ProXO (XT/XP/XF)

Programmable Clocks Live Bench Measurement Tool Step-by-Step Guide

renesas.com/clocklivebench

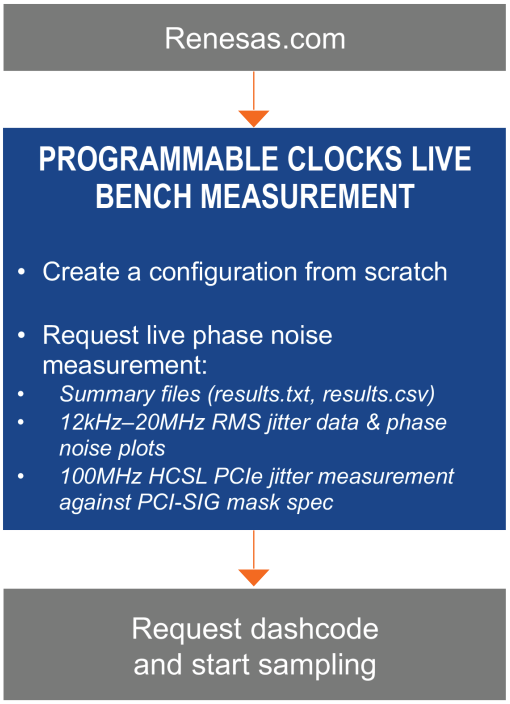
SYSTEM OVERVIEW

SYSTEM PURPOSE

- Instant access to automated jitter measurements for Renesas' flagship clock devices.
- Support PCIe Gen6/7 measurement against latest spec.

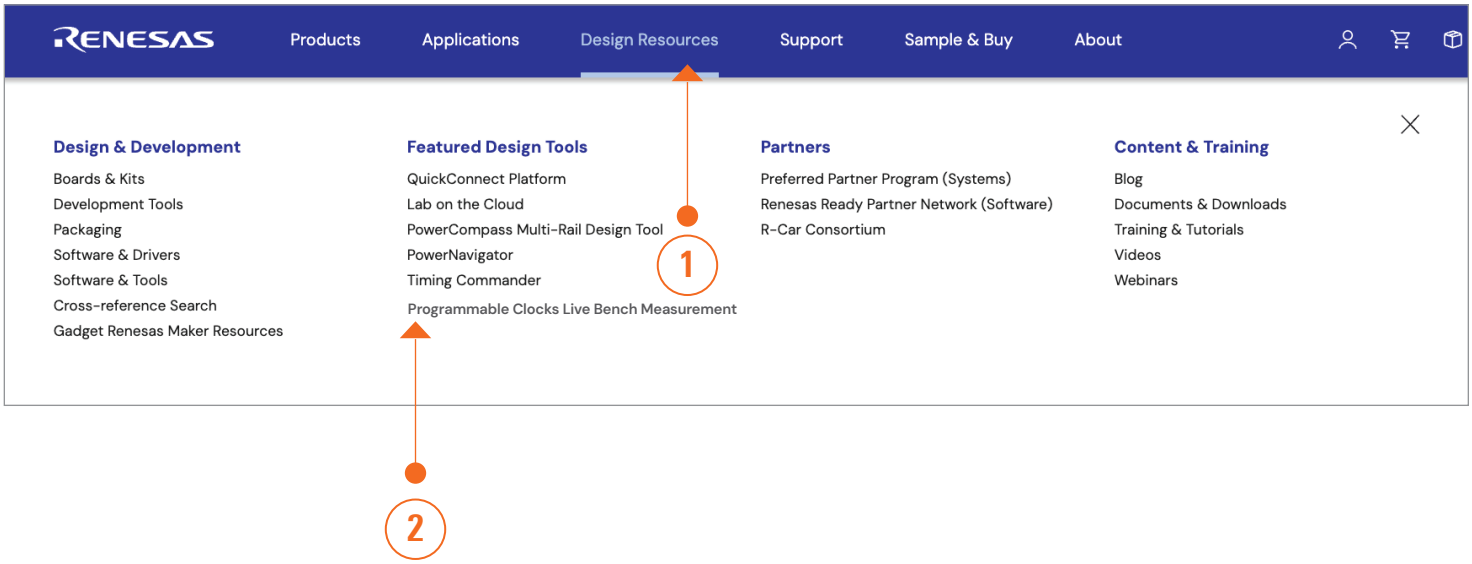
SYSTEM BENEFIT

- No EVB or lab equipment needed.
- Easy dashcode generation and sampling process.
- Most Renesas timing devices support multiple configurations, and once qualified, can be used across different platforms.

