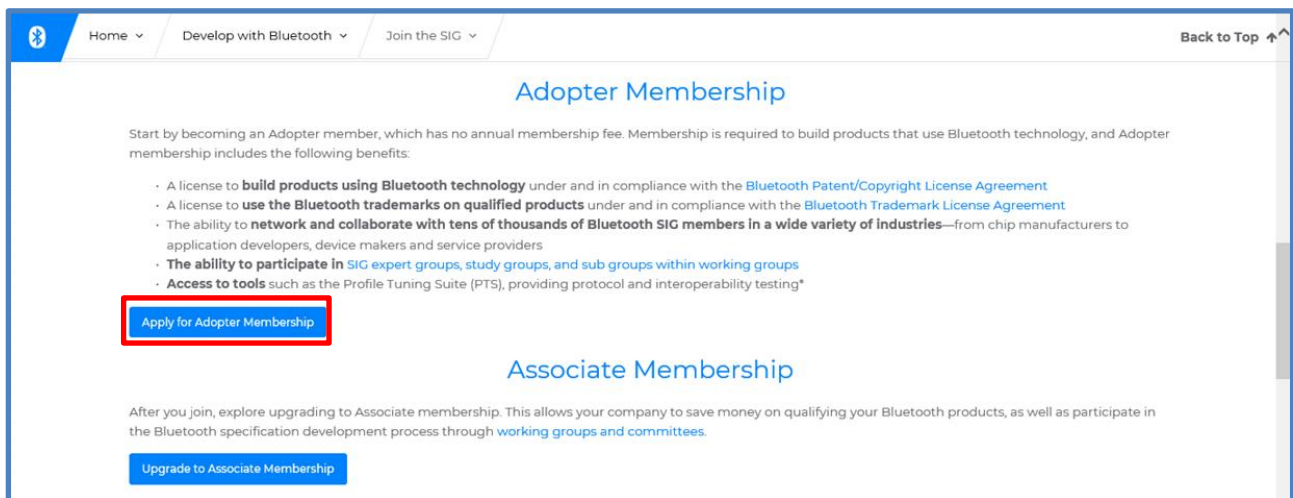
Membership registration to the Bluetooth SIG is needed to use a license of Bluetooth and the logo. Product registration becomes possible after member registration. There are two types of members: Adopter members with no admission fee and no annual fee, and Associate members which require an annual fee. Adopter members are the minimum requirements to obtain a license of Bluetooth product. However, Declaration Fee (registration fee) to pay to Bluetooth SIG on the occasion of product registration are different. (Adopter member: \$8,000, Associate member: \$4,000)

This application note describes the registration of "Adopter member".

2.1. Procedure to register the company to members of Bluetooth SIG

Enter the "Become a Bluetooth SIG Member" page from the following URL. Scroll down and click the "Apply for Adopter Membership" button under "Adopter Membership".

<https://www.bluetooth.com/develop-with-bluetooth/join>



The Bluetooth SIG membership application page is displayed. Please confirm the contents described in "① Prepare your application materials".

Precautions

- You must submit copy of corporate registration (PDF).
 - Applicant must be an "officer" listed in the copy of corporate registration.
- If the applicant is different from the officer, you may be required to submit a power of attorney.

Select the country with [★ Start Here:] at the bottom, enter the applicant's Email address and click the "Start Membership Application" button.

The "Membership Application Form" screen is displayed.

The form is displayed in the following order.

Part1: Company Information

Part2: My Information

Part3: Office Locations

"Company's Formation Documents" will upload the PDF file of copy of corporate registration in "Part1: Company Information".

When you have completed all forms, click the "Review Application Details" button under the "Part3: Office Locations".

When the "Review, Sign, and Submit" page is displayed, confirm the input contents.

If there is no error in the input content, move to the "Signature and Submission" below than middle of the page, confirm the contents of the declaration statement of the membership agreement, check the check box at the beginning.

After checking, sign the "Signature" text box and click the "Signature Confirmed-Submit Application" button to complete the online process.

