



CRC internal peripheral



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1 Article purpose

The purpose of this article is to

- briefly introduce the CRC peripheral and its main features
- indicate the level of security supported by this hardware block
- explain how each instance can be allocated to the three runtime contexts and linked to the corresponding software components
- explain how to configure the CRC peripheral.

2 Peripheral overview

The **CRC** peripheral is used to verify data transmission or storage integrity.

2.1 Features

Refer to the [STM32MP15 reference manuals](#) for the complete list of features, and to the software components, introduced below, to see which features are implemented.



2.2 Security support

CRC1 and CRC2 are **non secure** peripherals.

3 Peripheral usage and associated software

3.1 Boot time

CRC instances are not used at boot time.

3.2 Runtime

3.2.1 Overview

CRC instances can be allocated to:

- the Arm[®] Cortex[®]-A7 non-secure for using in Linux[®] with Linux Crypto framework

or

- the Arm[®] Cortex[®]-M4 for using in STM32Cube with STM32Cube CRC driver

Chapter [Peripheral assignment](#) describes which peripheral instance can be assigned to which context.

3.2.2 Software frameworks

Do	Peri	Software frameworks			Comment
mai Cor tex -A7 sec ure (O P- TE E)	Cor tex -A7 no n- sec ure (Li nux)	Cortex-M4 (STM32Cube)			
	Se cu rity	C R C	Linux Crypto framework	STM32Cube CRC driver	



4 How to go further

Not applicable.

5 References

Cyclic redundancy check calculation unit

Open Portable Trusted Execution Environment

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