

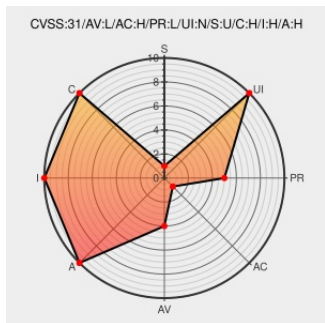


CVE-2020-12951

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CVE-2020-12951 - advisory for AMD-SB-1027

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

Certain versions of [Epyc 7001](#) from [Amd](#) contain the following vulnerability:

Race condition in ASP firmware could allow less privileged x86 code to perform ASP SMM (System Management Mode) operations.

CVE-2020-12951 has been assigned by [psirt@amd.com](#) to track the vulnerability - currently rated as **HIGH** severity.

Affected Vendor/Software: [AMD](#) - **Ryzen™ Series** version = **various**

Affected Vendor/Software: [AMD](#) - **Athlon™ Series** version = **various**

CVSS3 Score: **7 - HIGH**

Attack Vector	Attack Complexity	Privileges Required	User Interaction
LOCAL	HIGH	LOW	NONE
Scope	Confidentiality Impact	Integrity Impact	Availability Impact
UNCHANGED	HIGH	HIGH	HIGH

CVSS2 Score: **4.4 - MEDIUM**

Access Vector	Access Complexity	Authentication
LOCAL	MEDIUM	NONE
Confidentiality Impact	Integrity Impact	Availability Impact
PARTIAL	PARTIAL	PARTIAL

CVE References

Description	Tags	Link
AMD Security Center: CVE-2020-12951		AMD Security Center: CVE-2020-12951

No Description Provided

www.amd.com

Inactive Link

Not Archived

MISC www.amd.com/en/corporate/product-security/bulletin/amd-sb-1027

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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
Hardware 	Amd	Epyc 7001	-	All	All	All
Operating System	Amd	Epyc 7001 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7002	-	All	All	All
Operating System	Amd	Epyc 7002 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7003	-	All	All	All
Operating System	Amd	Epyc 7003 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7232p	-	All	All	All
Operating System	Amd	Epyc 7232p Firmware	All	All	All	All
Hardware 	Amd	Epyc 7251	-	All	All	All
Operating System	Amd	Epyc 7251 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7252	-	All	All	All
Operating System	Amd	Epyc 7252 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7262	-	All	All	All
Operating System	Amd	Epyc 7262 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7272	-	All	All	All
Operating System	Amd	Epyc 7272 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7281	-	All	All	All
Operating System	Amd	Epyc 7281 Firmware	All	All	All	All

Hardware  	Amd	Epyc 7282	-	All	All	All
Operating System	Amd	Epyc 7282 Firmware	All	All	All	All
Hardware  	Amd	Epyc 72f3	-	All	All	All
Operating System	Amd	Epyc 72f3 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7301	-	All	All	All
Operating System	Amd	Epyc 7301 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7302	-	All	All	All
Hardware  	Amd	Epyc 7302p	-	All	All	All
Operating System	Amd	Epyc 7302p Firmware	All	All	All	All
Operating System	Amd	Epyc 7302 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7313	-	All	All	All
Hardware  	Amd	Epyc 7313p	-	All	All	All
Operating System	Amd	Epyc 7313p Firmware	All	All	All	All
Operating System	Amd	Epyc 7313 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7343	-	All	All	All
Operating System	Amd	Epyc 7343 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7351	-	All	All	All
Hardware  	Amd	Epyc 7351p	-	All	All	All
Operating System	Amd	Epyc 7351p Firmware	All	All	All	All
Operating System	Amd	Epyc 7351 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7352	-	All	All	All
Operating System	Amd	Epyc 7352 Firmware	All	All	All	All
Hardware  	Amd	Epyc 73f3	-	All	All	All
Operating System	Amd	Epyc 73f3 Firmware	All	All	All	All
Hardware  	Amd	Epyc 7401	-	All	All	All
Hardware  	Amd	Epyc 7401p	-	All	All	All
Operating	Amd	Epyc 7401p Firmware	All	All	All	All