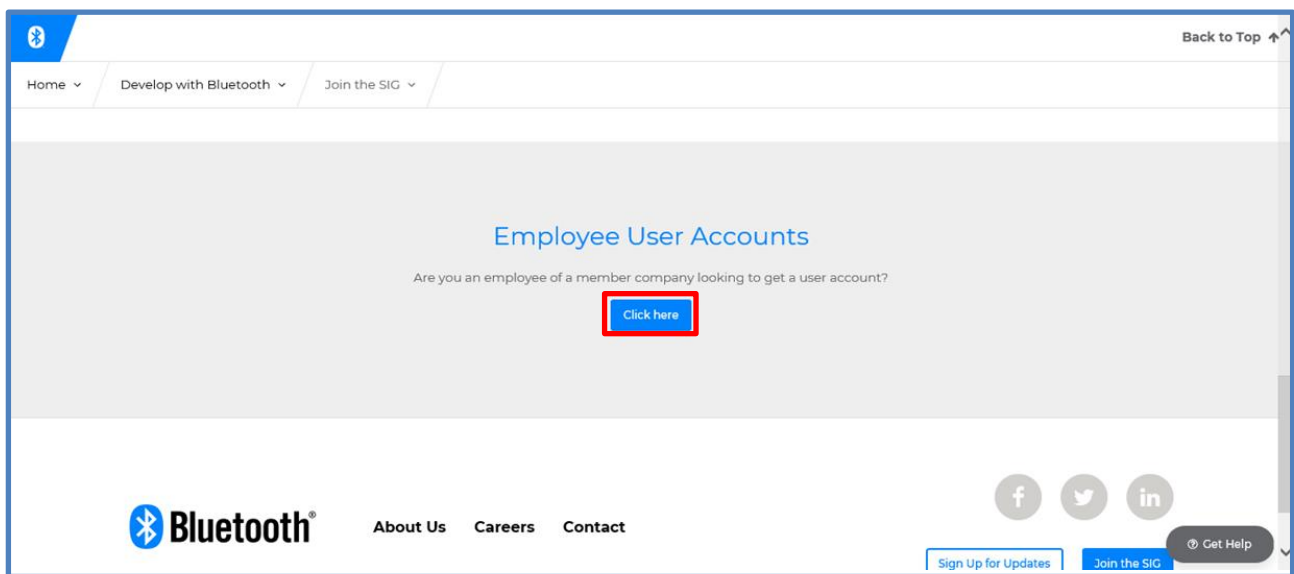
When the application is accepted, the applicant will receive an Email from the person in charge of the Bluetooth SIG.

Please submit a power of attorney if requested.

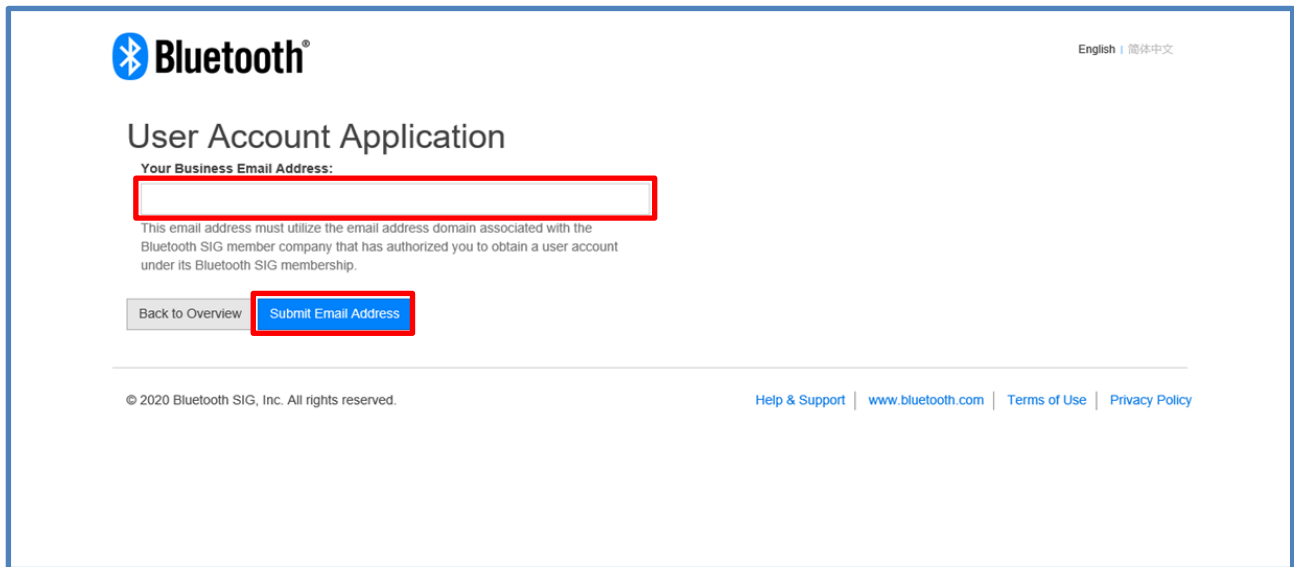
2.2. Procedure to acquire the account of the company's employee

