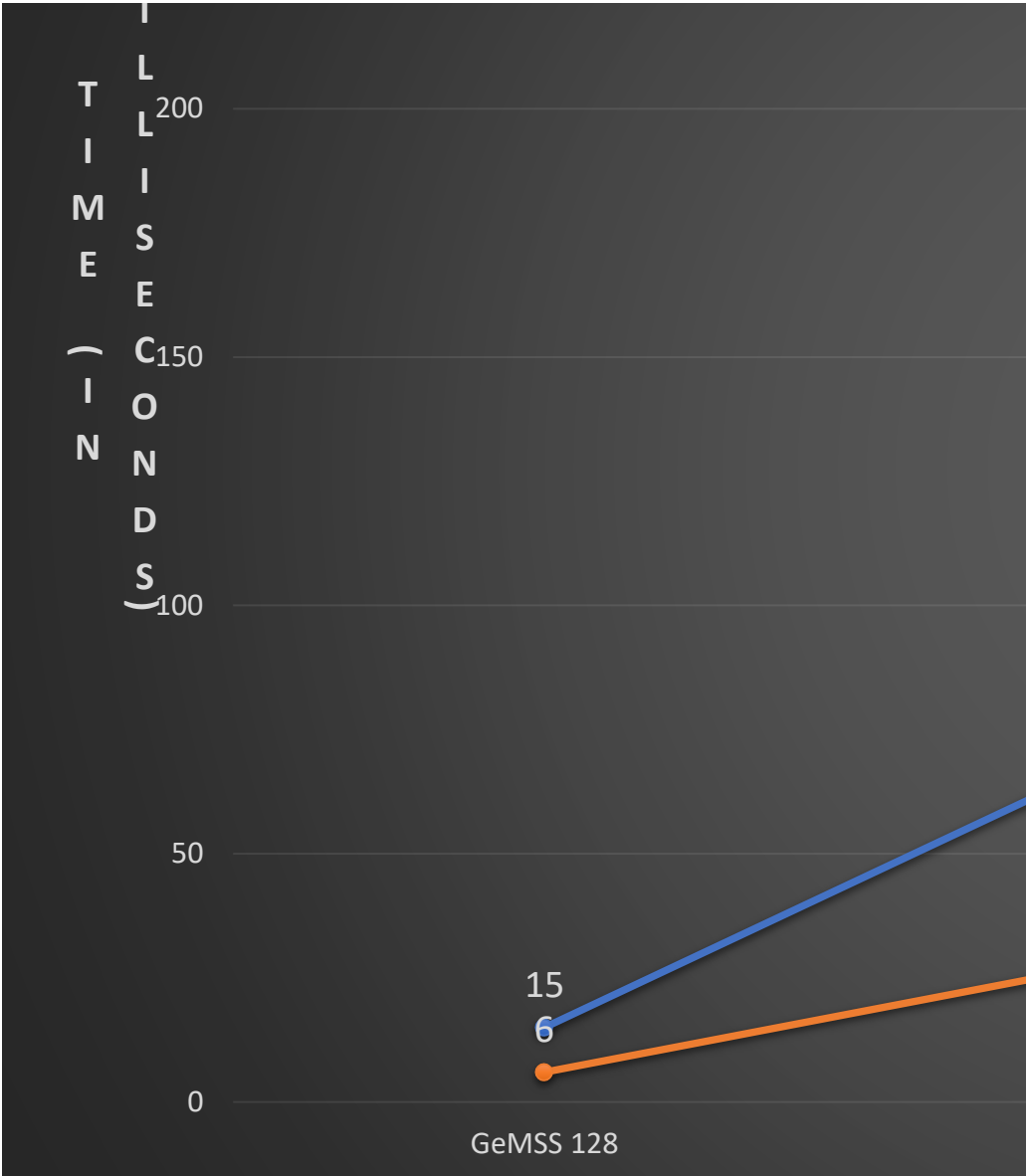


Yoann : Temps par algo	Hyperledger	GeMSS 128
GenKeySingle	1958	15
GenKeyParallel	1013	6
GenSignSingle	44	233
GenSignParallel	impossible en multi-thread	96
VerSignSingle	89	47
VerSignParallel	50	22
	ns	ms
	ns	ms
	ms	ms
		ms
	ms	µs
	ms	µs
	GeMSS 128	GeMSS 192
	15	74
	6	30
	233	678
	96	270
	47	212
	22	131

