

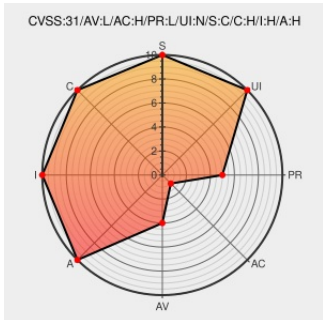


# CVE-2020-10028

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## CVE-2020-10028

[Source: Mitre](#)[Source: NIST](#)[CVE.ORG](#)[Print: PDF](#) 

Certain versions of [Zephyr](#) from [Zephyrproject](#) contain the following vulnerability:

Multiple syscalls with insufficient argument validation See NCC-ZEP-006 This issue affects: zephyrproject-rtos zephyr version 1.14.0 and later versions. version 2.1.0 and later versions.

CVE-2020-10028 has been assigned by [vulnerabilities@zephyrproject.org](#) to track the vulnerability - currently rated as **HIGH** severity.

Affected Vendor/Software: [zephyrproject-rtos](#) - **zephyr** version **>= 1.14.0**

Affected Vendor/Software: [zephyrproject-rtos](#) - **zephyr** version **>= 2.1.0**

CVSS3 Score: **7.8 - HIGH**

| Attack Vector    | Attack Complexity      | Privileges Required | User Interaction    |
|------------------|------------------------|---------------------|---------------------|
| <b>LOCAL</b>     | <b>LOW</b>             | <b>LOW</b>          | <b>NONE</b>         |
| Scope            | Confidentiality Impact | Integrity Impact    | Availability Impact |
| <b>UNCHANGED</b> | <b>HIGH</b>            | <b>HIGH</b>         | <b>HIGH</b>         |

CVSS2 Score: **4.6 - MEDIUM**

| Access Vector          | Access Complexity | Authentication      |
|------------------------|-------------------|---------------------|
| <b>LOCAL</b>           | <b>LOW</b>        | <b>NONE</b>         |
| Confidentiality Impact | Integrity Impact  | Availability Impact |
| <b>PARTIAL</b>         | <b>PARTIAL</b>    | <b>PARTIAL</b>      |

## CVE References

| Description | Tags | Link |
|-------------|------|------|
|-------------|------|------|

|                                                                                                                          |                                                                                                                          |                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Backport v1.14: drivers: gpio: fix syscall handlers by ceolin · Pull Request #23733 · zephyrproject-rtos/zephyr · GitHub | <a href="#">Patch</a><br><a href="#">Third Party Advisory</a><br><a href="#">github.com</a><br><a href="#">text/html</a> |  <a href="#">MISC github.com/zephyrproject-rtos/zephyr/pull/23733</a>                            |
| Vulnerabilities — Zephyr Project Documentation                                                                           | <a href="#">docs.zephyrproject.org</a><br><a href="#">text/html</a>                                                      |  <a href="#">MISC docs.zephyrproject.org/latest/security/vulnerabilities.html#cve-2020-10028</a> |
| fix some incorrect syscall handlers by andrewboie · Pull Request #23308 · zephyrproject-rtos/zephyr · GitHub             | <a href="#">Patch</a><br><a href="#">Third Party Advisory</a><br><a href="#">github.com</a><br><a href="#">text/html</a> |  <a href="#">MISC github.com/zephyrproject-rtos/zephyr/pull/23308</a>                            |
| Backport v2.1: drivers: gpio: fix syscall handlers by ceolin · Pull Request #23737 · zephyrproject-rtos/zephyr · GitHub  | <a href="#">Patch</a><br><a href="#">Third Party Advisory</a><br><a href="#">github.com</a><br><a href="#">text/html</a> |  <a href="#">MISC github.com/zephyrproject-rtos/zephyr/pull/23737</a>                            |
| [ZEPSEC-32] Multiple Syscalls In GPIO Subsystem Performs No Argument Validation - Zephyr Project Security Issues         | <a href="#">Third Party Advisory</a><br><a href="#">zephyrprojectsec.atlassian.net</a><br><a href="#">text/html</a>      |  <a href="#">MISC zephyrprojectsec.atlassian.net/browse/ZEPSEC-32</a>                            |

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There are currently no QIDs associated with this CVE

| Known Affected Configurations (CPE V2.3)     |                               |                        |         |        |         |          |
|----------------------------------------------|-------------------------------|------------------------|---------|--------|---------|----------|
| Type                                         | Vendor                        | Product                | Version | Update | Edition | Language |
| Operating System                             | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | 1.14.0  | All    | All     | All      |
| Operating System                             | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | 2.1.0   | All    | All     | All      |
| Operating System                             | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | 1.14.0  | All    | All     | All      |
| Operating System                             | <a href="#">Zephyrproject</a> | <a href="#">Zephyr</a> | 2.1.0   | All    | All     | All      |
| cpe:2.3:o:zephyrproject:zephyr:1.14.0:*****: |                               |                        |         |        |         |          |
| cpe:2.3:o:zephyrproject:zephyr:2.1.0:*****:  |                               |                        |         |        |         |          |
| cpe:2.3:o:zephyrproject:zephyr:1.14.0:*****: |                               |                        |         |        |         |          |
| cpe:2.3:o:zephyrproject:zephyr:2.1.0:*****:  |                               |                        |         |        |         |          |

| Discovery Credit     |
|----------------------|
| NCC Group for report |

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