



APU2 MCE

dsrebnick · Sep 30th 2021



dsrebnick

[Beginner]

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I'm configuring an APU2 (2 GB RAM, 3 ports) with OpenWRT 20.02.0. I have updated to the latest mainline firmware and have had some stability issues. I have turned off core performance boost. After being up for a few hours, I received the following MCE message:

```
[52613.653011] mce: [Hardware Error]: Machine check events logged
[52613.653022] mce: [Hardware Error]: CPU 0: Machine Check: 0 Bank 1: 9400000000000151
[52613.660983] mce: [Hardware Error]: TSC 0 ADDR ffff810b4b60
[52613.666863] mce: [Hardware Error]: PROCESSOR 2:730f01 TIME 1632935990 SOCKET 0 APIC 0
microcode 7030105
```

I am running the system off of an mSATA drive. The system has passed a full memory test.

Does this mean I definitely have a system board issue or could it be some other problem? It threw this one error over the course of a day and the system did not crash.

Linux kernel 5.4.143



miczyg

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It is actually hard to tell. We have encountered such errors in other apu owners reports, typically it was a BSD system and the problem was Core Performance Boost. When it comes to Linux, such MCEs are rather rare, thus it is difficult to say what is the culprit.

The Erro code says it was an instruction fetch error on cache L1 level (exactly the same error as here: <https://github.com/pcengines/coreboot/issues/469> (<https://github.com/pcengines/coreboot/issues/469>)) so it may be related to the cache/CPU somehow, but no idea what could cause it.

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Oct 4th 2021

Thanks for the response Michał. Reading the coreboot issue, it seems to also represent what I'm experiencing. It would be nice to get to the bottom of it!