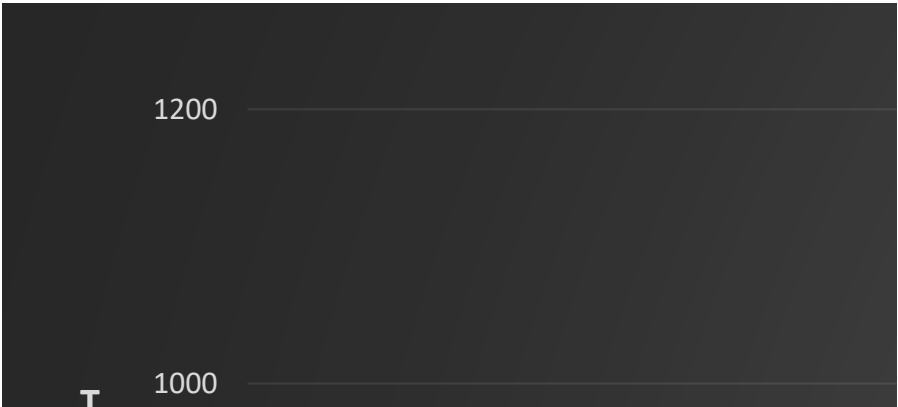
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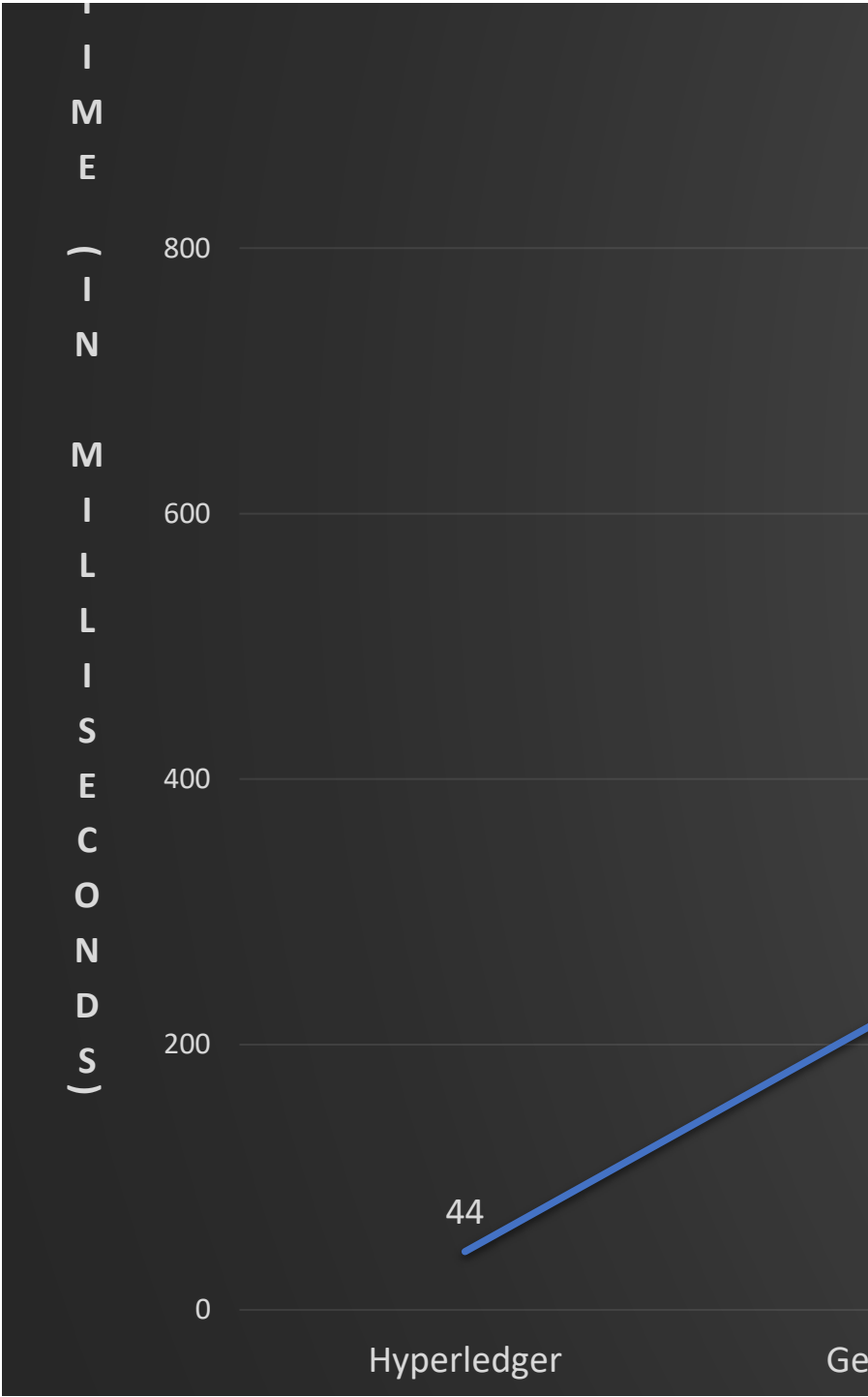
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Key Generation



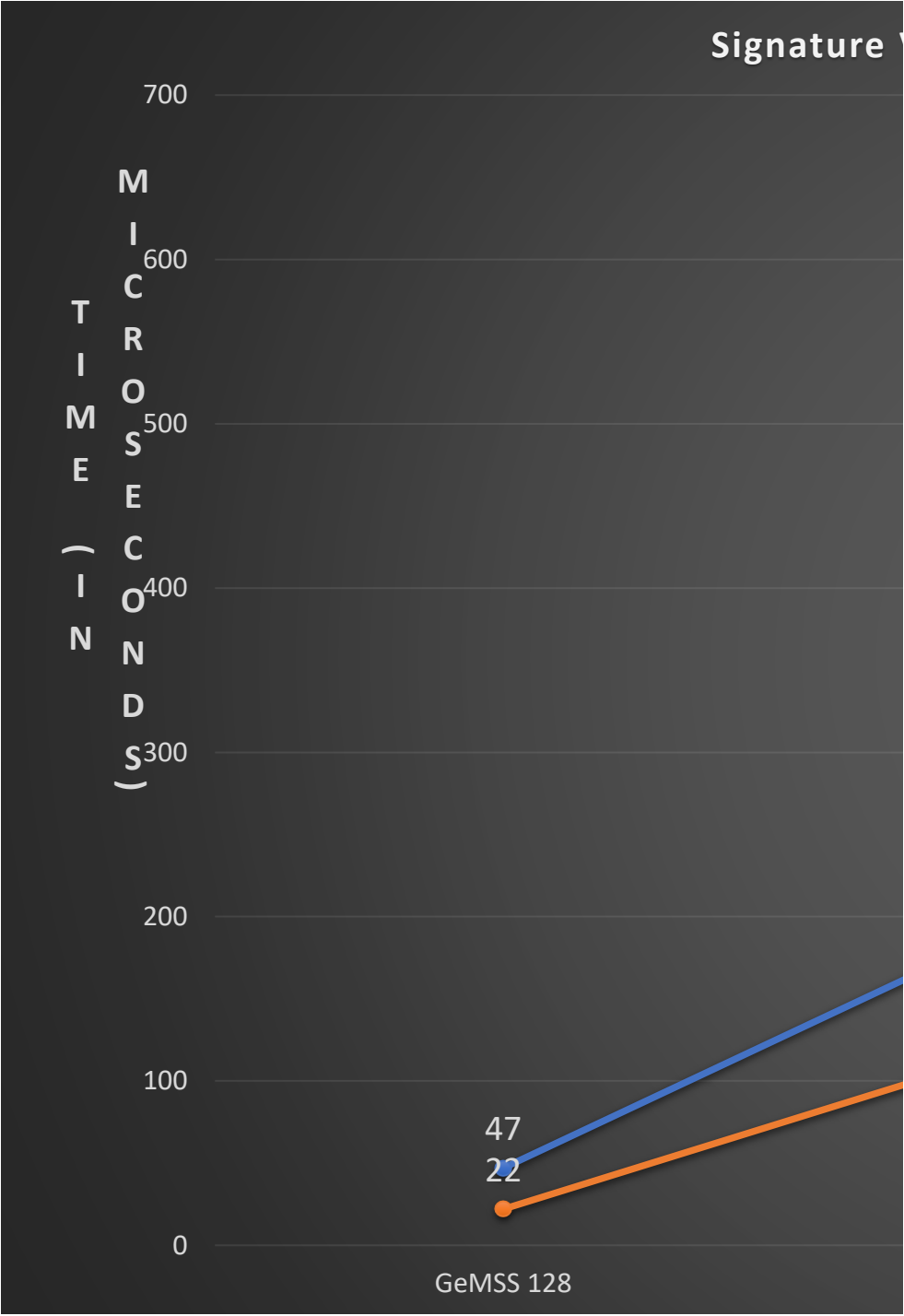
Hyperledger	GeMSS 128
1958	15
1013	6
44	233
	96





