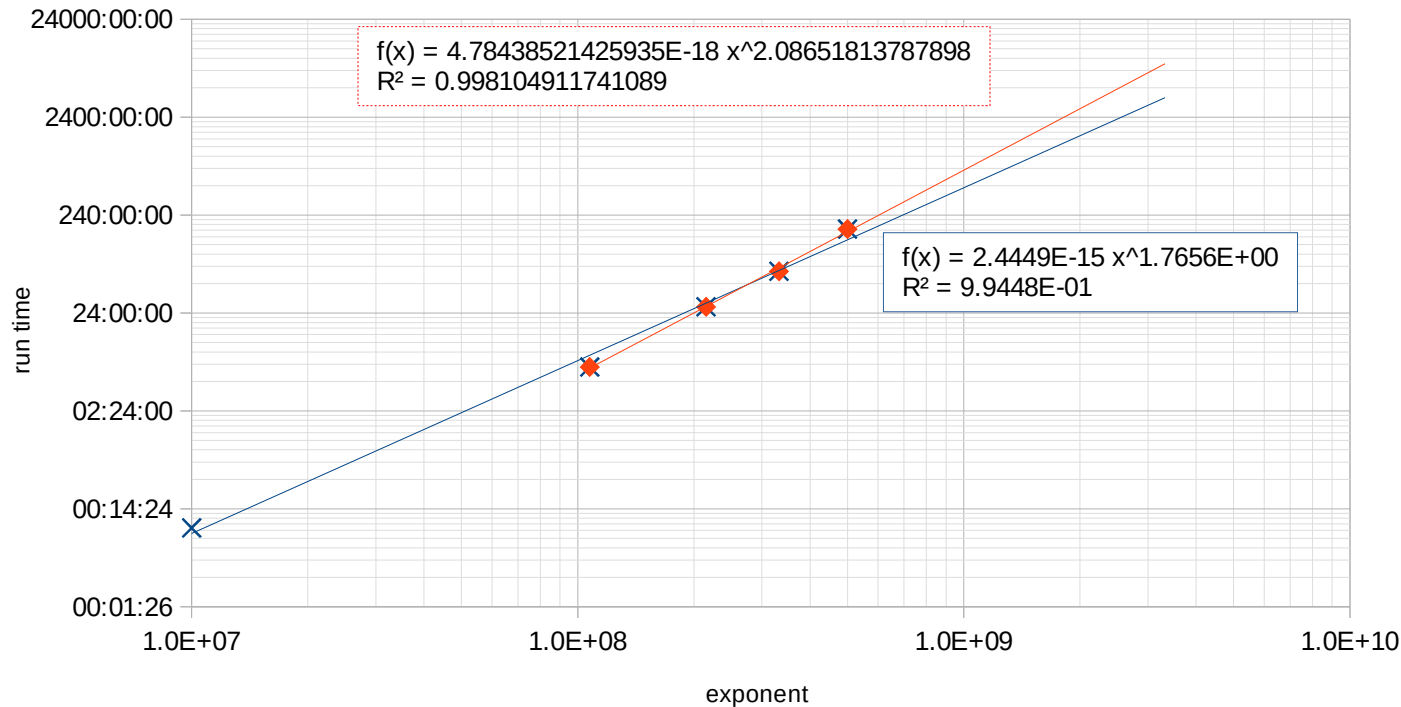


Mlucas V20.1.1 P-1 run time scaling Test system roa dual 12-core&HT Xeon e5-2697v2, 128 GiB ram, Win10 pro x64, WSL1, Ubuntu 18.04.2 LTS  
 Windows remote desktop also running on the system during scaling measurements. (No prime95, Mfactor, web browser, etc.)

Exponent	B1	B2	Stage 1 time	gcd1 time	buffer init	Stage 2 time	gcd2 time	total time	s2/s1	notes	factor if found
10000831	65000	1500000	00:03:58.83	00:00:02.94	00:02:31.35	00:02:34.14	00:00:02.72	00:09:09.99	0.649	1	646560662529991467527
107399021	700000	24000000	03:17:32.69	00:00:51.64	00:01:50.24	03:22:16.57	00:00:55.65	06:43:26.78	1.024	1	none
215000101	1300000	50000000	12:05:26.73	00:01:39.30	00:01:39.30	15:32:59.54	00:01:51.84	27:43:36.71	1.286	1, 2	none
332218753	1900000	80000000	25:41:58.98	00:03:09.53	00:01:48.91	38:05:31.95	00:02:53.32	63:55:22.69	1.481	1	none
500000729	3000000	130000000	63:59:51.06	00:04:59.49	00:01:41.05	108:29:06.23	00:05:00.90	172:40:38.74	1.694	1	none
3321928171	17000000	1000000000								3	

1 run with -cpu 0:19 (20 cores) -maxalloc 25      2 mlucas using 24.5GB ram in stage 2, so not constrained by -maxalloc 25  
 3 virtual size 8.7GB in stage 1, 6.1GB resident

Mlucas 20.1.1 P-1 run time scaling on WSL1 20 cores of dual e5-2697v2



Extrapolate to gigadigit

$T = a p^b$

a 2.4449E-15

b 1.7656

p 3321928171

T **158.2**  
(days)

$T = a p^b$

a 4.7844E-18

b 2.086518

p 3321928171

T **351.9**  
(days)

Above extrapolations =

**0.43**

**0.96**

years

One year =

365 days

8760 hours

3.65 times 2400 hours

Usage in above was 20 mlucas threads, across 24 cores / 48 hyperthread capable hardware;

Initial timing of 1Gdigit S1 is 9.41 hours for 0.33%; 9hr 41 min = 9.68 hours / 0.0033 \* (1 + 1.7) / 24 / 365 = **0.904** years s1&s2

GCDs at stage ends are at 500M **0.0966%** of total yielding **0.905** years with other loading described above. (**~10.86 months**)

Additional performance past that could probably be obtained by a Linux native boot.

0.335 stage1 estimated time years

Update to Mlucas past V20.1.1 (when available) might also help.

Higher or unrestricted -maxalloc would speed stage 2

Stage 2 can also be split to multiple systems in parallel to accelerate completion