

[libre-riscv-dev] power pc

By *Roy Schestowitz*

Created *21/10/2019 - 2:13am*

Submitted by Roy Schestowitz on Monday 21st of October 2019 02:13:46 AM Filed under [GNU](#) [1] [Linux](#) [2]

[Hardware](#) [3] [OSS](#) [4]

So as you know, the RISCv Foundation is seriously impeding progress. There is huge momentum around RISCv itself, however as far as open *innovation* is concerned, the sheer arrogance of the Foundation in failing to respect the combination of Libre goals and business objectives has us completely isolated from key critical resources such as the closed secret lists and wiki.

We cannot even get access to documentation explaining how to propose new extensions.

I have been considering for some time to reach out to MIPS and PowerPC.

Yesterday I wrote to the OpenPower Foundation and was really surprised and delighted to hear back from Hugh Blemings, whom I worked with over 20 years ago.

I outlined some conditions (no NDAs, open mailing lists, use of Certification Marks and Compliance Suites) and he replied back that this was pretty much along the lines of what they were planning.

I will have a chat with him some time, in the meantime I found the spec: https://openpowerfoundation.org/?resource_lib=power-isa-version-3-0

It is eennoormous, however Hugh reassures me that they want to break it into sections.

Why would we even consider this?

The lesson from RISC-V is really clear: if the ISA is set up as a cartel, Libre innovation is not welcome.

If we had a goal to just *implement* a *pre existing* Extension, there would be no problem.

It is the fact that we wish to implement entirely new extensions, for CPU and GPU *and* VPU purposes, but not as a separate processor (which would be classified as "custom") that is the "problem".

So starting at page 1146, we need to work out how to shoe horn a ton of stuff into the ISA, as well as fit 16 bit compressed in as well.

L.

[5]

Also: [Libre RISC-V Open-Source Effort Now Looking At POWER Instead Of RISC-V](#) [6]

[GNU Linux Hardware OSS](#)

Source URL: <http://www.tuxmachines.org/node/129523>

Links:

[1] <http://www.tuxmachines.org/taxonomy/term/144>

[2] <http://www.tuxmachines.org/taxonomy/term/63>

[3] <http://www.tuxmachines.org/taxonomy/term/39>

[4] <http://www.tuxmachines.org/taxonomy/term/72>

[5] <http://lists.libre-riscv.org/pipermail/libre-riscv-dev/2019-October/003035.html>

[6] https://www.phoronix.com/scan.php?page=news_item&px=Libre-RISC-V-Eyeing-POWER