Enter the "Become a Bluetooth SIG Member" page from the following URL. Click the "Click here" button for "Employee User Accounts" on the bottom page.

<https://www.bluetooth.com/develop-with-bluetooth/join>



The "User Account Application" page is displayed. Enter the Email address of the employee who applies for the account and click the "Submit Email Address" button.

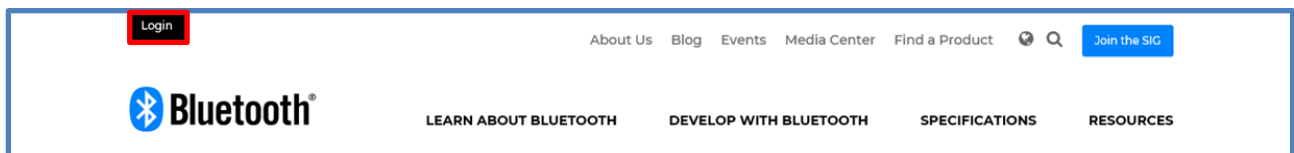


A registration confirmation Email will be sent from the Bluetooth SIG to the account applicant. Click on the URL listed in the Email and enter the "My Information" on the opened WEB page. After completing the entry you will receive an Email asking for the creation of a password. Please access the URL stated in the Email and complete the creation of the password. Acquisition of the employee's user account is complete with this.

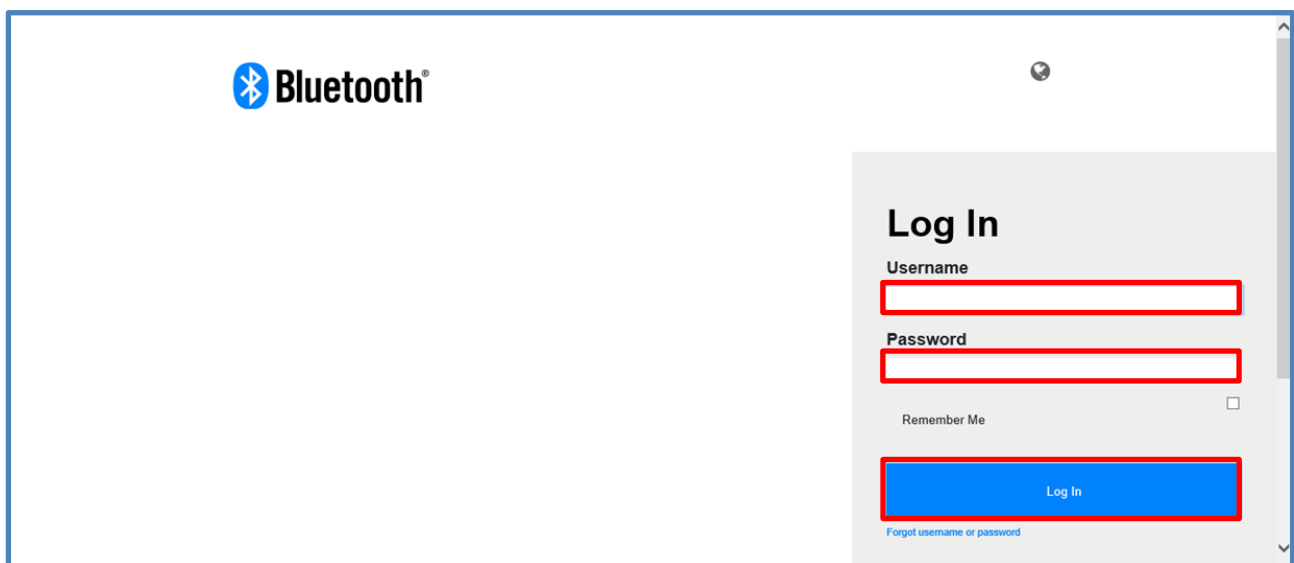
Enter the top page of Bluetooth SIG from the following URL.

