

Project Manager - C:\RVS\timing.rvd - RVS

File Edit Navigate Search Project Coverage Window Help

Project Navi... Report Navi... timing.rvd Execution Time for Report: timing.rvd

Qualification

cycles (s) Find element

Name	Min-OverET	A-OverET	H-OverET	Max-OverET	W-OverET	#Tests
mathemati...Self_Test	8	18.6	32	32	78	5

Function Summary

Overall Execution Time

Function	Minimum	Average	High-Water	Maximum	Worst Case	Difference	#Tests
Name	Min-OverET	A-OverET	H-OverET	Max-OverET	W-OverET	W - Avg	
.Self_Test	8	18.6	32	32	78	59.4	5
mathematics.Self_Test	8	18.6	32	32	78	59.4	5
.Subtract_One	13	17.0	21	21	21	0	2
mathematics.Subtract_One	13	17.0	21	21	21	0	2
.Add_One	5	12.2	21	21	21	0	2
mathematics.Add_One	5	12.2	21	21	21	0	2
.Subtract_One	21	21.0	21	21	21	0	2
[BB]mathematics.Subtract_One	21	21.0	21	21	21	0	2

Source code: srcmathematics.adb:9-24

```

4
5   package body mathematics is
6     type BitMask_t is mod 2**8;
7
8     -- Tests the functions
9     procedure Self_Test (run_t
10    begin
11      -- Stretch maths to its
12      case run_test is
13        when 1 =>
14          Ada.Text_IO.Put_Line
15            when 2=>
16              Ada.Text_IO.Put_Line
17            when 3=>
18              Ada.Text_IO.Put_Line
19            when 4=>
20              Ada.Text_IO.Put_Line
21            when others =>
22              Ada.Text_IO.Put_Line
23            end case;
24      end Self_Test;
25
26      -- Returns Value + 1
27      function Add_One(Value : I
28        bits : BitMask_t;

```

workerTask Metrics for Function: worker1Task

Name	Minimum	Average	High-Water	Maximum	#Tests
	Min-Over	Avg-Over	HWM-Over	Max-Over	
RVS_TIMING	234,759,079	0.3e9	285,604,661	285,604,661	2,000
L2_interference - control	234,759,079	0.3e9	236,686,579	236,686,579	500
L2_interference - core1_rpd	246,250,147	0.3e9	248,036,899	248,036,899	500
L2_interference - core1_core2_rpd	257,780,965	0.3e9	258,817,302	258,817,302	500
L2_interference - core1_core2_core3_rpd	284,496,720	0.3e9	285,604,661	285,604,661	500
CPU_CYCLES	2.9e9	3.5e9	3,436,789,594	3.5e9	2,000
L2_interference - control	2.9e9	3.5e9	2,848,990,715	2.9e9	500
L2_interference - core1_rpd	3.0e9	3.5e9	2,985,836,851	3.0e9	500
L2_interference - core1_core2_rpd	3.2e9	3.5e9	3,111,574,511	3.2e9	500
L2_interference - core1_core2_core3_rpd	3.5e9	3.5e9	3,436,789,594	3.5e9	500
L2D_CACHE_REFILL	761,892	1,188,280	1,353,467	1,353,369	2,000
L2_interference - control	761,892	1,083,316	927,252	929,453	500
L2_interference - core1_rpd	858,314	1,149,789	1,023,619	1,023,619	500
L2_interference - core1_core2_rpd	990,922	1,227,240	1,126,910	1,126,910	500
L2_interference - core1_core2_core3_rpd	1,204,719	1,292,772	1,353,467	1,353,467	500



Safety through quality

ORDER INFORMATION

RapiTime Tool Qualification for DO-178C

Order information: RapiTime Tool Qualification for DO-178C

Our Qualification Kits, along with our expert Qualified Target Integration Service, provide the resources and expertise you need to qualify RapiTime for use in DO-178C projects.

