Speed Test

When running GNU radio and trying to use it as radio to communicate you may be pressed to find your best option on a computer to use. This information is intended to help you understand the difference in performance of a few available platforms.

I installed a package called sysbench on several computers. This package is an attempt at bench testing computers to see how fast they can complete a task. The version I used, sysbench -version:

sysbench 1.0.11 (using system LuaJIT 2.1.0-beta3)

The command line entry for the program I used was:

sysbench --test=cpu --num-threads=4 --cpu-max-prime=9999 run

In this case sysbench would execute with the following flags set:

--test=cpu Test the CPU in the computer

--num=threads=4 Run four different calculations at one time.

--cpu-max-prime=9999 Calculate the number of prim numbers found in 9999

run Execute the request and time the results

There are many other options available, and some things are set at default. This command with the options selected gives us some useful information.

The test results in Table 1 show us the time it takes each computer to complete the calculations.

Raspberry Pi	Model B+ V1.2	388	Seconds
Raspberry Pi	Rpi Zero W	42	Seconds
Raspberry Pi	Pi 4	29	Seconds
NVDIA	Jetson 2	10	Seconds
Intel	17	10	Seconds

Table 1

I was surprised to see the Jetson 2 and the Intel I7 performed with the same results.