<https://www.bluetooth.com>

Click the "Login" button on the upper left to open the Log In page.



Enter the user name and password on the Log In page and click the "Log In" button to enter the member page.



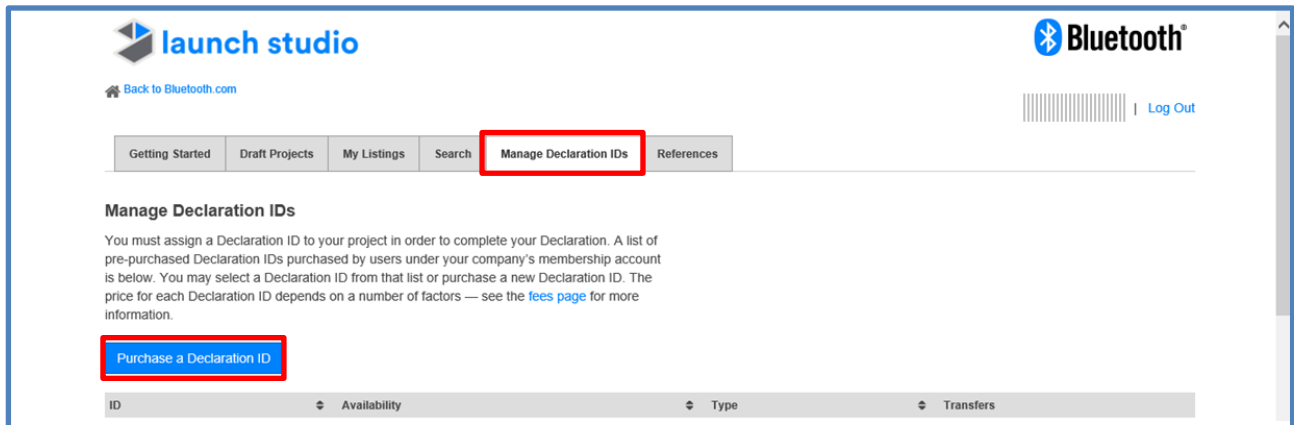
2.3. Purchase procedure of Declaration ID

You must purchase a Declaration ID to register your product.

Enter the "Launch Studio" page of Bluetooth SIG from the following URL.

<https://launchstudio.bluetooth.com/>

Select the "Manage Declaration IDs" tab and click the "Purchase a Declaration ID" button.



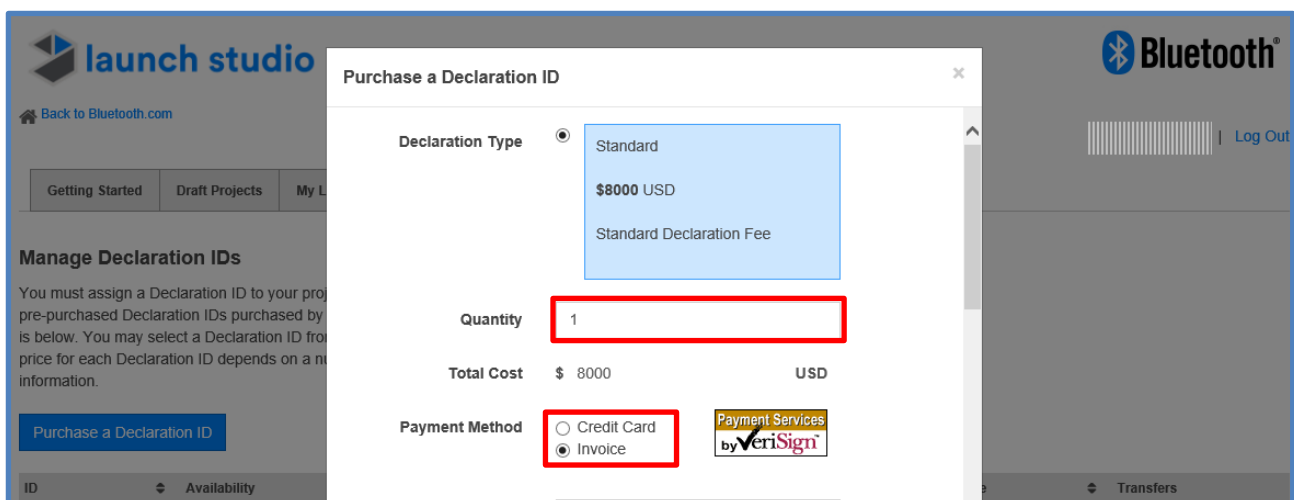
The "Purchase a Declaration ID" screen is displayed.