KEY TERMS

A **use** means: Providing Qualification Kit documents and deliverables from the Qualified Target Integration Service (if applicable) to a certification authority as part of a single submission (or resubmission requested by a certification authority) for certification of a single piece of equipment. Each resubmission to a certification authority due to new features being added or updates being made to the same equipment is a separate use.

A **configuration** means: The integration of a version of RapiCover into a specific development and target environment. We work with you to define your configuration during the delivery process. A detailed description of your configuration is documented in your Licensing Agreement.

Qualification Kits

You can purchase a Qualification Kit for RapiTime if you have a valid RapiTime license as well as an active support and maintenance contract. To purchase a Qualification Kit:

1. Choose a licensing model that works best for your organization or project.
2. Provide us with details about your configuration so that we can prepare and finalize your Licensing Agreement.
3. If required, add a Qualified Target Integration Service to your order (see next page).

Qualification Kit licensing models

We offer two off-the-shelf licensing models (as shown in Figure 1) for our RapiTime Qualification Kits.

A **Single Use** license lets you qualify a single version of RapiTime for a single submission.

A **Re-usable** license lets you use the Qualification Kit for a specific version of RapiTime in up to three submissions per year. We invoice you for an annual subscription fee each year.

We also offer customized **Product line** licenses to support larger scale deployments of RapiTest.

We work with you to choose the best licensing model for your organization or project.

Delivery process

When we receive your order, we ask you to provide details on the configuration you wish to use the Qualification Kit for. If required, a Rapita engineer will assist you with this.

We then invoice you for the appropriate one-time fee (see Table 1 on the next page for a list of product codes). We also provide early access to the latest version of the Qualification Kit for informational purposes.

Note: You can use this version to familiarize yourself with the content; you can't use it to make a submission to a certification authority.

The information you provide us about your configuration forms the basis of the Licensing Agreement. Once this is finalized and signed, we provide you with the licensed version of the Qualification Kit, which you can then use according to the agreed terms.

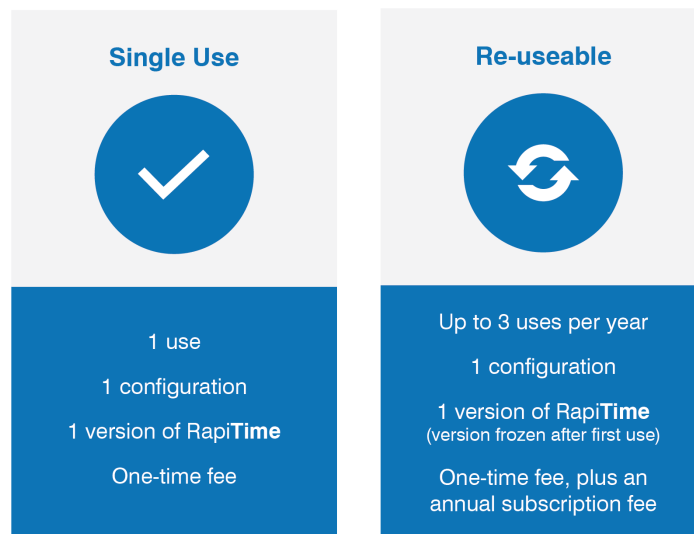


Figure 1: Qualification Kit licensing models

Qualified Target Integration Service

You can purchase a Qualified Target Integration Service for **a single configuration and use** of your licensed Qualification Kit. It is delivered as an engineering service, and includes the delivery of an Integration Qualification Report (IQR), on-site tests and expected results.

We can only provide a Qualified Target Integration Service if you have purchased a Qualification Kit for RapiTime, and:

- We have integrated RapiTime into your development and target environment via a Target Integration Service (TIS).
- The integration is stable, meaning there are no anticipated changes.

Delivery process

Figure 2 (right) shows a detailed overview of the Qualified Target Integration Service delivery process. In general, Qualified Target Integration Services are delivered remotely from our offices in York, UK, but can be provided on-site if required.

Your input on preliminary, interim and final versions of the deliverables is essential throughout the process to ensure that the service is delivered on time.

