

RTX 3090  
PCIe 4<sup>th</sup> Gen x16lane

NAND constants		Size of Matrix	Sparsity	Basic CUDA	Complete CUDA	StoRM	Speed-up factor
N	K		%	uS	uS	uS	$\frac{StoRM}{Complete}$
20	1	78332 x 78332	99.99802	383.0	275.7	1352.3	4.9
20	2	154942 x 154942	99.999001	571.3	331.7	3274.0	9.9
20	3	231552 x 231552	99.99933	751.3	391.7	3424.3	8.7
20	4	308162 x 308162	99.9995	923.3	457.3	7204.7	15.8
40	1	1004862 x 1004862	99.99984	2260.3	1131.0	17149.3	15.2
40	2	2003082 x 2003082	99.99992	3957.7	1945.3	34162.3	17.6
40	3	3001302 x 3001302	99.99995	5579.7	2637.7	50461.7	19.1
40	4	3999522 x 3999522	99.99996	7054.0	3530.7	67648.7	19.2
60	1	4717592 x 4717592	99.99997	8292.7	4065.7	80398.0	19.8
60	2	9420422 x 9420422	99.999983	27721.0	7434.7	160595.0	21.6
60	3	14123252 x 14123252	99.999989	34884.3	10809.0	239025.0	22.1
60	4	18826082 x 18826082	99.999992	43033.7	14203.7	321569.7	22.6

Model Name	Matrix Size	Sparsity	Basic CUDA	Complete CUDA	StoRM CPU	Speed-up factor
		%	uS	uS	uS	$\frac{StoRM}{Complete}$
Herman3	8 x 8	56.25	203.00	196.00	6.00	0.03
Herman5	32 x 32	76.17	208.00	196.67	12.00	0.06
Herman7	128 x 128	86.64	216.33	196.33	28.00	0.14
Herman9	512 x 512	92.5	199.67	197.67	144.00	0.73
Herman11	2048 x 2048	95.8	220.67	217.00	1564.33	7.21
Herman13	8192 x 8192	97.62	1366.33	369.33	13844.33	37.48
Herman15	32768 x 32768	98.66	8019.33	1307.33	104995.00	80.31