Enter necessary information.

Select "Standard" for "Declaration Type".

Enter "1" in "Quantity" and select "Credit Card" or "Invoice" for "Payment Method".

The following input items change depending on the selection of "Payment Method".



LAPIS Technology Co.,Ltd.

2. Bluetooth SIG members registration

When all input is completed, scroll down and click the "Finish" button.

The completion button changes depending on the item selected in "Payment Method". If you select "Credit Card", it becomes "Purchase Declaration ID", and if you select "Invoice", it becomes "Create Invoice".

The payment procedure when "Credit Card" is selected is now complete.

[Back to Bluetooth.com](#)

Getting Started

Draft Projects

My L

Manage Declaration IDs

You must assign a Declaration ID to your project. You may select pre-purchased Declaration IDs purchased by you or those assigned to you below. You may select a Declaration ID from the list below. The price for each Declaration ID depends on a number of factors, including the amount of time it takes to process the request for information.

Purchase a Declaration ID

Bluetooth®

[Log Out](#)

Purchase a Declaration ID

Country/Region *

Japan

By clicking on the "Purchase Declaration ID" button below, you agree: (1) to pay Bluetooth SIG the amount shown above according to the terms of Bluetooth SIG's invoice or, if you have entered credit card information above, that Bluetooth SIG may charge the card in the amount shown above immediately when you click the Purchase Declaration ID button below; (2) that Bluetooth SIG will not issue a Declaration ID until payment has been processed; and (3) to the [Bluetooth Launch Studio Terms of Use](#).

Purchase Declaration ID

Cancel

You may contact [Member Support](#) and submit a request for a refund of fees you paid for a purchased Declaration ID that has not been assigned to a submitted project. Upon

Click the "Create Invoice" button to open Invoice PDF file and save it.

Later, the same invoice is also attached to the Email sent from the Bluetooth SIG to the Invoice applicant.

Please make deposit procedure to the account described in Invoice.

Invoice is the following contents.


Description		Amount
BLUETOOTH DECLARATION FEE		
Declaration fee:		\$8,000.00 USD
Quantity:		1
INVOICE DATE - 21-January-2020		
MEMBER TYPE - Adopter		
TOTAL DUE (US DOLLARS)		\$8,000.00

WIRE TRANSFER DETAILS: Bank Name: BMO Harris Bank, N.A. Bank Address: 1200 E. Warrenville Rd. Naperville, IL 60563, USA Account Name: Bluetooth SIG, Inc. Account No: 1410034151 ABA No: 071000288 SWIFT No: HATRUS44	USD CHECK MADE PAYABLE TO: Bluetooth SIG, Inc. 5209 Lake Washington Blvd. NE Suite 350 Kirkland, WA 98033 USA	INVOICE CONTACT: accounting@bluetooth.com Heidi S. Ho, TEL: +1.425.691.3387 FAX: +1.314.754.9397
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All banking charges and deductions associated with the payment of this invoice (e.g. wire transfer charges, conversion cost, etc.) are to be borne by the payer, so that the Bluetooth SIG is paid the principal amount mentioned above.

**** Invoice number must be quoted on all payments.**

After having paid money to the account, the Declaration ID you purchased is attached to the Email sent from the Bluetooth SIG to the Invoice applicant.


