



Dear customer

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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

ML7436 Evaluation Kit Start Guide

* Read this guide first

Issue Date: Dec 21, 2020

Notes

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Preface

Thank you for your purchasing our product. Read this "Start Guide" first before using the product to ensure proper use of the product. After reading, keep this guide handy for future reference. This start guide describes the attached articles and connection methods.

The following related manuals are available and should be referenced as needed:

- ML7436N Datasheet
- LAPIS Sub-GHz CPU Board(LSCB) / LAPIS RF Shield Board(LRSB) Hardware Manual
- WCT3 User's Guide

Notation

Classification	Notation	Description
● Numeric value	<i>0xnn</i>	Represents a hexadecimal number.
	<i>0bnnnn</i>	Represents a binary number.
● Address	<i>0xnnnn_nnnn</i>	Represents a hexadecimal number. (indicates 0xnnnnnnnn)
● Unit	word, W	1 word = 32 bits
	byte, B	1 byte = 8 bits
	Mega, M	10^6
	Kilo, K (uppercase)	$2^{10}=1024$
	Kilo, k (lowercase)	$10^3=1000$
	Milli, m	10^{-3}
	Micro, μ	10^{-6}
	Nano, n	10^{-9}
● Terminology	"H" level	Signal level on the high voltage side; indicates the voltage level of V_{IH} and V_{OH} as defined in electrical characteristics.
	"L" level	Signal level on the low voltage side; indicates the voltage level of V_{IL} and V_{OL} as defined in electrical characteristics.
● Register description	Read/write attribute: R indicates read-enabled; W indicates write-enabled.	
	MSB: Most significant bit in an 8-bit register (memory)	
	LSB: Least significant bit in an 8-bit register (memory)	

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1 Cautions in Handling This Product

- This product is an evaluation kit. It shall be used only for evaluations.
- Use the application software of this product on a personal computer with Windows10 installed.
- Duplicating all or any part of the software of this product or distributing a copy without the permission of the copyright owner violates the copyright.
- LAPIS assumes no responsibility for retrofitting and illegal using of this product.
- Should this product cause a harmful radio wave interference, immediately change the frequency used or stop the radio wave output and make crosstalk avoidance treatments.

2 Setup Flow

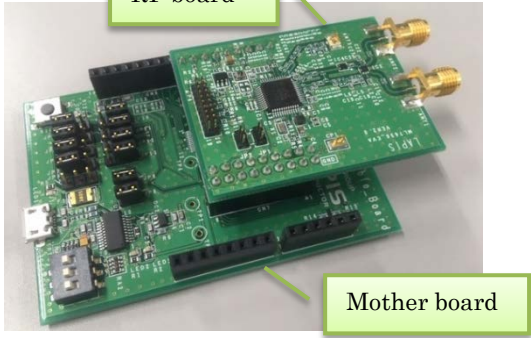


This flow is from the check on package contents to the assembly.

- STEP 1
Checking on Package Contents
- STEP 2
Setting Evaluation Board
- STEP 3
Setting up RF Evaluation Tools

STEP1 Checking on Package Contents

Open the box. First, confirm all of the following articles are available.
Should there is any missing or broken part, contact the source from which you purchased it.

- * CD-ROM is packaged only when purchased first time.
- * The mounted parts may look different from the photo depending on the shipment time.
- * Prepare the PC, the stabilized power supply and an antenna by yourself.
- *
- *

<ul style="list-style-type: none"> * <input type="checkbox"/> ML7436 Evaluation board (1) * <input type="checkbox"/> MicroUSB cable (1) 	<ul style="list-style-type: none"> * <input type="checkbox"/> CD-ROM (1) (Only for the first purchase)
	
	

STEP2 Setting Evaluation Board

At the time of delivery, the program built into the ML7436N is set to start in the initial state.

Always turn off the power when configuring the board setting.

For board settings, refer to "LAPIS Sub-GHz CPU Board (LSCB) / LAPIS RF Shield Board (LRSB) Hardware Manual".

Insert the USB cable into the USB connector on the evaluation board enclosed by a heavy line in the photo below.

* An attempt to diagonally insert the USB cable may break the connector.

