

## DPRG RBNV Chat Record – April 30, 2024

Jim F - CalgaryAB

7:32 PM

Hello from Calgary.

Jim F - CalgaryAB

7:34 PM

Does Ray have a ceiling fan? Video is flickering. May cause seizures.

Carl Ott

7:39 PM

Paul - I've got the recording laptop ready - I can do it if you want.

Jim F - CalgaryAB

7:40 PM

Would be interesting to see it done on KiCad. That's popular design software.

Mickey Dean

7:48 PM

I feel the OPPOSITE with humanoid robots, I do not like them trying to appear human.

I prefer a more cyborg humanoid.

Paul Bouchier

7:51 PM

GOLD star for Karim - Pioneer robot moved under teleoperation

Jim F - CalgaryAB

7:51 PM

Congrats @Karim ! 🌟

Carl Ott

7:58 PM

Ted - thanks for the shout out to standards change - I don't recall ever hearing that before. Here's a link that describes the fudge factors adjusted in 1958 / 1959 [https://www.nist.gov/pml/owm/si-units-](https://www.nist.gov/pml/owm/si-units-length#:~:text=The%20new%20conversion%20factors%20were,exactly%20equivalent%20to%2025.4%20mm)

[length#:~:text=The%20new%20conversion%20factors%20were,exactly%20equivalent%20to%2025.4%20mm](https://www.nist.gov/pml/owm/si-units-length#:~:text=The%20new%20conversion%20factors%20were,exactly%20equivalent%20to%2025.4%20mm).

and this looks like the official doc -

<https://www.nist.gov/system/files/documents/2017/05/09/frn-59-5442-1959.pdf>

Ted Meyers

8:01 PM

Carl - you might also be interested to know that aluminum cans are different in Hawaii:

[https://vinepair.com/articles/hawaiian-beer-](https://vinepair.com/articles/hawaiian-beer-can/#:~:text=The%20design%20calls%20for%20more,prevents%20cans%20from%20easily%20rupturing)

[can/#:~:text=The%20design%20calls%20for%20more,prevents%20cans%20from%20easily%20rupturing](https://vinepair.com/articles/hawaiian-beer-can/#:~:text=The%20design%20calls%20for%20more,prevents%20cans%20from%20easily%20rupturing).

Jim F - CalgaryAB

8:01 PM

Doug P. Is doing Teleportation effects with his background.

Mickey Dean

8:02 PM

but also, a couple levels cheaper

Chris N

8:07 PM

link to website that I use for CPU benchmarks:

[https://www.cpubenchmark.net/cpu\\_lookup.php?cpu=BCM2835&id=4671](https://www.cpubenchmark.net/cpu_lookup.php?cpu=BCM2835&id=4671)

Chris N

8:08 PM

unfortunately, that site doesn't have data for all the various BCM2xxx SoC's used in the different Pis

<https://www.cpubenchmark.net/cpu.php?cpu=Intel+N100&id=5157>

Mickey Dean

8:09 PM

i wonder about which is easier to integrate with other micros

Carl Ott

8:10 PM

Ted - thanks that's pretty cool. I always get a kick about places deciding to 'be different'. At least nobody has decided to redefine the units of time / hours and minutes. OH WAIT - NASA has been tasked to define a time zone specific for the moon.

<https://www.npr.org/2024/04/09/1243405460/space-news-moon-nasa-time-zone-white-house>

But at least there seems to be a reasonable reason for that...

Due to the moon's lower gravity and its motion relative to Earth, moon time passes 56 microseconds faster each earth day. As a result, an atomic clock on Earth would run at a different rate than an atomic clock on the moon.

Mickey Dean

8:10 PM

my guess is the Pi is easier to integrate.

Mike Williamson

8:11 PM

Carl, that is a lot of time diff!!

Carl Ott

8:12 PM

Mike - yeah - just when you think you can rely on an atomic clock... everything gets relative....

Paul Bouchier

8:15 PM

David A reported what Brady explained last Saturday: JCLPCB ships 5 boards for \$2. David said the SW is so easy to use.

Ted Meyers

8:15 PM

I missed it, can someone post a link to the board maker company.

got it: <https://jlcpcb.com/>

Paul Bouchier

8:18 PM

Brady said you can get 4 layers 50mm x 50mm for the same price.

It supports copper flow.

Ted Meyers

8:19 PM

<https://easyeda.com/>

Paul Bouchier

8:25 PM

Doug is making a new video using audio from the meeting and Brady's slides.

Paul Bouchier

8:31 PM

David A has made his own PCB footprints & schematic symbols using EasyEDA

Paul Bouchier

8:35 PM

Carl talked about a job opportunity - shipping 50 or so devices at a time, & helping ppl set it up. Starting in 3 weeks & lasts about a year. Simple tech.

Paul Bouchier

8:44 PM

David A has been using Thonny over Wi-Fi. Suggest using PLA for the case for temp. Doug P suggests.

Doug P.

8:45 PM

ABS for final case

Paul Bouchier

8:46 PM

Harold suggests Zac Friedman on 3D materials & prints

Paul Bouchier

8:46 PM

Harold suggests Zac Friedman on 3D materials & prints

Paul Bouchier

8:48 PM

Mike W has modified Jon's URC code to operate his robot's claws, and to report back battery value.

Paul Bouchier

8:52 PM

Mike was modifying Jon's code by making a new module & his own main().

Paul Bouchier

8:55 PM

There's some questions as to reliability of communication with URC.

Paul Bouchier

8:57 PM

Doug announced a return to the Ron Grant style of Roborama prize - the laser-cut Robie.

Ponder SomeMore

9:04 PM

<https://www.dprg.org/renew-your-membership/>

Paul Bouchier

9:11 PM

Mike W reported that dragging a can around did not disturb his robot's odometry enough to matter.

Paul Bouchier

9:13 PM

Discussion of having an outdoor picnic in September for DPRG 40th birthday celebration.