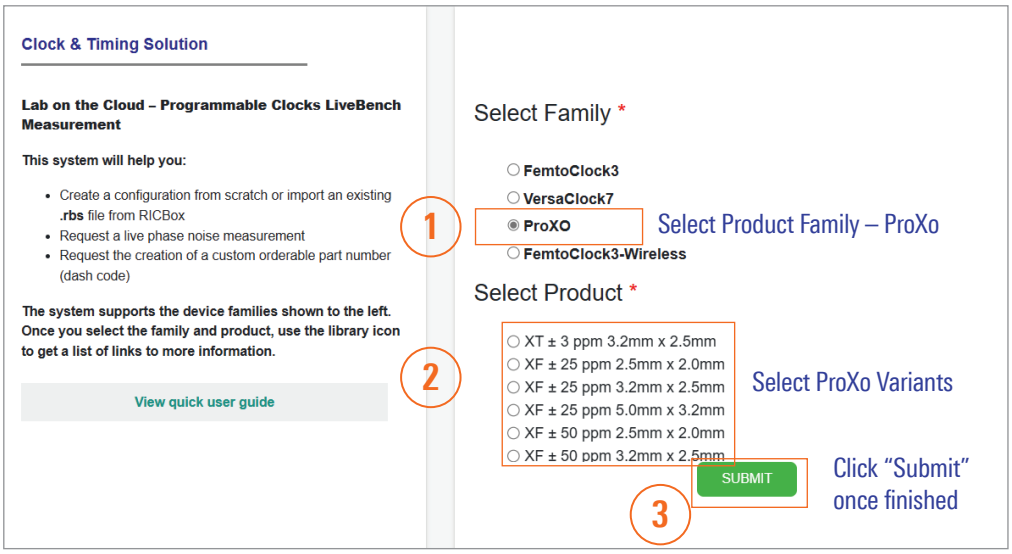


HOW TO FIND THE TOOL

Access Programmable Clocks Live Bench Measurement Tool from Website:
Design Resources → Programmable Clocks Live Bench Measurement