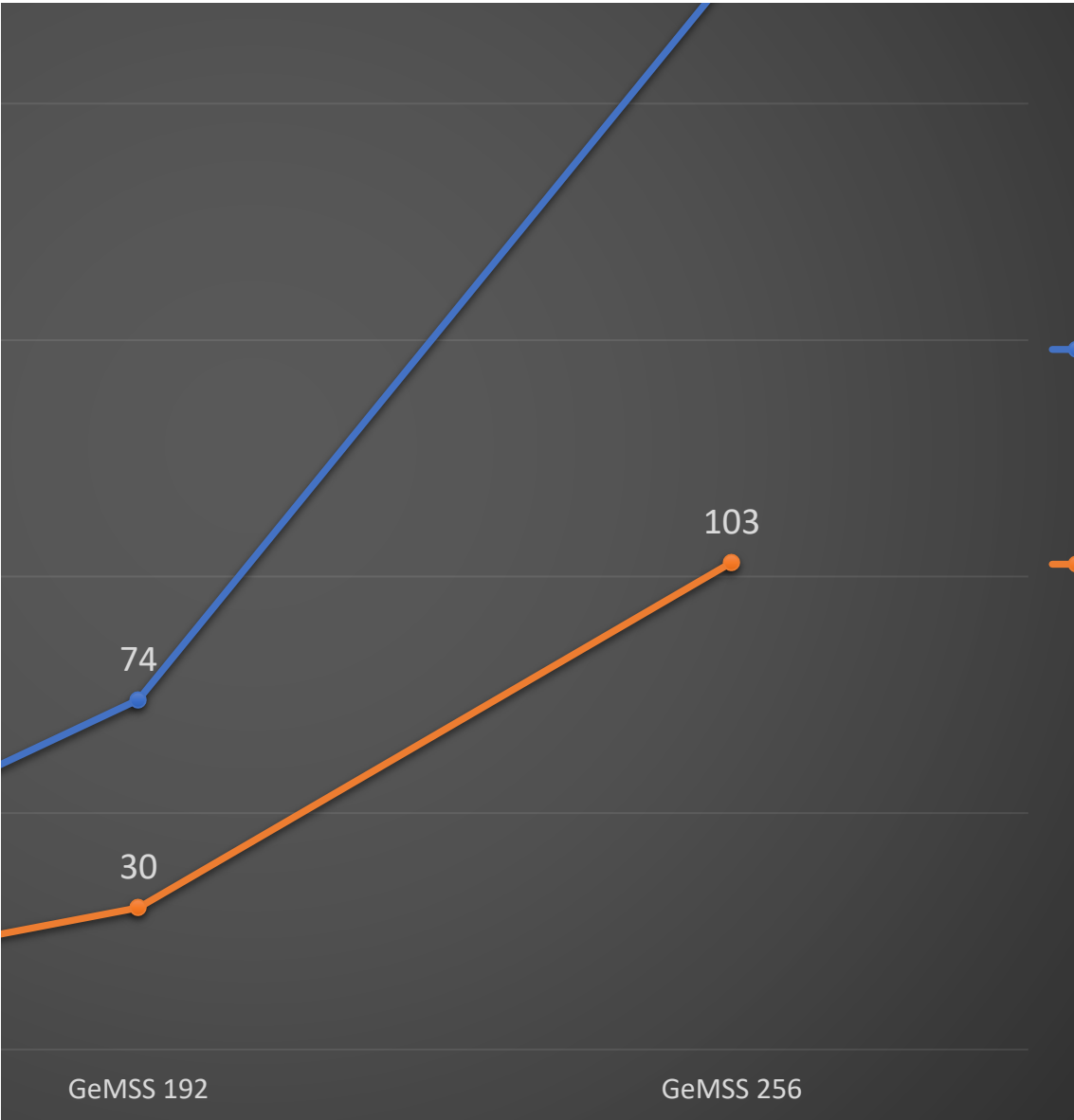
GeMSS 128
15
6
233

96
47
22

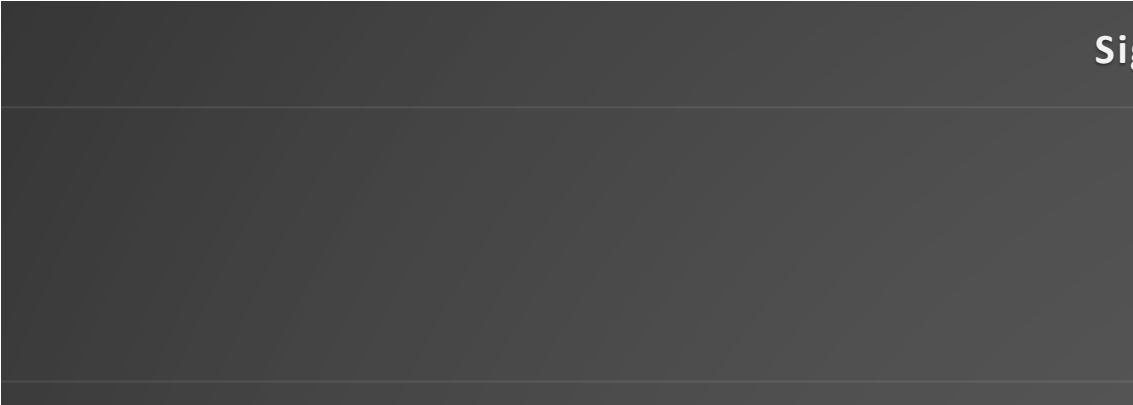


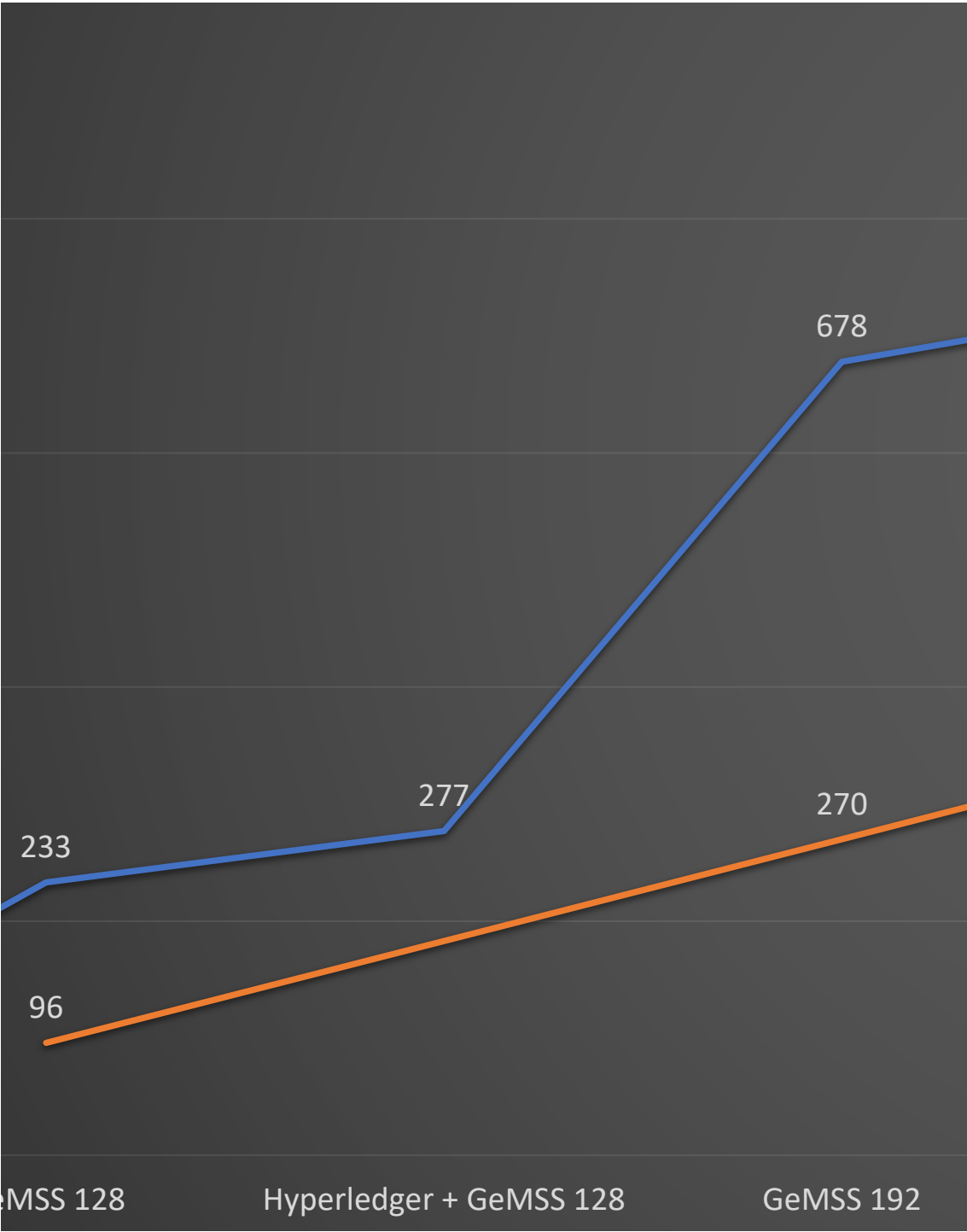
Hyperledger + GeMSS 128	GeMSS 192	Hyperledger + GeMSS 192
1602	74	1971
1013	30	1020
277	678	737
impossible en multi-thread	270	impossible en multi-thread
74	212	100
62	131	58
ns	ms	ns
ns	ms	ns
ms	ms	ms
	ms	
ms	μs	ms
ms	μs	ms
GeMSS 256		
228		
103		
1141		
445		
648		
442		

