



author Denis Arefev <arefev@swemel.ru> 2025-03-20 12:35:02 +0300
committer Greg Kroah-Hartman <gregkh@linuxfoundation.org> 2025-04-25 10:43:57 +0200
commit de6f8e0534cfabc528c969d453150ca90b24fb01 (patch)
tree 3ab87cf0e199b2d0e6ef30f6f9de50a74d01d567
parent 836a189fb422e7efb81c51d5160e47ec7bc11500 (diff)
download [linux-de6f8e0534cfabc528c969d453150ca90b24fb01.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 2e061a74a0b7ee..6c10140b15ccca 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
@@ -1228,7 +1228,7 @@ 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
```