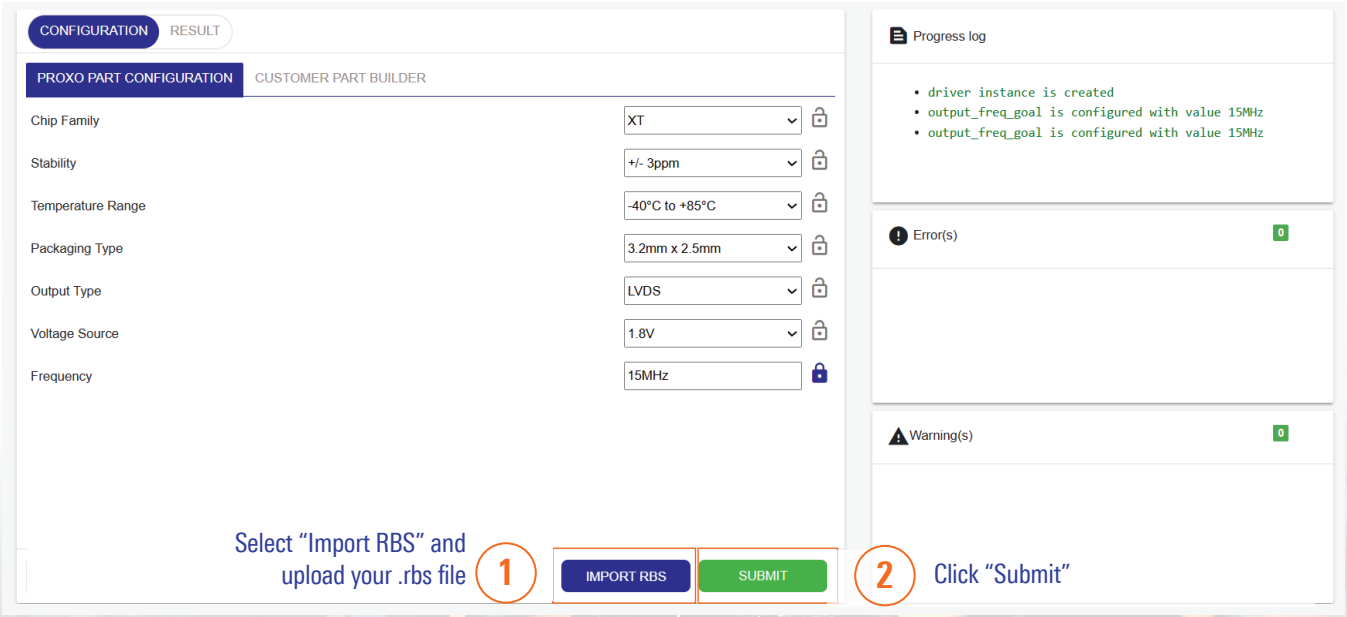


SELECTING THE FAMILY AND VARIANT



CREATE OR LOAD A CONFIGURATION

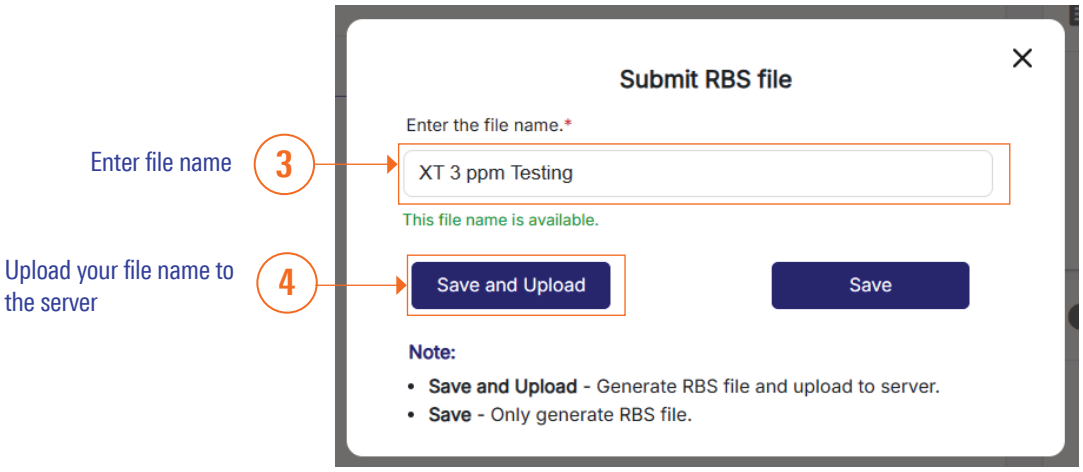
Option 1: Importing an existing RBS file*



*RBS file is generated using Renesas RICBox GUI. For more details, please see Appendix.

CREATE OR LOAD A CONFIGURATION

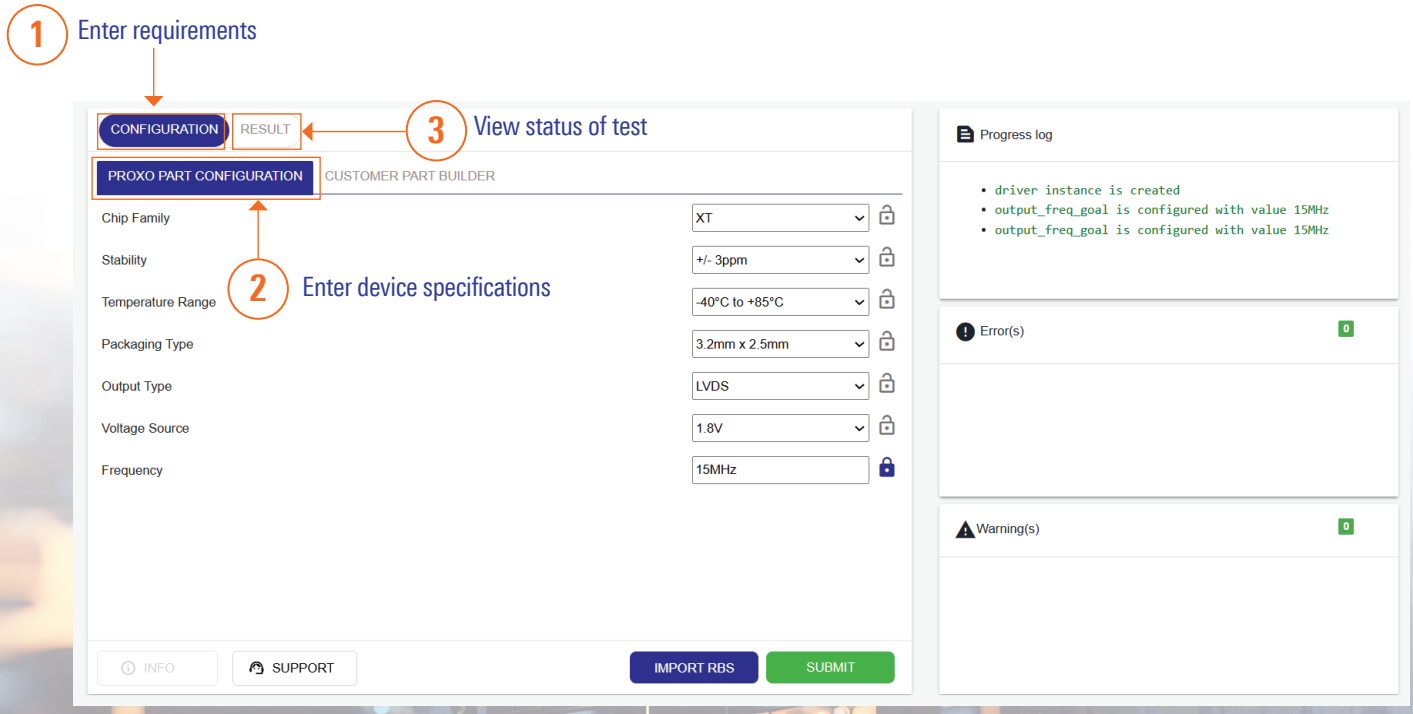
Option 1: Importing an existing RBS file*