ration Time for each GeMSS version



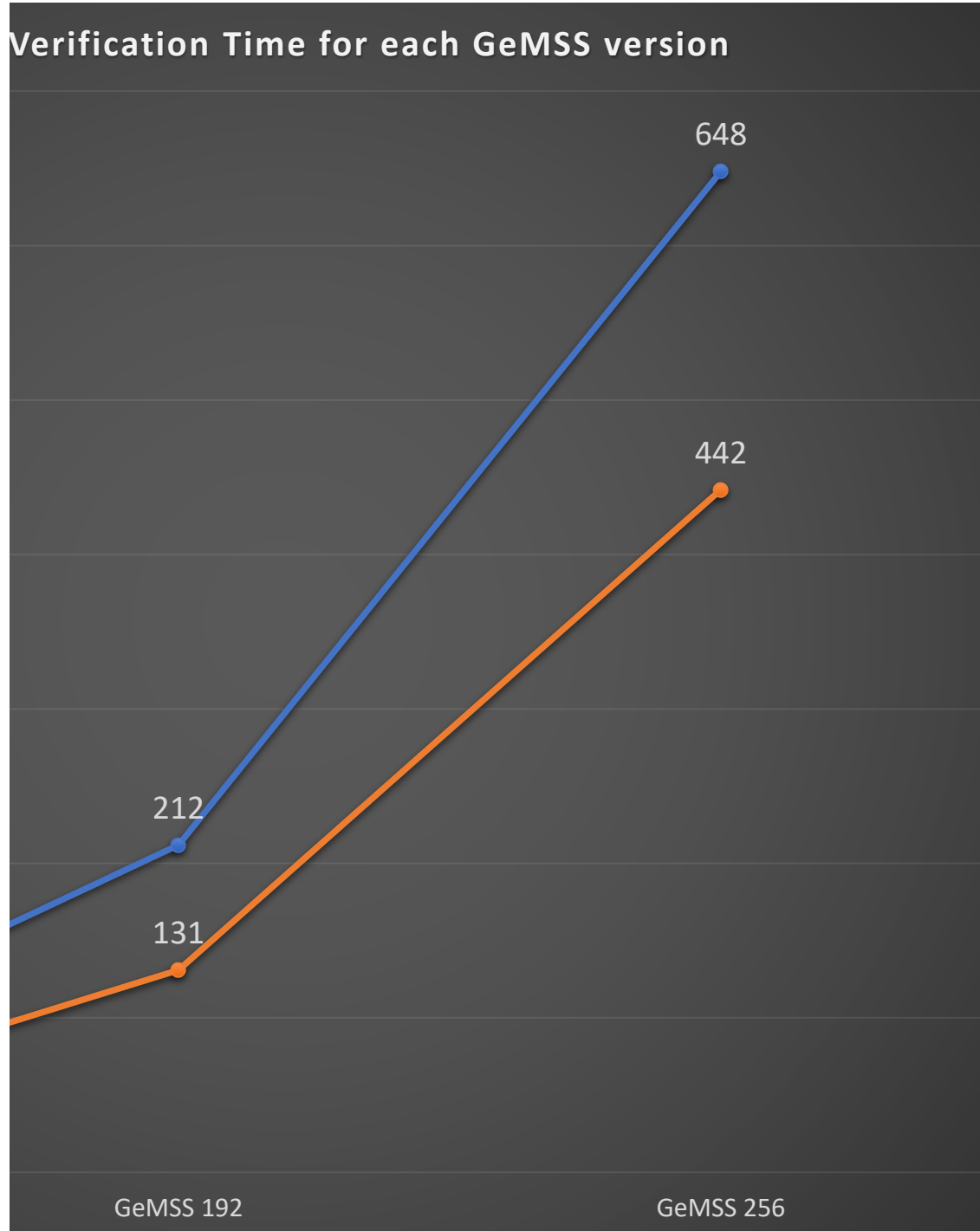
Hyperledger + GeMSS 128	GeMSS 192	Hyperledger + GeMSS 192
1602	74	1971
1013	30	1020
277	678	737
	270	





GeMSS 192	GeMSS 256
74	228
30	103
678	1141

270	445
212	648
131	442



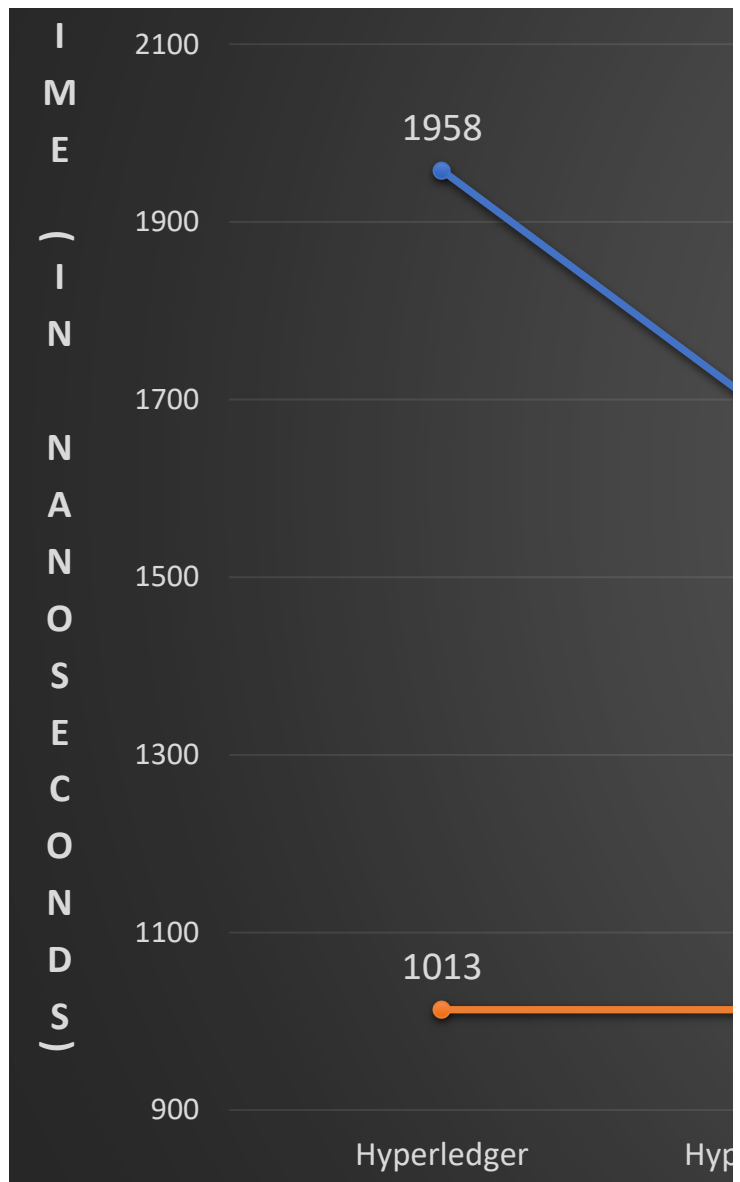
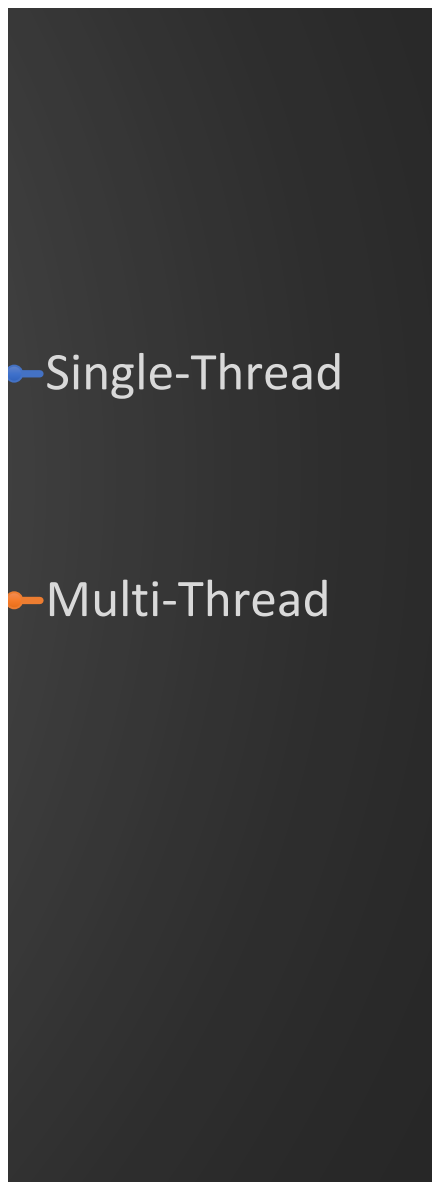
GeMSS 256	Hyperledger + GeMSS 256	MQDSS
228	1938	696
103	1029	302
1141	1130	38
445	impossible en multi-thread	15
648	90	28
442	52	11
ms	ns	µs
ms	ns	µs
ms	ms	ms
ms		ms
µs	ms	ms
µs	ms	ms
		MQDSS
		696
		302
		38
		15
		28
		11