Timeframes

In general, a Qualified Target Integration Service takes around 6 weeks from the submission of a purchase order subject to any configuration changes, the availability of Rapita engineers and your availability and feedback during the process. We confirm the delivery schedule after we receive your purchase order.

Licensed materials

The deliverables of a Qualified Target Integration Service (the final IQR, on-site tests and expected results) are licensed for **one configuration** and **one use** only. Changes to the configuration of your integration during the service delivery process may affect engineering effort, delivery dates and costs.

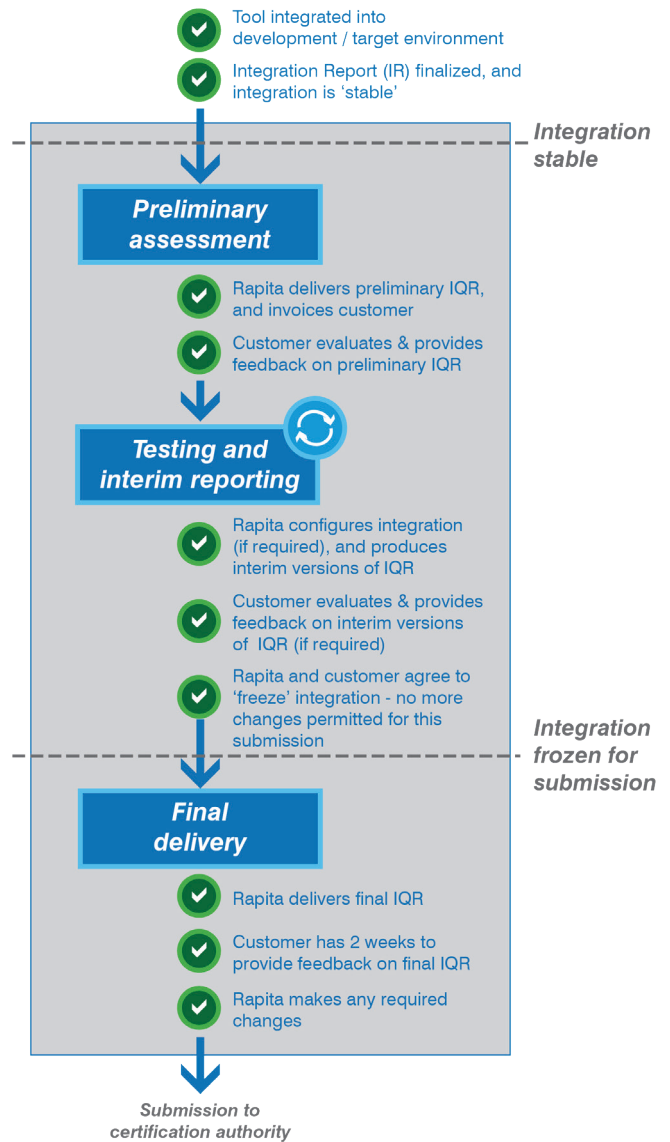


Figure 2. Qualified Target Integration Service – delivery process

Table 1. RapiTime Qualification Kit product codes

RapiTime Qualification Kits for DO-178C			Qualified Target Integration Service
Licensing model		Product code	Product code
Single use	One-time fee	QK-aero-RPT	ES-xx*-QTIS
Re-useable	One-time fee	QKR-aero-RPT	
	Annual subscription fee	QKRS-aero-RPT	

*xx indicates the region the engineering activities take place (RSI: Rapita Systems Inc. headquarters in the USA, RSL: Rapita Systems Ltd. headquarters in the UK, UK: United Kingdom, EU: Europe other than the UK, AM: America, AP: Asia Pacific).



About Rapita

Rapita Systems provides on-target software verification tools and services globally to the embedded aerospace and automotive electronics industries.

Our solutions help to increase software quality, deliver evidence to meet safety and certification objectives and reduce costs.

Find out more

A range of free high-quality materials are available at:
rapitasystems.com/downloads

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Qualification

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Compiler Verification

Multicore verification

MACH¹⁷⁸

Multicore Timing Solution

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