

Package: crc32c (via r-universe)

July 16, 2024

Type Package

Title Cyclic Redundancy Check with CPU-Specific Acceleration

Version 0.0.2

Date 2023-05-11

Description Hardware-based support for 'CRC32C' cyclic redundancy checksum function is made available for 'x86_64' systems with 'SSE2' support as well as for 'arm64', and detected at build-time via 'cmake' with a software-based fallback. This functionality is exported at the 'C'-language level for use by other packages. 'CRC32C' is described in 'RFC 3270' at <https://datatracker.ietf.org/doc/html/rfc3270> and is based on 'Castagnoli et al' <doi:10.1109/26.231911>.

URL <https://github.com/google/crc32c>,
<https://github.com/eddelbuettel/crc32c>

BugReports <https://github.com/eddelbuettel/crc32c/issues>

License GPL (>= 2)

LinkingTo tidyCpp

SystemRequirements cmake

Encoding UTF-8

RoxygenNote 6.0.1

Repository <https://eddelbuettel.r-universe.dev>

RemoteUrl <https://github.com/eddelbuettel/crc32c>

RemoteRef HEAD

RemoteSha 1fb5c11662ae80c432e4d85498ac48326f5e5666

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`crc32c-package`*Cyclic Redundancy Check with CPU-Specific Acceleration*

Description

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Package Content

Index: This package was not yet installed at build time.

Maintainer

Dirk Eddelbuettel

Author(s)

The CRC32C Authors for the 'crc32c' library; Dirk Eddelbuettel for the package.

`crc32c`*Cyclic Redundancy Check with Hardware Support*

Description

The `crc32c` implementation with hardware support via SSE2 instructions on 'x86_64' platforms as well as on 'arm64' is provided by using the code from the repository at <https://github.com/google/crc32c>.

Usage

```
crc32c(x)
```

Arguments

`x` A character vector

Value

A character vector of the same length as the incoming vector, with a `crc32c` checksum in hexadecimal as a character value of length eight in each element.

References

<https://datatracker.ietf.org/doc/html/rfc3720>, doi:10.1109/26.231911

See Also

<https://github.com/google/crc32c>

Examples

```
crc32c("abc")
```

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