Hyperledger	Hyperledger + GeMSS 128
1958	1602
1013	1013
44	277
impossible en multi-thread	impossible en multi-thread
89	74
50	62

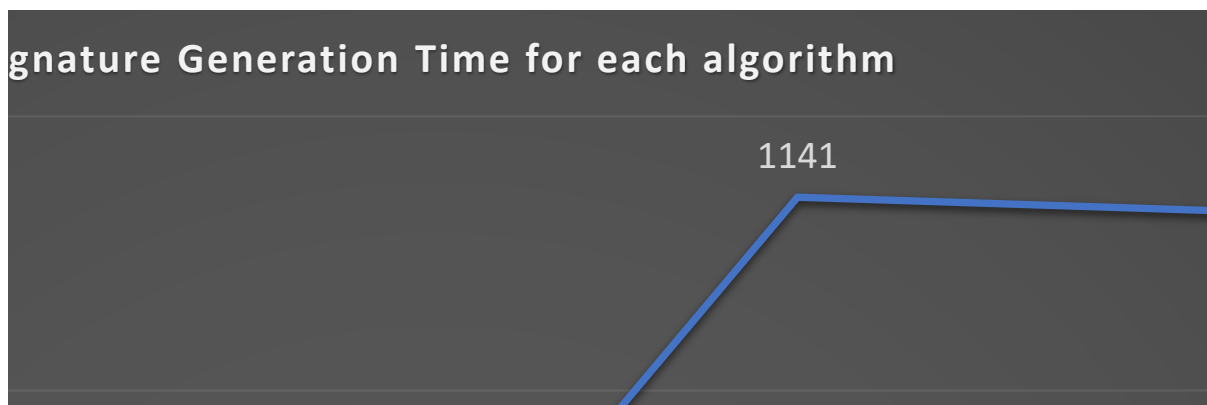


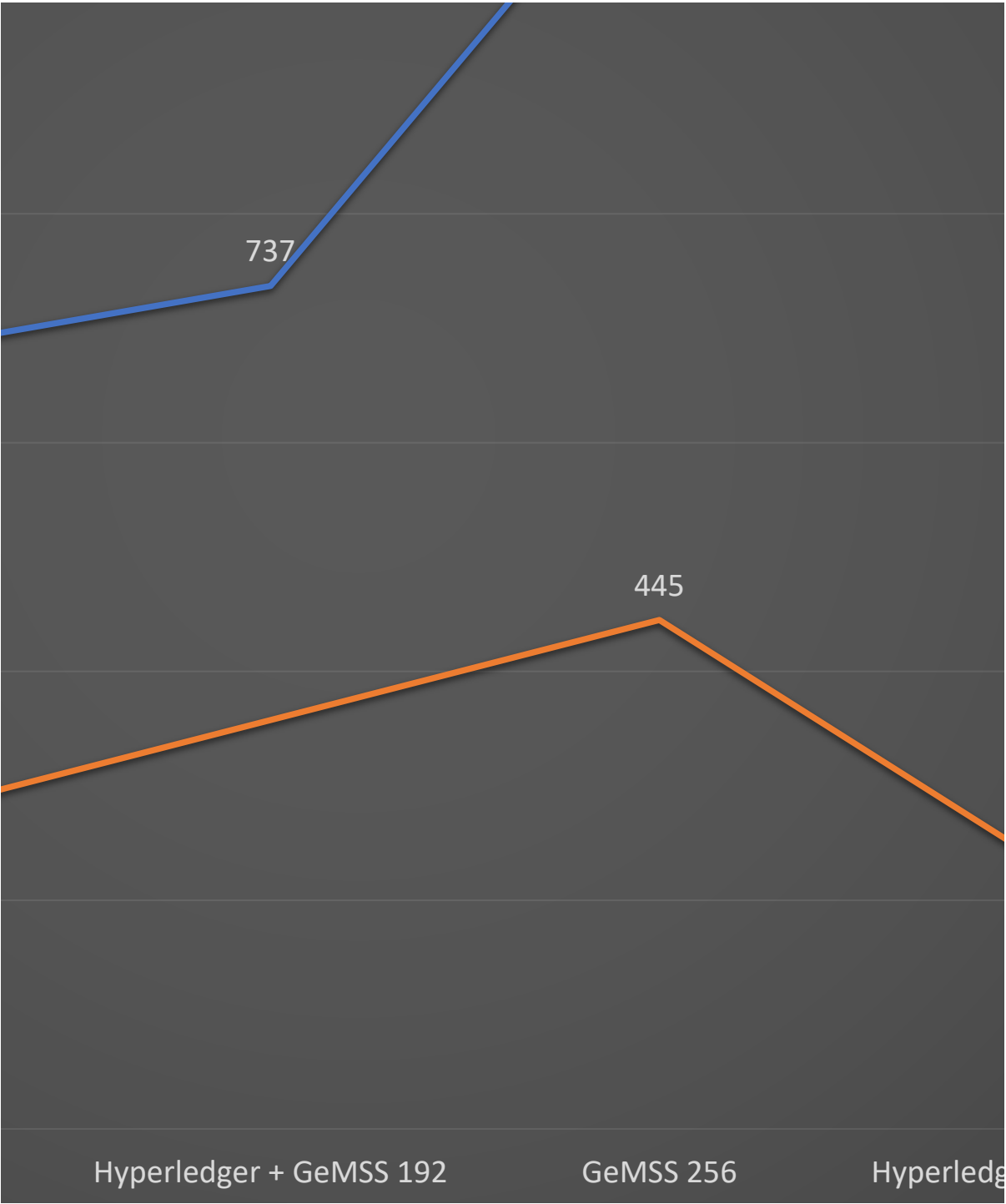
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T