*RBS file is generated using Renesas RICBox GUI. For more details, please see Appendix.

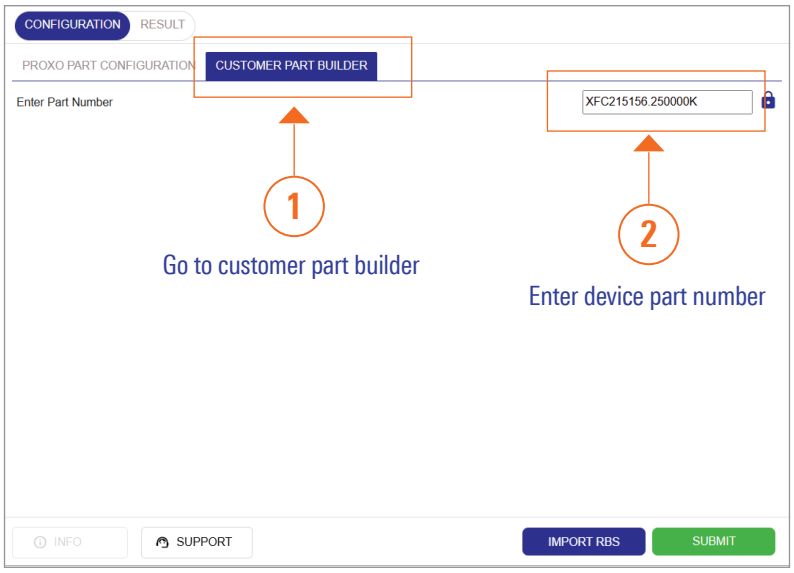
CREATE OR LOAD A CONFIGURATION

Option 2: No RBS file. Create new configuration from scratch.



CREATE OR LOAD A CONFIGURATION

Option 3: Enter known part number.

