Test	Sequential time in ms	Threaded (wait for all) time in ms	Threaded (continuously check) in ms	Threaded (semaphore) in ms
Arch 1	54	39	0	0
Arch 2	82	37	0	0
Arch 3	97	38	0	4
Arch 4	110	50	0	0
Arch 5	111	40	0	0
Arch 6	111	40	0	8
Redhat 1	60	61	0	0
Redhat 2	91	32	0	0
Redhat 3	105	31	0	13
Redhat 4	120	61	0	0
Redhat 5	120	32	0	0
Redhat 6	120	31	0	15

System info:

Arch:

1 socket; 2 core/socket; 2 thread/core; 4 cpu

Redhat:

2 socket; 2 core/socket; 1 thread/core; 4 cpu

Looking at the hardware specs of the systems that I ran the tests on, they both end up with 4 threads. However the data in the table reflects a big difference in calculation speed between the Arch and Redhat systems. It may be that the Arch machine is using an i7-4510U while the Redhat machine is using a Xeon E5-2640, but if that were the case, the Redhat machine should have been faster. It could also be that the Redhat machine is being shared with hundreds of other people, while the Arch machine only is used by one person, so the tasks on the Redhat machine were not able to be executed using the full capacity of its cpus. It also may be from the fact that the Arch machine has 2 threads per core while the Redhat machine has 1 thread per core. The Arch machine is hyper threaded so it can store the state of two threads on work on them both while the Redhat machine has to take more time context switching, which hurts performance speed.