System						
Operating System	Amd	Epyc 7401 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7402	-	All	All	All
Hardware 	Amd	Epyc 7402p	-	All	All	All
Operating System	Amd	Epyc 7402p Firmware	All	All	All	All
Operating System	Amd	Epyc 7402 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7413	-	All	All	All
Operating System	Amd	Epyc 7413 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7443	-	All	All	All
Hardware 	Amd	Epyc 7443p	-	All	All	All
Operating System	Amd	Epyc 7443p Firmware	All	All	All	All
Operating System	Amd	Epyc 7443 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7451	-	All	All	All
Operating System	Amd	Epyc 7451 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7452	-	All	All	All
Operating System	Amd	Epyc 7452 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7453	-	All	All	All
Operating System	Amd	Epyc 7453 Firmware	All	All	All	All
Hardware 	Amd	Epyc 74f3	-	All	All	All
Operating System	Amd	Epyc 74f3 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7501	-	All	All	All
Operating System	Amd	Epyc 7501 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7502	-	All	All	All
Hardware 	Amd	Epyc 7502p	-	All	All	All
Operating System	Amd	Epyc 7502p Firmware	All	All	All	All
Operating System	Amd	Epyc 7502 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7513	-	All	All	All

Operating System	Amd	Epyc 7513 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7532	-	All	All	All
Operating System	Amd	Epyc 7532 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7542	-	All	All	All
Operating System	Amd	Epyc 7542 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7543	-	All	All	All
Hardware 	Amd	Epyc 7543p	-	All	All	All
Operating System	Amd	Epyc 7543p Firmware	All	All	All	All
Operating System	Amd	Epyc 7543 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7551	-	All	All	All
Hardware 	Amd	Epyc 7551p	-	All	All	All
Operating System	Amd	Epyc 7551p Firmware	All	All	All	All
Operating System	Amd	Epyc 7551 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7552	-	All	All	All
Operating System	Amd	Epyc 7552 Firmware	All	All	All	All
Hardware 	Amd	Epyc 75f3	-	All	All	All
Operating System	Amd	Epyc 75f3 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7601	-	All	All	All
Operating System	Amd	Epyc 7601 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7642	-	All	All	All
Operating System	Amd	Epyc 7642 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7643	-	All	All	All
Operating System	Amd	Epyc 7643 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7662	-	All	All	All
Operating System	Amd	Epyc 7662 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7663	-	All	All	All

Operating System	Amd	Epyc 7663 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7702	-	All	All	All
Hardware 	Amd	Epyc 7702p	-	All	All	All
Operating System	Amd	Epyc 7702p Firmware	All	All	All	All
Operating System	Amd	Epyc 7702 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7713	-	All	All	All
Hardware 	Amd	Epyc 7713p	-	All	All	All
Operating System	Amd	Epyc 7713p Firmware	All	All	All	All
Operating System	Amd	Epyc 7713 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7742	-	All	All	All
Operating System	Amd	Epyc 7742 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7763	-	All	All	All
Operating System	Amd	Epyc 7763 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7f32	-	All	All	All
Operating System	Amd	Epyc 7f32 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7f52	-	All	All	All
Operating System	Amd	Epyc 7f52 Firmware	All	All	All	All
Hardware 	Amd	Epyc 7f72	-	All	All	All
Operating System	Amd	Epyc 7f72 Firmware	All	All	All	All
cpe:2.3:h:amd:epyc_7001:-:*****:.*:						
cpe:2.3:o:amd:epyc_7001_firmware:*****:.*:						
cpe:2.3:h:amd:epyc_7002:-:*****:.*:						
cpe:2.3:o:amd:epyc_7002_firmware:*****:.*:						
cpe:2.3:h:amd:epyc_7003:-:*****:.*:						
cpe:2.3:o:amd:epyc_7003_firmware:*****:.*:						
cpe:2.3:h:amd:epyc_7232p:-:*****:.*:						
cpe:2.3:o:amd:epyc_7232p_firmware:*****:.*:						

```
cpe:2.3:h:amd:epyc_7251:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7251_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7252:-:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7252_firmware:*:*:*:*:*:*:

```
cpe:2.3:h:amd:epyc_7262:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7262_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7272:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7272_firmware:*.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7281:-:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7281_firmware:*.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7282:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc 7282 firmware:*.*.*.*.*.*.*.*
```

```
cpe:2.3:h:amd:epyc_72f3:-:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_72f3_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7301:-:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7301_firmware:*.*.*.*.*.*.*.*

```
cpe:2.3:h:amd:epyc_7302:-:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7302p:-:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7302p_firmware:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7302_firmware:*.*.*.*.*.*.*.*
```

```
cpe:2.3:h:amd:epyc_7313:-:*:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7313p:-:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7313p_firmware:*.*.*.*.*.*.*.*
```

```
cpe:2.3:o:amd:epyc_7313_firmware:*.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7343:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7343_firmware:*.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7351:-:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7351p:-:*:*:*:*:*:*:
```