Bluetooth®

Bluetooth SIG, Inc.
5209 Lake Washington Blvd. NE
Suite 350
Kirkland, WA 98033
USA

Your payment has been received for invoice [REDACTED]

Declaration type:	Standard
Quantity:	1
Total Cost:	\$8,000.00 USD
<u>DID(s):</u>	<u>D049594</u>


Billing Info


Company: [REDACTED]

Address: [REDACTED]

You may contact [Member Support](#) and submit a request for a refund of fees you paid for a purchased Declaration ID that has not been assigned to a submitted project. Upon receipt of your refund request, Bluetooth SIG will issue you a refund of the fees paid by you for that Declaration ID in accordance with the [Bluetooth Launch Studio Terms of Use](#). All refunds processed by Bluetooth SIG will be made less a 10% processing fee.

You can confirm the Declaration ID you purchased on the "Manage Declaration IDs" tab of the Launch Studio.


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||||| | [Log Out](#)

[Getting Started](#)
[Draft Projects](#)
[My Listings](#)
[Search](#)
[Manage Declaration IDs](#)
[References](#)

Manage Declaration IDs

You must assign a Declaration ID to your project in order to complete your Declaration. A list of pre-purchased Declaration IDs purchased by users under your company's membership account is below. You may select a Declaration ID from that list or purchase a new Declaration ID. The price for each Declaration ID depends on a number of factors — see the [fees page](#) for more information.

[Purchase a Declaration ID](#)

ID	Availability	Type	Transfers
D049594	Available	Standard	

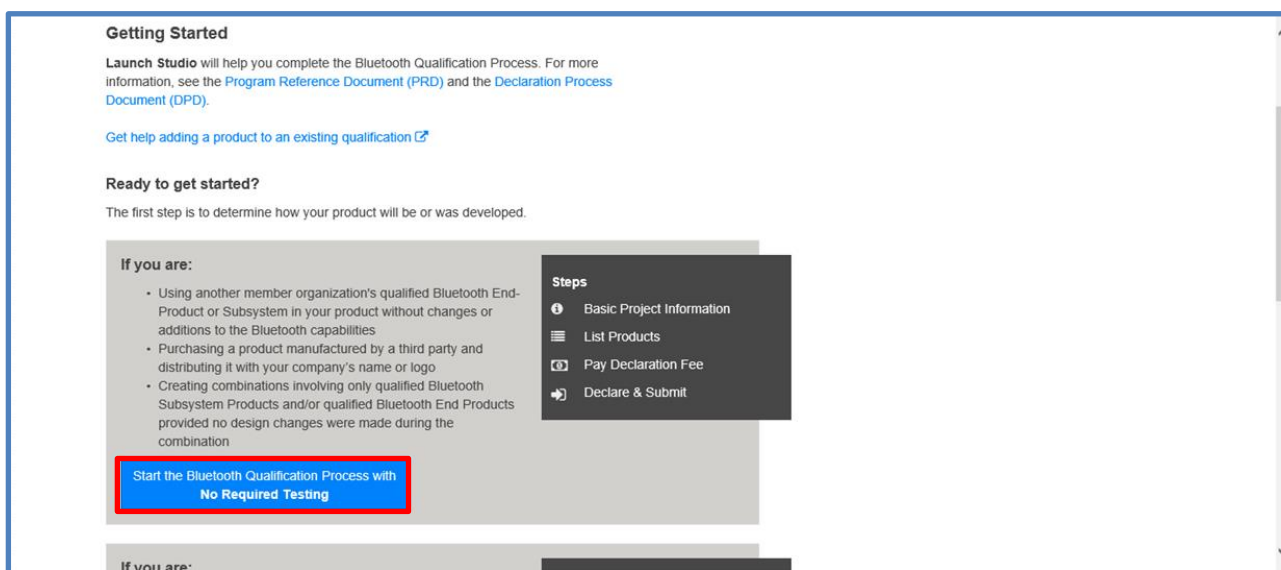
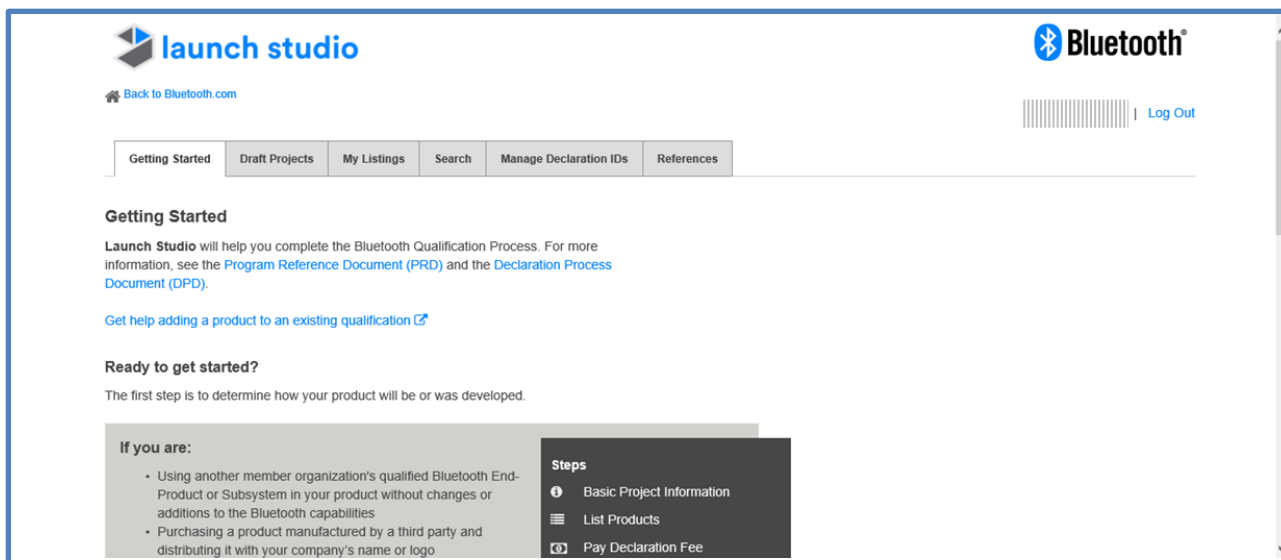
3. Procedure of product registration