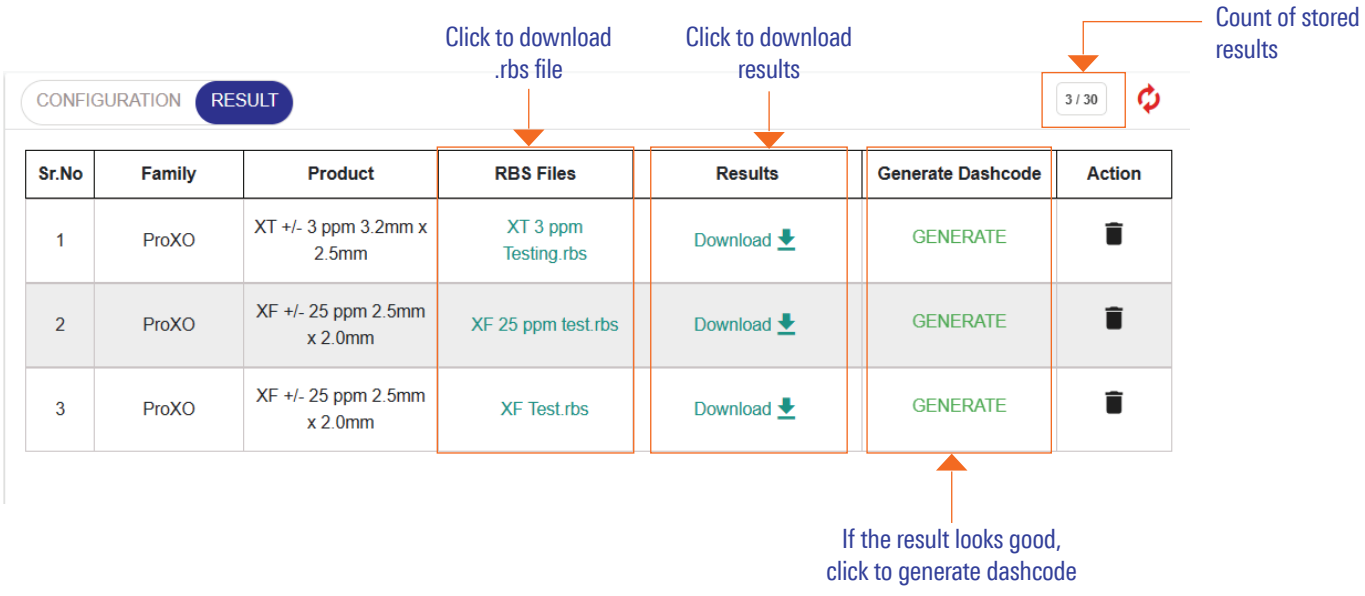


GET THE RESULTS

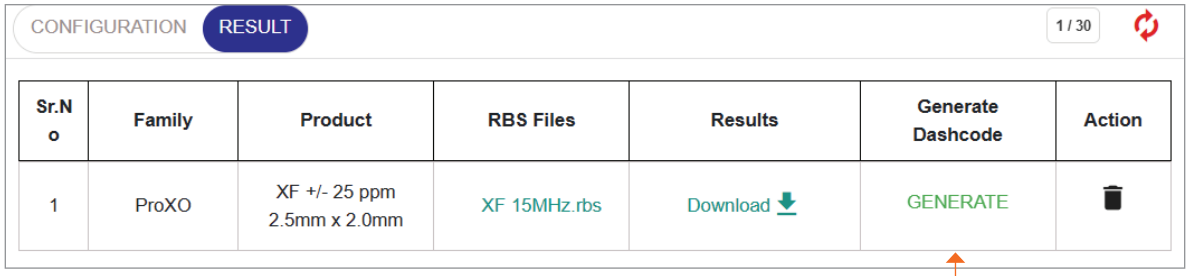
Results – Get the results (including the RBS file), phase noise text files, and phase noise graphs. Also include PCIe analysis if applicable.

Generate Dashcode – Redirect link to renesas.com to start the dashcode generation and sampling process.

RBS files – Save this .rbs file locally if you wish to generate dashcode later.

