

Status of OBD exponents relevant to TF & P-1 push toward level 28 (currently 33 candidates, to accommodate a few factors found yet run enough for reaching level 30 some day/decade)

Exponent p	p mod 10 ⁴	TF done to	reserved to	P-1 done to	reserved by	ETA	running on	Notes
3321928171	8171	92	P-1 both	Stage 2 5%	johnny_jack	S2 2023-12-31	dual E5-2630Lv2/256GB	Reservation for completion by 2024-07-24
3321928307	8307	92	P-1 both	Stage 2 14%	kriesel	S2 2024-05-17	dual e5-2690/64GB	Reservation for completion by 2024-02-24; Ubuntu/WSL1/Win10 now; may run S2 tandem or relocate later
3321928319	8319	92	P-1 both	Stage 2 17%	kriesel	S2 2023-11-24	dual e5-2697v2/128GB	Reservation for completion by ~2024-03-25; Ubuntu/WSL1Win10 now
3321928373	8373	92	P-1 both	unstarted	kriesel	?	Xeon Phi 7210/192GB?	Reservation for completion by 2025-03-02 on future Linux install
3321928381	8381	90						
3321928417	8417	90						
3321928483	8483	90						
3321928697	8697	90						
3321928699	8699	90						
3321928777	8777	90						
3321928927	8927	90						
3321928963	8963	90						
3321929041	9041	90						
3321929053	9053	90						
3321929059	9059	90						
3321929113	9113	90						
3321929173	9173	90						
3321929179	9179	90						
3321929197	9197	90						
3321929209	9209	90						
3321929411	9411	90						
3321929519	9519	90						
3321929563	9563	90						
3321929573	9573	90						
3321929617	9617	90						
3321929621	9621	90						
3321929701	9701	90						
3321929789	9789	90						
3321929909	9909	90						
3321929927	9927	90						
3321929929	9929	90						
3321929971	9971	90						
3321929987	9987	90						

The slower GPUs should not be used on TF assignments above 89 bits, since the run times will be longer than a year: Quadro 2000, Quadro 4000, Quadro K4000
 Tesla K80 on Colab free typically gets only 1 class completed per 3-4 hour session at 90 bits in the more-classes version of mfaktc & require 960 sessions. Tesla T4 is ~4x faster so may go to 92 bits.
 The required 960 classes / Colab free GPU sessions may require up to several thousand session attempts over ~3 years calendar duration. Scale maximum bit level for Colab free downward accordingly.
 To keep Google Colab Free calendar durations < 1 year / exponent / bit level, Tesla K80 88 bit max, Tesla T4 90 bit max.
 A GTX1650 or faster can complete 91 to 92 bits within ~251. days, running nonstop 24/7; from 88 to 89 in ~31 days.

See also <https://www.mersenne.ca/obd>

Fully qualified OBD P-1 systems

node	username	reference	hardware	Notes
roa	kriesel	https://mersenneforum.org/showpost.php?p=594155&postcount=16	2x e5-2697v2, 128 GiB ECC ram	Single instance run time scaling indicates OBD stage 1 and 2 solo completion under 1 year combined on Ubuntu/WSL/Win10

Conditionally qualified OBD P-1 systems

node	username	reference	hardware	Notes
ostrich	kriesel	https://mersenneforum.org/showpost.php?p=599270&postcount=18	2x e5-2690, 64 GiB ECC ram	Single instance run time scaling indicates OBD stage 1 and 2 solo completion under 1.7 years combined on Ubuntu/WSL/Win10, dual instance ~1/year throughput projected; pair with an equally fast system for stage 2 or further optimize for <1 year
raven	kriesel	https://mersenneforum.org/showpost.php?p=599271&postcount=19	i5-7600T, 64 GiB nonECC ram	Single instance run time scaling indicates OBD stage 1 only < 10 months; stage 1 and 2 solo completion in 1.5-2 years combined on CentOS 7.9; pair with an equally fast or faster system for stage 2 for <1.4 year overall time. Note lack of ECC ram is a reliability risk.