After purchasing the Declaration ID, please perform product registration operation as follows.

Enter the "Launch Studio" page of Bluetooth SIG from the following URL.

<https://launchstudio.bluetooth.com/>

Select the "Getting Started" tab, scroll down and click the "Start the Bluetooth Qualification Process with No Required Testing" button.



The "Project Basics" screen is displayed.

Enter the "Project Name" and "Referenced Qualified Design".

Enter the QDID of the Nordic's SoftDevice in "Referenced Qualified Design".

When input is completed, click the "Save and continue to Product Declaration" button.

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Bluetooth

Back to Draft Projects

New Project

Project Actions

Project Basics Product Declaration Declaration ID Review & Submit

Qualification Project with No Required Testing

Get help on this step

Project Name * New Project

Referenced Qualified Design * Search by QDID

If you don't have this number, ask your supplier or [Search Listings](#).

Save and continue to Product Declaration Save All Changes

The "Product Declaration" screen is displayed.

Enter the "Listing Date" (Date on which you want to display the registered product in the public list database).

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Bluetooth

Back to Draft Projects

Product Declaration

Project Actions

Project Basics Product Declaration Declaration ID Review & Submit

Product Declaration

Get help on this step

Begin the Declaration Process phase of product qualification by describing each of your product(s) that implement Bluetooth technology.

Listing Date * Required for submission, YYYY-MM-DD

Product Listing

Get help on this step

List all Products that use this Design (or combination of Designs) and that are distributed under a name that identifies your company as the source of the Product. Please refer to the [Bluetooth Launch Studio Terms of Use](#) for the definition of Product Declaration as required.

After setting "Listing Date", click the "+Add a Product" button displayed at the bottom of the page.

Product Listing

List all Products that use this Design (or combination of Designs) and that are distributed under a name that identifies your company as the source of the Product. Please refer to the [Bluetooth Launch Studio Terms of Use](#) for the definition of "Product." Color variations are not considered as separate Product. Any other change (e.g., form factor, model name, Design, etc.) is considered a separate Product. All Products must complete the Qualification Process by adding a separate Product listing. Certain changes to the Design portion of a Product will require a new Design qualification and Declaration ID (as set forth in the [Bluetooth Qualification Program Reference Document \(PRD\)](#)).

