

Test system i7-8750H 6 core one worker PRP3 in prime95 V29.4b8 x64 on Win7 (mfakto on UHD630 igp halted)

[Mar	14	10:37:51 AM	M83921941	interim	Wg4	residue	BFC29059CAAD23A4	at	iteration	47039140
[Mar	14	10:37:54]	M83921941	interim	Wg4	residue	958B3584A2193893	at	iteration	47039150
[Mar	14	10:37:57]	M83921941	interim	Wg4	residue	F6BA1B8DACEBE1B1	at	iteration	47039160
[Mar	14	10:37:59]	M83921941	interim	Wg4	residue	33DE1BDD6C236F12	at	iteration	47039170
[Mar	14	10:38:02]	M83921941	interim	Wg4	residue	67CAC56DB888E7BF	at	iteration	47039180
[Mar	14	10:38:05]	M83921941	interim	Wg4	residue	BDA2525B133CAE5B	at	iteration	47039190
[Mar	14	10:38:08]	M83921941	interim	Wg4	residue	B097540E478DEDF5	at	iteration	47039200
[Mar	14	10:38:11]	M83921941	interim	Wg4	residue	A4DFB4048920F477	at	iteration	47039210
[Mar	14	10:38:13]	M83921941	interim	Wg4	residue	A51318D2480C80D5	at	iteration	47039220
[Mar	14	10:38:16]	M83921941	interim	Wg4	residue	52CD0ABBDC2F19C7	at	iteration	47039230
[Mar	14	10:38:19]	M83921941	interim	Wg4	residue	ECE5B13A60F32800	at	iteration	47039240
[Mar	14	10:38:22]	M83921941	interim	Wg4	residue	D6EA98D0F08B85F7	at	iteration	47039250
[Mar	14	10:38:25]	M83921941	interim	Wg4	residue	90654AB3914C5642	at	iteration	47039260
[Mar	14	10:38:27]	M83921941	interim	Wg4	residue	4A27DA76D06CB10F	at	iteration	47039270
[Mar	14	10:38:30]	M83921941	interim	Wg4	residue	A51E06732158F50E	at	iteration	47039280
[Mar	14	10:38:33]	M83921941	interim	Wg4	residue	4936BCE471254BF1	at	iteration	47039290
[Mar	14	10:38:36]	M83921941	interim	Wg4	residue	FC6EF1EEF3EF79DB	at	iteration	47039300
[Mar	14	10:38:39 AM	M83921941	interim	Wg4	residue	CE41D6DF891D4265	at	iteration	47039310

00:00:48

number of PRP iterations 170  
number of res64 outputs 17

$$r = \frac{48 - 170}{17} = -8.8235$$

[Mar	14	10:38:59 AM	Iteration:	47040000 /	83921941 [56.05%]	ms/iter:	10.405 ETA:	4d	10:36
[Mar	14	10:39:09]	Iteration:	47041000 /	83921941 [56.05%]	ms/iter:	10.236 ETA:	4d	08:51
[Mar	14	10:39:20]	Iteration:	47042000 /	83921941 [56.05%]	ms/iter:	10.2 ETA:	4d	08:29
[Mar	14	10:39:30]	Iteration:	47043000 /	83921941 [56.05%]	ms/iter:	10.361 ETA:	4d	10:08
[Mar	14	10:39:40]	Iteration:	47044000 /	83921941 [56.05%]	ms/iter:	10.526 ETA:	4d	11:49
[Mar	14	10:39:51]	Iteration:	47045000 /	83921941 [56.05%]	ms/iter:	10.32 ETA:	4d	09:42
[Mar	14	10:40:01]	Iteration:	47046000 /	83921941 [56.05%]	ms/iter:	10.409 ETA:	4d	10:37
[Mar	14	10:40:12]	Iteration:	47047000 /	83921941 [56.06%]	ms/iter:	10.396 ETA:	4d	10:29
[Mar	14	10:40:22]	Iteration:	47048000 /	83921941 [56.06%]	ms/iter:	10.387 ETA:	4d	10:23
[Mar	14	10:40:32]	Iteration:	47049000 /	83921941 [56.06%]	ms/iter:	10.336 ETA:	4d	09:52
[Mar	14	10:40:43]	Iteration:	47050000 /	83921941 [56.06%]	ms/iter:	10.343 ETA:	4d	09:56
[Mar	14	10:40:53 AM	Iteration:	47051000 /	83921941 [56.06%]	ms/iter:	10.264 ETA:	4d	09:07

seconds 00:01:54 11000 average time/iteration 10.34858 msec/iter  
114 10.375631 msec/iter ratio between timings 1.00261  
expected err +/- .5 sec 0.00438

r= 2.720043578 Seconds =~ 262.8 iterations

Interim residue output at 1/10 iterations appears to be a single-core activity and drastically reduces cpu utilization on this hyperthreaded system, from 50+% to ~10%.

No interim residue outputs	96.63158403	100.00%
One per 10 iterations	3.541666667	3.67%

Est. impact of interim residues at 5E6 its ~ 45.7 seconds/84M test