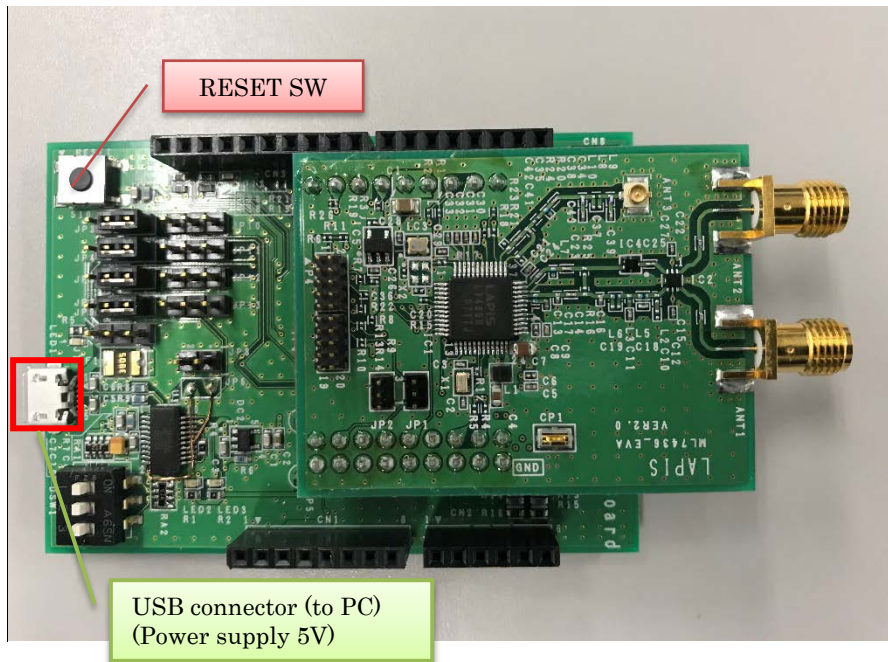


Figure 1: Connection of Evaluation board and USB cable

STEP3 Setting up Serial Communication Software

- (1) Install (copy) WCT3 on your personal computer.
- (2) Install the Virtual COM Port driver for the USB-UART conversion FTDI device on the personal computer used for evaluation. Please download the driver from the following web page.

http://www.ftdichip.com/FT_Drivers.htm

- (3) Connect the USB cable to the computer on which WCT3 is installed.

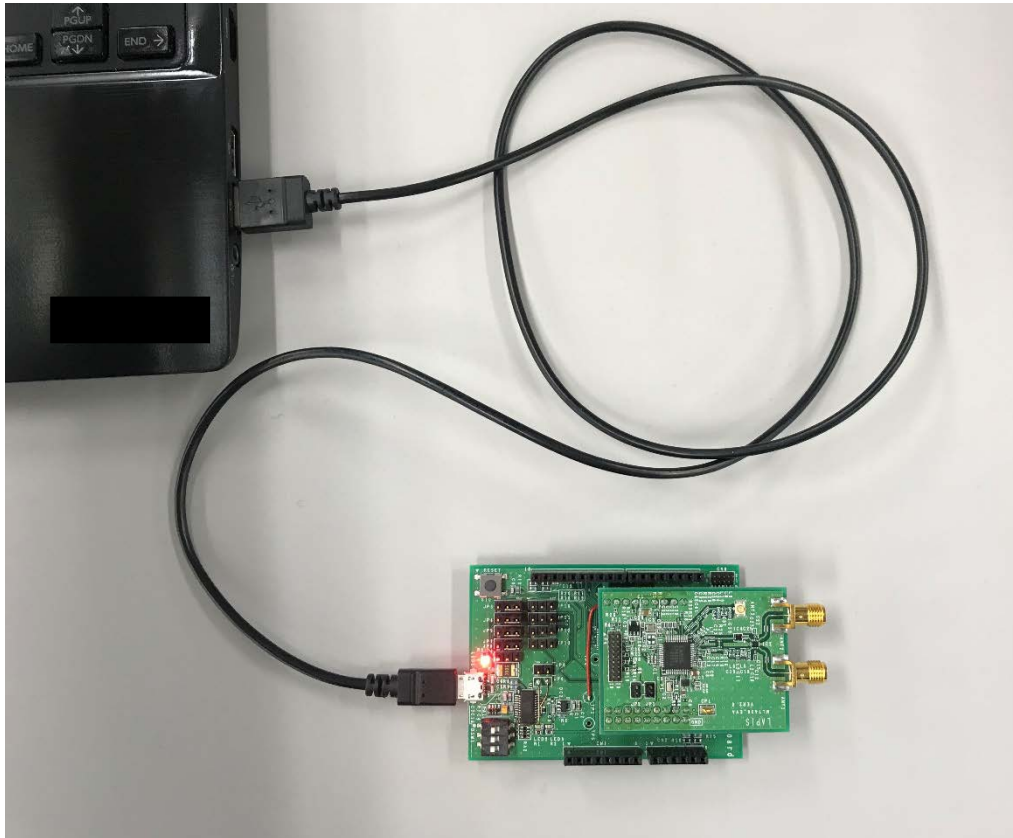


Figure 2: Connection of PC and USB cable

(4) Double-click TEST_ML7436N.bat to start WCT3. Below is the main window of WCT3 that opens at startup.

