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 committer Greg Kroah-Hartman <gregkh@linuxfoundation.org> 2025-04-20 10:17:58 +0200
 commit a062d8de0be5525ec8c52f070acf7607ec8cbfe4 (patch)
 tree 22daa98a814ad85ab0b88a982640227c6015c61e
 parent eff1aa6d9c66ebe996b63fbd956242430893ebab (diff)
 download linux-a062d8de0be5525ec8c52f070acf7607ec8cbfe4.tar.gz

diff options

context:	<input type="text" value="3"/>
space:	<input type="text" value="include"/>
mode:	<input type="text" value="unified"/>

media: venus: hfi: add a check to handle OOB in sfr region

commit f4b211714bcc70effa60c34d9fa613d182e3ef1e upstream.

sfr->buf_size is in shared memory and can be modified by malicious user. OOB write is possible when the size is made higher than actual sfr data buffer. Cap the size to allocated size for such cases.

Cc: stable@vger.kernel.org

Fixes: d96d3f30c0f2 ("[media] media: venus: hfi: add Venus HFI files")

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Diffstat

```
-rw-r--r-- drivers/media/platform/qcom/venus/hfi_venus.c 12
```

1 files changed, 10 insertions, 2 deletions

diff --git a/drivers/media/platform/qcom/venus/hfi_venus.c b/drivers/media/platform/qcom/venus/hfi_venus.c
index f9437b6412b91c..cfd9471560cce8 100644

```
--- a/drivers/media/platform/qcom/venus/hfi_venus.c
+++ b/drivers/media/platform/qcom/venus/hfi_venus.c
@@ -1035,18 +1035,26 @@ static void venus_sfr_print(struct venus_hfi_device *hdev)
 {
     struct device *dev = hdev->core->dev;
     struct hfi_sfr *sfr = hdev->sfr.kva;
+    u32 size;
     void *p;

     if (!sfr)
         return;

-    p = memchr(sfr->data, '\0', sfr->buf_size);
+    size = sfr->buf_size;
+    if (!size)
+        return;
+
+    if (size > ALIGNED_SFR_SIZE)
+        size = ALIGNED_SFR_SIZE;
+
+    p = memchr(sfr->data, '\0', size);
     /*
      * SFR isn't guaranteed to be NULL terminated since SYS_ERROR indicates
      * that Venus is in the process of crashing.
      */
     if (!p)
-        sfr->data[sfr->buf_size - 1] = '\0';
+        sfr->data[size - 1] = '\0';
```

```
} dev_err_ratelimited(dev, "SFR message from FW: %s\n", sfr->data);
```