



index : kernel/git/stable/linux.git

master



switch

Linux kernel stable tree

Stable Group

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author Denis Arefev <arefev@swemel.ru> 2025-03-21 13:52:32 +0300
committer Alex Deucher <alexander.deucher@amd.com> 2025-03-26 17:41:23 -0400
commit 7d641c2b83275d3b0424127b2e0d2d0f7dd82aef (patch)
tree 25e01ef3cf1c5320d93932d7166ebf9944846cae
parent f23e9116ebb71b63fe9cec0dcac792aa9af30b0c (diff)
download linux-7d641c2b83275d3b0424127b2e0d2d0f7dd82aef.tar.gz

diff options

context: 3
space: include
mode: unified

drm/amd/pm: Prevent division by zero

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: b64625a303de ("drm/amd/pm: correct the address of Arcturus fan related registers")

Signed-off-by: Denis Arefev <arefev@swemel.ru>

Signed-off-by: Alex Deucher <alexander.deucher@amd.com>

Cc: stable@vger.kernel.org

Diffstat

-rw-r--r-- drivers/gpu/drm/amd/pm/swsmu/smu11/arcturus_ppt.c 3

1 files changed, 3 insertions, 0 deletions

diff --git a/drivers/gpu/drm/amd/pm/swsmu/smu11/arcturus_ppt.c b/drivers/gpu/drm/amd/pm/swsmu/smu11/arcturus_ppt.c

index 8aa61a9f77782b..453952cdc353b1 100644

--- a/drivers/gpu/drm/amd/pm/swsmu/smu11/arcturus_ppt.c

+++ b/drivers/gpu/drm/amd/pm/swsmu/smu11/arcturus_ppt.c

@@ -1267,6 +1267,9 @@ static int arcturus_set_fan_speed_rpm(struct smu_context *smu,
uint32_t crystal_clock_freq = 2500;
uint32_t tach_period;

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

tach_period = 60 * crystal_clock_freq * 10000 / (8 * speed);
WREG32_SOC15(THM, 0, mmCG_TACH_CTRL_ARCT,
REG_SET_FIELD(RREG32_SOC15(THM, 0, mmCG_TACH_CTRL_ARCT),