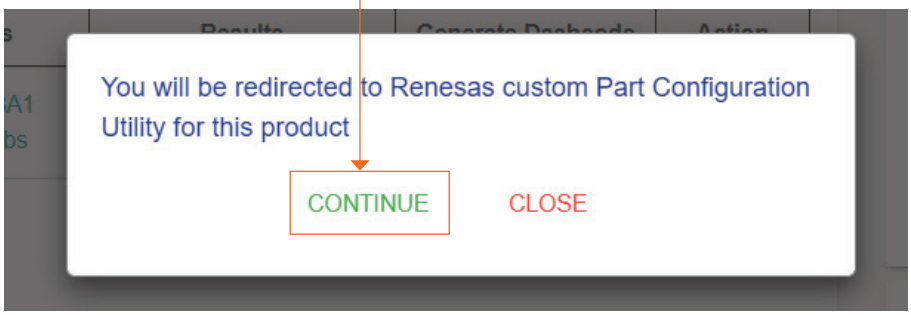


GENERATE DASHCODE

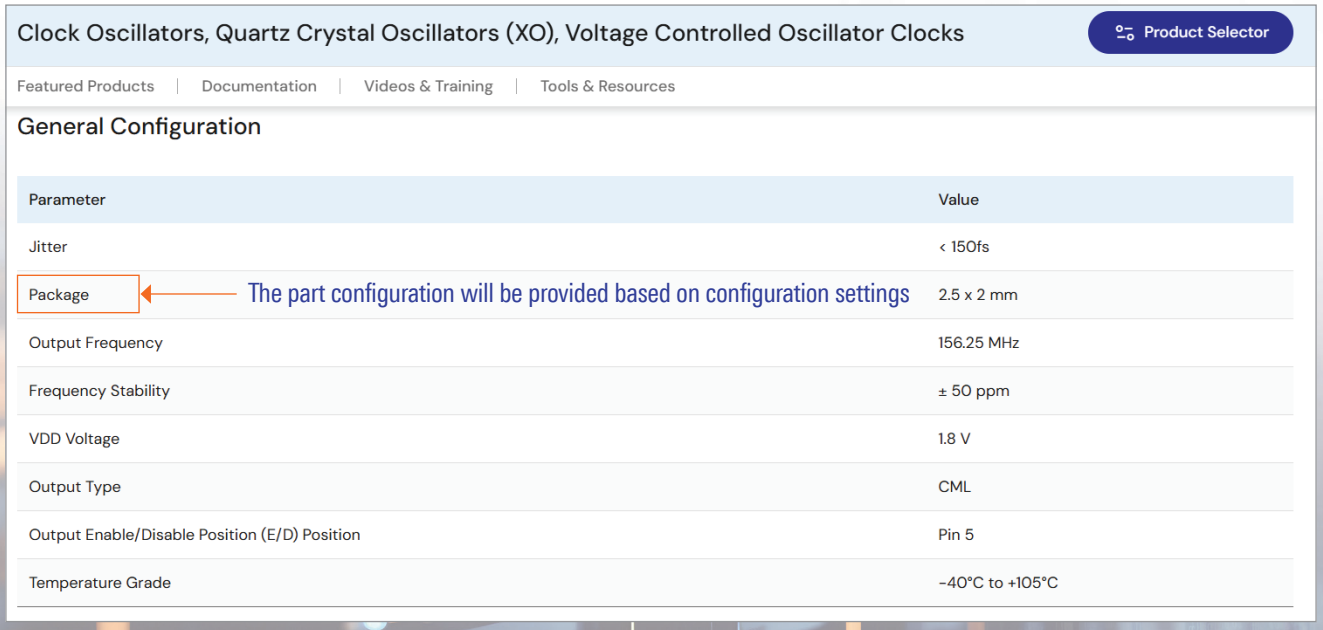


After confirming the result looks good, Click "GENERATE" to get unique dashcode (1)

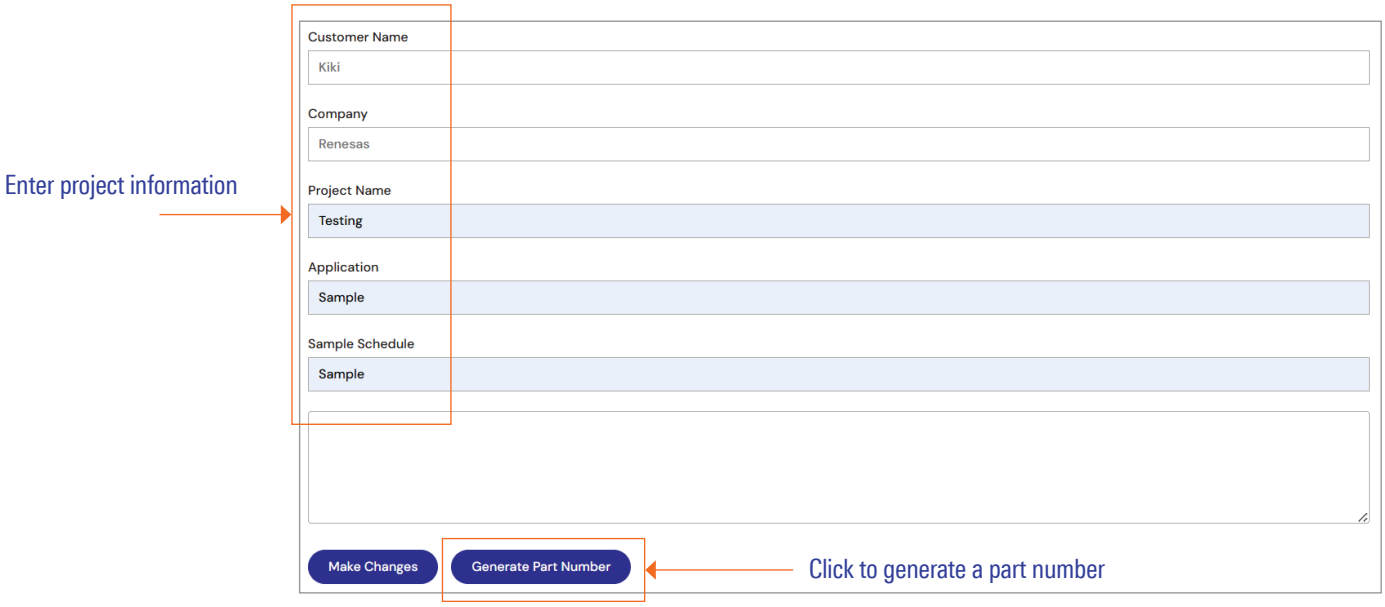
Click "CONTINUE" (2)

