



author Denis Arefev <arefev@swemel.ru> 2025-03-20 12:35:02 +0300
committer Greg Kroah-Hartman <gregkh@linuxfoundation.org> 2025-04-25 10:51:12 +0200
commit [fc9d55377353321e78f9e108d15f72a17e8c6ee2](#) (patch)
tree [f4f4077abe6f86f86139bdac709a370314781add](#)
parent [6cf295b299640fe504ca69445c184d584bdb010d](#) (diff)
download [linux-fc9d55377353321e78f9e108d15f72a17e8c6ee2.tar.gz](#)

diff options

context: 3 ▼
space: include ▼
mode: unified ▼

drm/amd/pm/smu11: Prevent division by zero

commit 7ba88b5cccc1a99c1afb96e31e7eedac9907704c upstream.

The user can set any speed value.
If speed is greater than UINT_MAX/8, division by zero is possible.

Found by Linux Verification Center (linuxtesting.org) with SVACE.

Fixes: [1e866f1fe528](#) ("drm/amd/pm: Prevent divide by zero")
Signed-off-by: Denis Arefev <arefev@swemel.ru>
Signed-off-by: Alex Deucher <alexander.deucher@amd.com>
(cherry picked from commit [da7dc714a8f8e1c9fc33c57cd63583779a3bef71](#))
Cc: stable@vger.kernel.org
Signed-off-by: Greg Kroah-Hartman <gregkh@linuxfoundation.org>

Diffstat

```
-rw-r--r-- drivers/gpu/drm/amd/pm/swsmu/smu11/smu_v11_0.c 2
```

1 files changed, 1 insertions, 1 deletions

```
diff --git a/drivers/gpu/drm/amd/pm/swsmu/smu11/smu_v11_0.c b/drivers/gpu/drm/amd/pm/swsmu/smu11/smu_v11_0.c
index 189c6a32b6bdb4..54229b991858c2 100644
--- a/drivers/gpu/drm/amd/pm/swsmu/smu11/smu_v11_0.c
+++ b/drivers/gpu/drm/amd/pm/swsmu/smu11/smu_v11_0.c
@@ -1200,7 +1200,7 @@ int smu_v11_0_set_fan_speed_rpm(struct smu_context *smu,
    uint32_t crystal_clock_freq = 2500;
    uint32_t tach_period;

-    if (speed == 0)
+    if (!speed || speed > UINT_MAX/8)
        return -EINVAL;

    /*
     * To prevent from possible overheat, some ASICs may have requirement
```