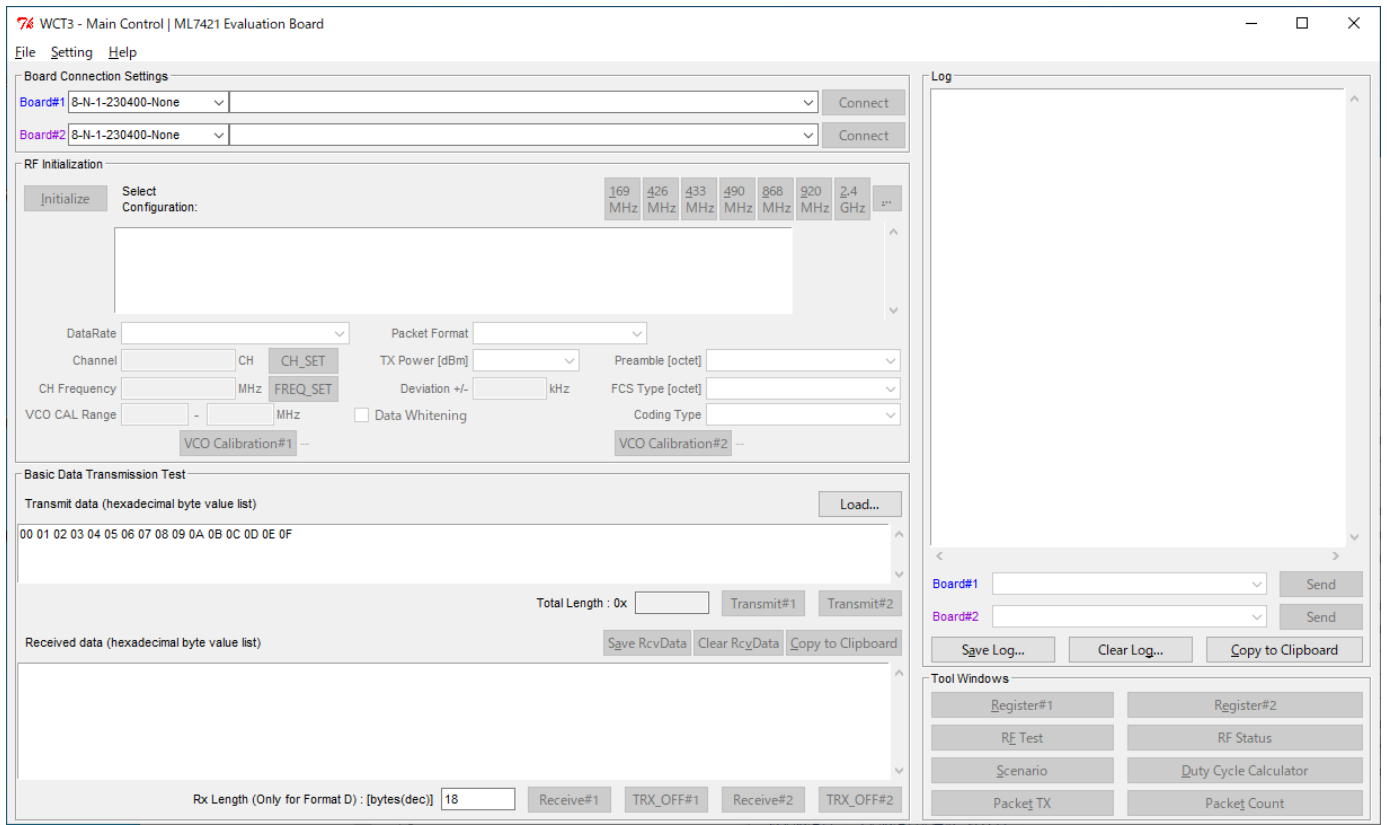


Figure 3: WCT3 Startup screen

For the operation method of WCT3, refer to "WCT3 User's Guide".

3 Setup Site

Lapis Technology asks you to register as a user on the Lapis Technology Internet registration system site "Lapis Technology Support Site" (hereinafter referred to as "this support site") so that we can provide better products and services to our customers. By registering on this support site, you will be able to download the latest documents, evaluation tools, etc. Please take this opportunity to register

■ How to register

1. Access the "Support Site" on the top page of Lapis Technology below.

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

Top page ▶

「Support Site」

Alternatively, please refer directly from the address below.

<https://www.lapis-semi.com/cgi-bin/MyLAPIS/regi/login.cgi>

2. Click the "New Registration / Re-registration" button and follow the on-screen instructions to register.

* To register on this support site, first perform "temporary registration" and then perform "main registration".

* In "Registration", specify "Wireless LSI" in "Product field" and enter it.

Caution

After registration is complete, you will receive a "Registration Completion Notification" email, so please wait for a while.

■ Contact

For inquiries regarding this support site, please contact us at the following address or use the "Inquiry" form on this support site.

E-mail: telecom-support@lapis-tech.com

Revision History

Document No.	Issue Date	Page		Description
		Previous Edition	New Edition	
PEXL7436EVA_startguide-01	2020.12.21	–	–	First edition

(Caution) Clerical errors, changes in expressions and corrections are not included.