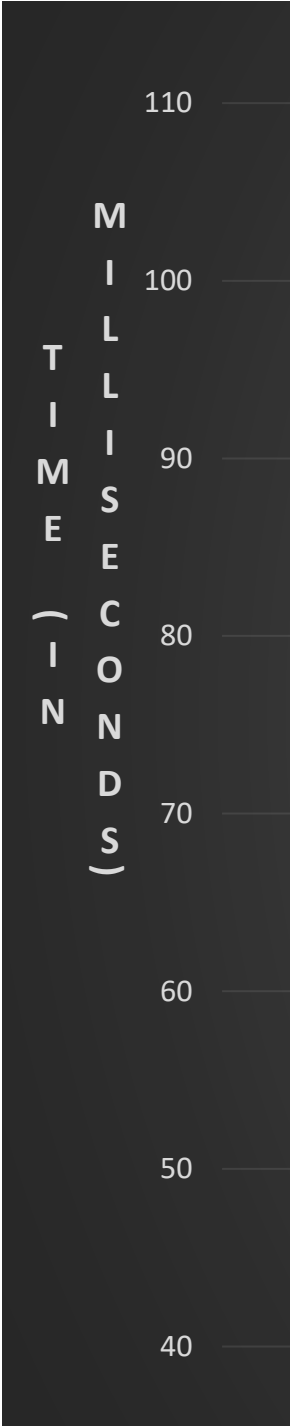
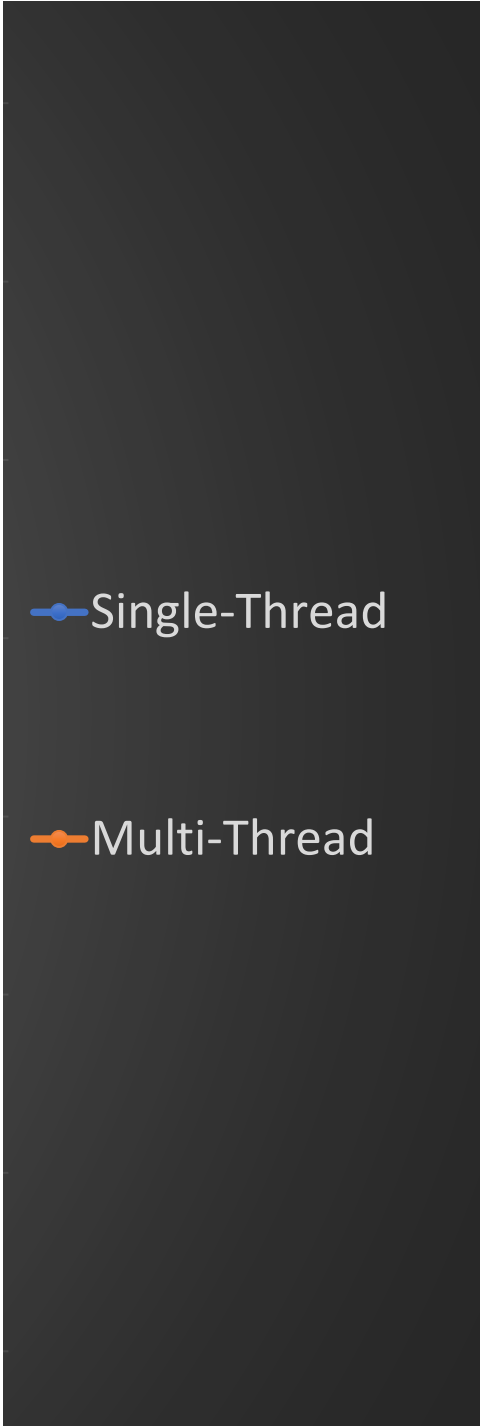
GeMSS 256	Hyperledger + GeMSS 256	MQDSS
228	1938	696
103	1029	302
1141	1130	38
445		15





Hyperledger	Hyperledger + GeMSS 128
1958	1602
1013	1013
44	277
impossible en multi-thread	impossible en multi-thread