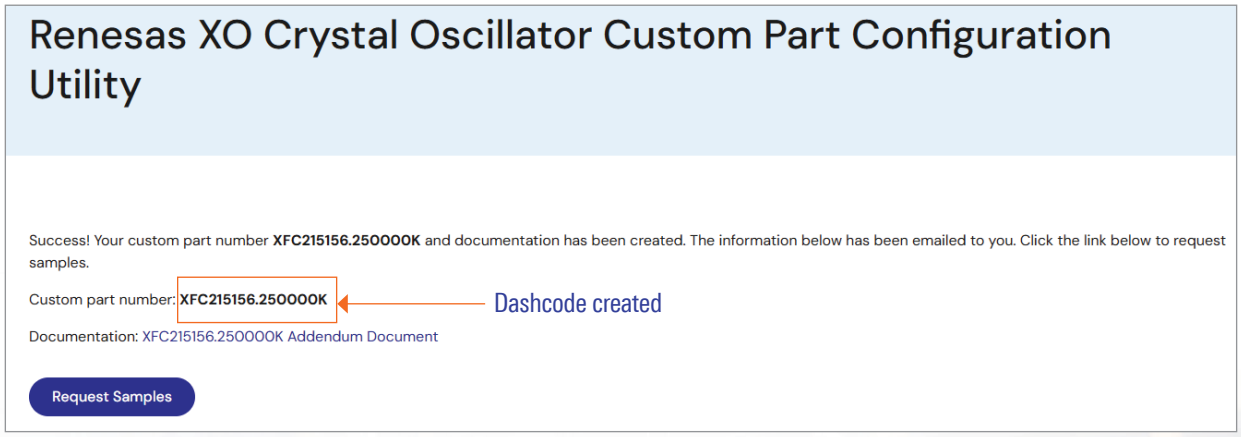


GENERATE DASHCODE



GENERATE DASHCODE





NOTE

Storage Limit

- Max 20 test results per user
- Delete older results when full (check counter on results screen)

RBS File Matching

- Imported RBS must match the selected device

Test Queueing

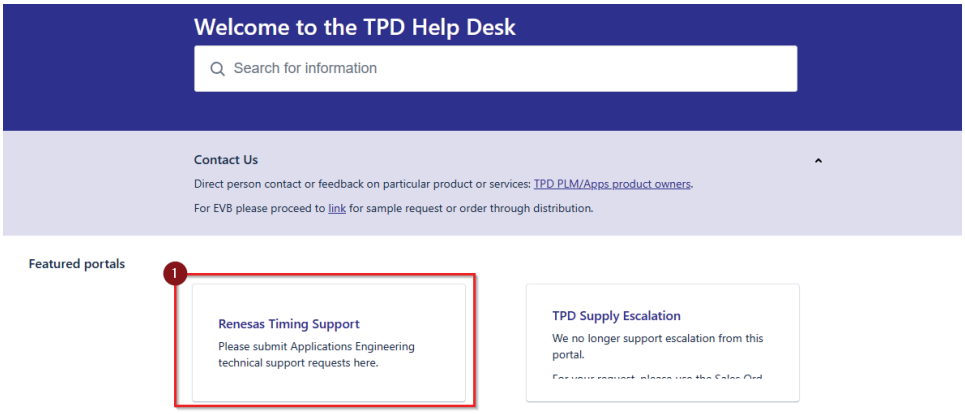
- Requests run one at a time
- Multiple submissions will be queued

Support Scope

- System measures provided configurations only
- For optimization, an application engineer is still needed