[illegible]

cpe:2.3:o:amd:epyc_7351p_firmware:~::~::~::~:
cpe:2.3:o:amd:epyc_7351_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7352:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7352_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_73f3:-:~::~::~::~:
cpe:2.3:o:amd:epyc_73f3_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7401:-:~::~::~::~:
cpe:2.3:h:amd:epyc_7401p:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7401p_firmware:~::~::~::~:
cpe:2.3:o:amd:epyc_7401_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7402:-:~::~::~::~:
cpe:2.3:h:amd:epyc_7402p:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7402p_firmware:~::~::~::~:
cpe:2.3:o:amd:epyc_7402_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7413:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7413_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7443:-:~::~::~::~:
cpe:2.3:h:amd:epyc_7443p:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7443p_firmware:~::~::~::~:
cpe:2.3:o:amd:epyc_7443_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7451:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7451_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7452:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7452_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7453:-:~::~::~::~:
cpe:2.3:o:amd:epyc_7453_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_74f3:-:~::~::~::~:
cpe:2.3:o:amd:epyc_74f3_firmware:~::~::~::~:
cpe:2.3:h:amd:epyc_7501:-:~::~::~::~:

cpe:2.3:o:amd:epyc_7501_firmware:*:*:*:*:*:*:

```
cpe:2.3:h:amd:epyc_7502:-:*:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7502p:-:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7502p_firmware:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7502_firmware:*:*:*:*:*:*:*:

```
cpe:2.3:h:amd:epyc_7513:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7513_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7532:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7532_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7542:-:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7542_firmware:*:*:*:*:*:*:

```
cpe:2.3:h:amd:epyc_7543:-:*:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7543p:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7543p_firmware:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7543_firmware:*:*:*:*:*:*:*:

```
cpe:2.3:h:amd:epyc_7551:-:*:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7551p:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7551p_firmware:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7551_firmware:*:*:*:*:*:*:

```
cpe:2.3:h:amd:epyc_7552:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7552_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_75f3:-:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_75f3_firmware:*.:.:.:.:.:.:.:
```

```
cpe:2.3:h:amd:epyc_7601:-:*:*:*:*:*:*:
```

```
cpe:2.3:o:amd:epyc_7601_firmware:*:*:*:*:*:*:
```

```
cpe:2.3:h:amd:epyc_7642:-:*:*:*:*:*:*:
```

cpe:2.3:o:amd:epyc_7642_firmware:*:*:*:*:*:*:

cpe:2.3:h:amd:epyc_7643:-:*:*:*:*:*:*:

cpe:2.3:o:amd:epyc_7643_firmware:*****:
cpe:2.3:h:amd:epyc_7662:-:*****:
cpe:2.3:o:amd:epyc_7662_firmware:*****:
cpe:2.3:h:amd:epyc_7663:-:*****:
cpe:2.3:o:amd:epyc_7663_firmware:*****:
cpe:2.3:h:amd:epyc_7702:-:*****:
cpe:2.3:h:amd:epyc_7702p:-:*****:
cpe:2.3:o:amd:epyc_7702p_firmware:*****:
cpe:2.3:o:amd:epyc_7702_firmware:*****:
cpe:2.3:h:amd:epyc_7713:-:*****:
cpe:2.3:h:amd:epyc_7713p:-:*****:
cpe:2.3:o:amd:epyc_7713p_firmware:*****:
cpe:2.3:o:amd:epyc_7713_firmware:*****:
cpe:2.3:h:amd:epyc_7742:-:*****:
cpe:2.3:o:amd:epyc_7742_firmware:*****:
cpe:2.3:h:amd:epyc_7763:-:*****:
cpe:2.3:o:amd:epyc_7763_firmware:*****:
cpe:2.3:h:amd:epyc_7f32:-:*****:
cpe:2.3:o:amd:epyc_7f32_firmware:*****:
cpe:2.3:h:amd:epyc_7f52:-:*****:
cpe:2.3:o:amd:epyc_7f52_firmware:*****:
cpe:2.3:h:amd:epyc_7f72:-:*****:
cpe:2.3:o:amd:epyc_7f72_firmware:*****:

No vendor comments have been submitted for this CVE

Social Mentions		
Source	Title	Posted (UTC)
 @CVEreport	CVE-2020-12951 : Race condition in PSP FW could allow less privileged x86 code to perform PSP SMM operations.... cve.report/CVE-2020-12951	2021-11-16 18:48:32
 @WeslIncensored	New vulnerability on the NVD: CVE-2020-12951 ift.tt/2YUDAJ0	2021-11-17 15:33:59

© CVE.report 2024		15:53:12
 @workentin	New vulnerability on the NVD: CVE-2020-12951 ift.tt/2YUDAJ0	2021-11-17 15:40:58
 @xanadulinux	CVE-2020-12951 ift.tt/2YUDAJ0	2021-11-17 15:53:12
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