

## fgrape 1.0.0 GPU Benchmarks

	CPU time (Macbook Air M1 2020)	GPU time (Quadro RTX 6000)	Batch size	Dissipation
Example_A	0:09	0:24	10	No
Example_A_cat_state	5:38	7:23	10	No
Example_B	12:07	6:24	10	No
Example_C	16:46	8:55	10	No
Example_D*	1:04 (0:52, 609 iters)	1:52 (11:51, 644 iters)	1	No (Yes)
Example_D**	2:27 (0:44)	2:36 (4:48)	10	No (Yes)
Example_E	15:01	12:45	16	Yes
Example_E**	2:36	14:36	1	Yes

\*Example\_D is separated into the optimize\_pulse call without and with dissipation.

\*\*This example was run again on different batch size to see how that impacts runtime.

In all examples it was checked, that the numerical output is identical between different machines and identical to the values in the repo. In all examples, the number of iterations is independent of the machine, except for one of the runs of example\_D.