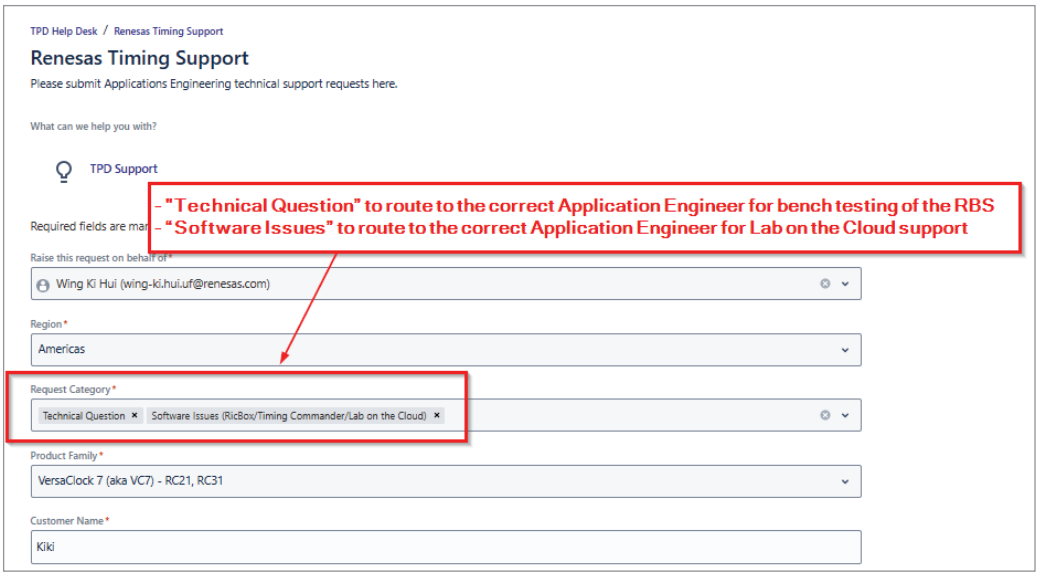
GETTING HELP WITH SYSTEM

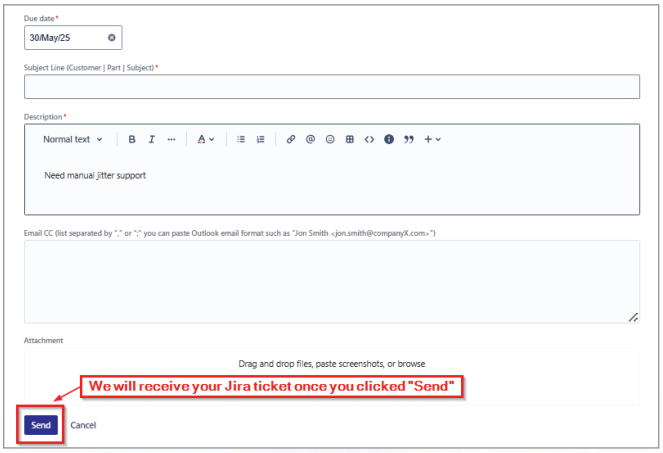
For manual jitter requests or system issues, please submit on JIRA at:
Use a "Request Category" of "Technical Question" to route to the correct Application Engineer for bench testing of the RBS.
https://clocking.atlassian.net/servicedesk/customer/portals → Renesas Timing Support → TPD Support → Product Family "ProXO – XT, XF, XP"

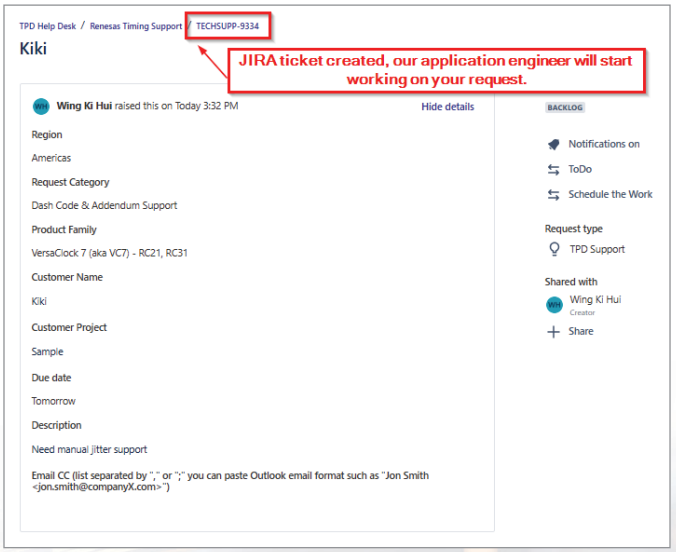


GETTING HELP WITH SYSTEM

Use a "Request Category" of "Software Issues" to route to the correct Application Engineer for Lab on the Cloud support







OTHER USEFUL INFORMATION

ProXO Product Landing Pages:

XT: www.renesas.com/xt

XP: www.renesas.com/xp

XF: www.renesas.com/xf

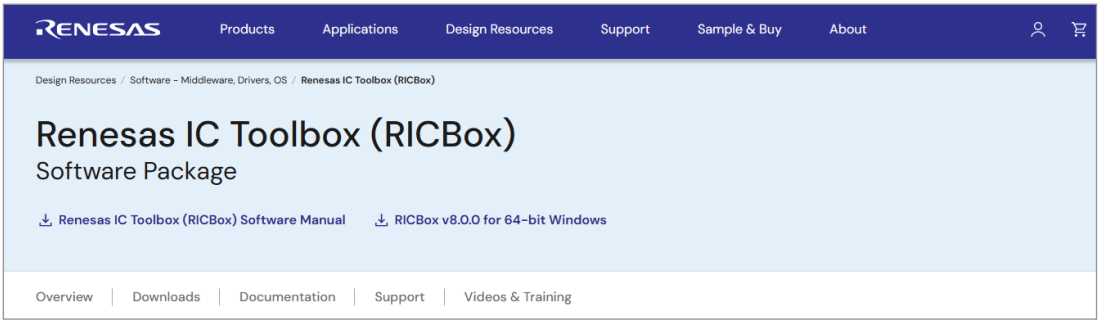
RICBox Builder Tool: Renesas IC Toolbox (RICBox)

APPENDIX

WHAT IS RICBox?

Renesas IC Toolbox (RICBox) is a software platform that lets users:

- Configure Renesas devices via evaluation kits connected to a PC
- Build configuration profiles for devices with non-volatile memory
- Ensure correct startup behavior, especially for clock devices needing pre-set configurations
- Especially useful when you want your device to boot up with a specific setup automatically



RENESAS
Renesas Electronics America Inc. | renesas.com
6024 Silver Creek Valley Rd, San Jose, CA 95138 | Phone: 1-888-468-3774

Document No.: R11QS0068EU0000