Bluetooth SIG maintains a publicly available database of information submitted through Launch Studio. Customs officials often use the database to identify unlicensed Bluetooth products. If a product implements Bluetooth technology or bears the Bluetooth® trademark and it is not listed in Bluetooth SIG's database, customs officials may seize or block the import of the product. You can delay the inclusion of certain information about your product in the publicly available database for up to 90 days after you submit your project (see [Bluetooth Launch Studio Terms of Use](#), Section 5) by selecting a Publish Date in the "Add a Product" modal up to 90 days after the date you submit your project.

+ Add a Product

Product Name	Product Website	Product Category	Publish Date	Archive Date	Model Number	Subset ID	Description
--------------	-----------------	------------------	--------------	--------------	--------------	-----------	-------------

[Save and return to Project Basics](#) [Save and continue to Declaration ID](#) [Save All Changes](#)

The "Add/Edit products" panel will be displayed, please enter product information. When input is completed, click the "Save" button at the bottom.

Product Listing

List all Products that use this Design (or combination of Designs) and that are distributed under a name that identifies your company as the source of the Product. Please refer to the [Bluetooth Launch Studio Terms of Use](#) for the definition of "Product." Color variations are not considered as separate Product. Any other change (e.g., form factor, model name, Design, etc.) is considered a separate Product. All Products must complete the Qualification Process by adding a separate Product listing. Certain changes to the Design portion of a Product will require a new Design qualification and Declaration ID (as set forth in the [Bluetooth Qualification Program Reference Document \(PRD\)](#)).

Bluetooth SIG maintains a publicly available database of information submitted through Launch Studio. Customs officials often use the database to identify unlicensed Bluetooth products. If a product implements Bluetooth technology or bears the Bluetooth® trademark and it is not listed in Bluetooth SIG's database, customs officials may seize or block the import of the product. You can delay the inclusion of certain information about your product in the publicly available database for up to 90 days after you submit your project (see [Bluetooth Launch Studio Terms of Use](#), Section 5) by selecting a Publish Date in the "Add a Product" modal up to 90 days after the date you submit your project.

+ Add a Product

Add/Edit products

Product Full Name *
(Including Trademark)

Category
Select a Category

Product Website

Publish Date *
2020-04-24

Certain product information becomes visible to the public in Bluetooth SIG's database at 00:00 UTC+00:00 Coordinated Universal Time (UTC) on the Publish Date you select. The Publish Date must be on or after the Listing Date, but no later than 90 days from the date this project is submitted.

Description *

Model Number *

Save and return to Project Basics **Save and continue to Declaration ID** **Save All Changes**

Confirm that the input contents are displayed in the product list and click the "Save and continue to Declaration ID" button.

Save and return to Project Basics **Save and continue to Declaration ID** **Save All Changes**

The "Declaration ID" screen is displayed.

The list of purchased Declaration IDs will be displayed. Select the ID used for product registration and click the "Save and continue to Review" button.

launch studio **Bluetooth**

[Back to Draft Projects](#) [Log Out](#) [Project Actions](#)

Project Basics Product Declaration **Declaration ID** Review & Submit

Declaration IDs

Select or purchase a Declaration ID

[Get help on this step](#)

You must assign a Declaration ID to your project in order to complete the qualification process. A list of your pre-purchased Declaration IDs is below. You may select a Declaration ID from that list or purchase a new Declaration ID. The price for each Declaration ID depends on a number of factors — see the [fees page](#) for more information.

[Purchase a Declaration ID](#)

[Manage my company's Declaration IDs](#)

Available Declaration IDs

ID	Type	Notes
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[Save and return to Product Declaration](#) [Save and continue to Review](#) [Save All Changes](#)

The "Review & Submit" screen is displayed.

Please confirm that the contents of "Project Details" are correct.

If the contents are correct, check the declaration statement at the bottom of the page and check the check box at the beginning of the declaration statement.

Finally sign the "Signature" text box and click the "Signature Confirmed - Complete Project & Submit Product(s) for Qualification" button to complete the online procedure.

Registered products can be confirmed on the "My Listings" tab of the "Launch Studio".

Revision History

Document No.	Issue date	Page		Remarks
		Before revision	After revision	
FEXK715x1_AN_SIG certif -01	Oct. 12, 2020	—	—	Final first edition