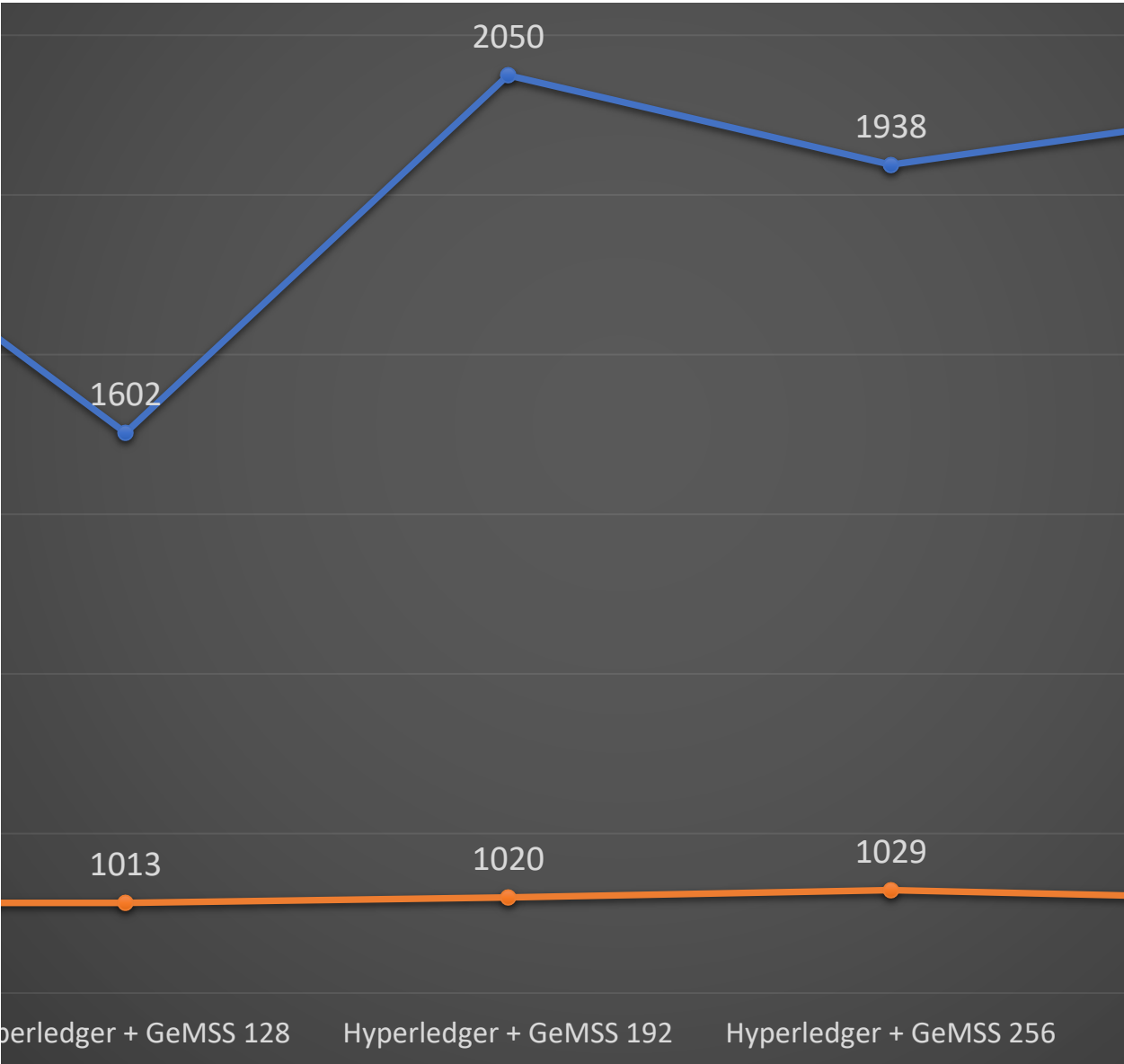
89	74
50	62



Hyperledger + MQDSS
2006
1018
82
impossible en multi-thread
marche pas, je sais pas pourquoi
marche pas, je sais pas pourquoi
ns
ns
ms

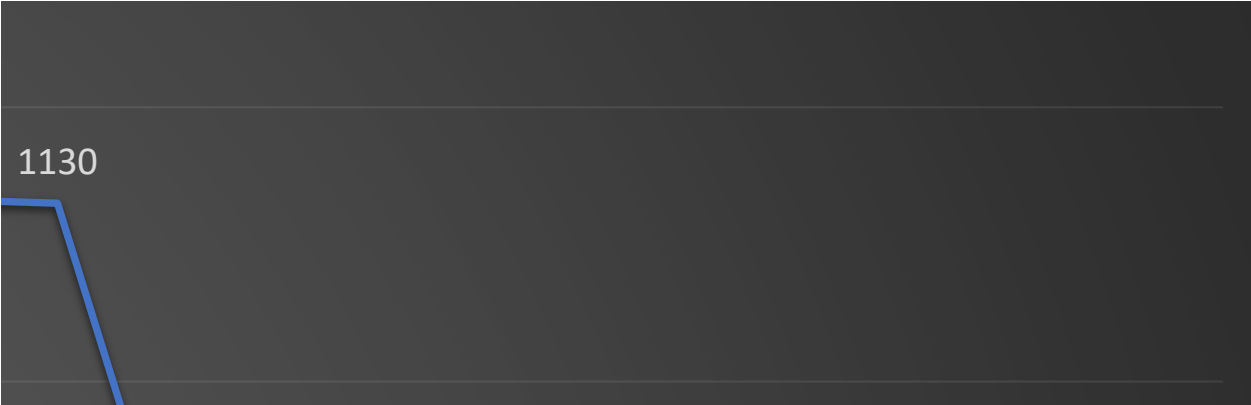
Hyperledger + GeMSS 192	Hyperledger + GeMSS 256	Hyperledger + MQDSS
2050	1938	2006
1020	1029	1018
737	1130	82
impossible en multi-thread	impossible en multi-thread	impossible en multi-thread
100	90	marche pas, je sais pas pourquoi
58	52	marche pas, je sais pas pourquoi

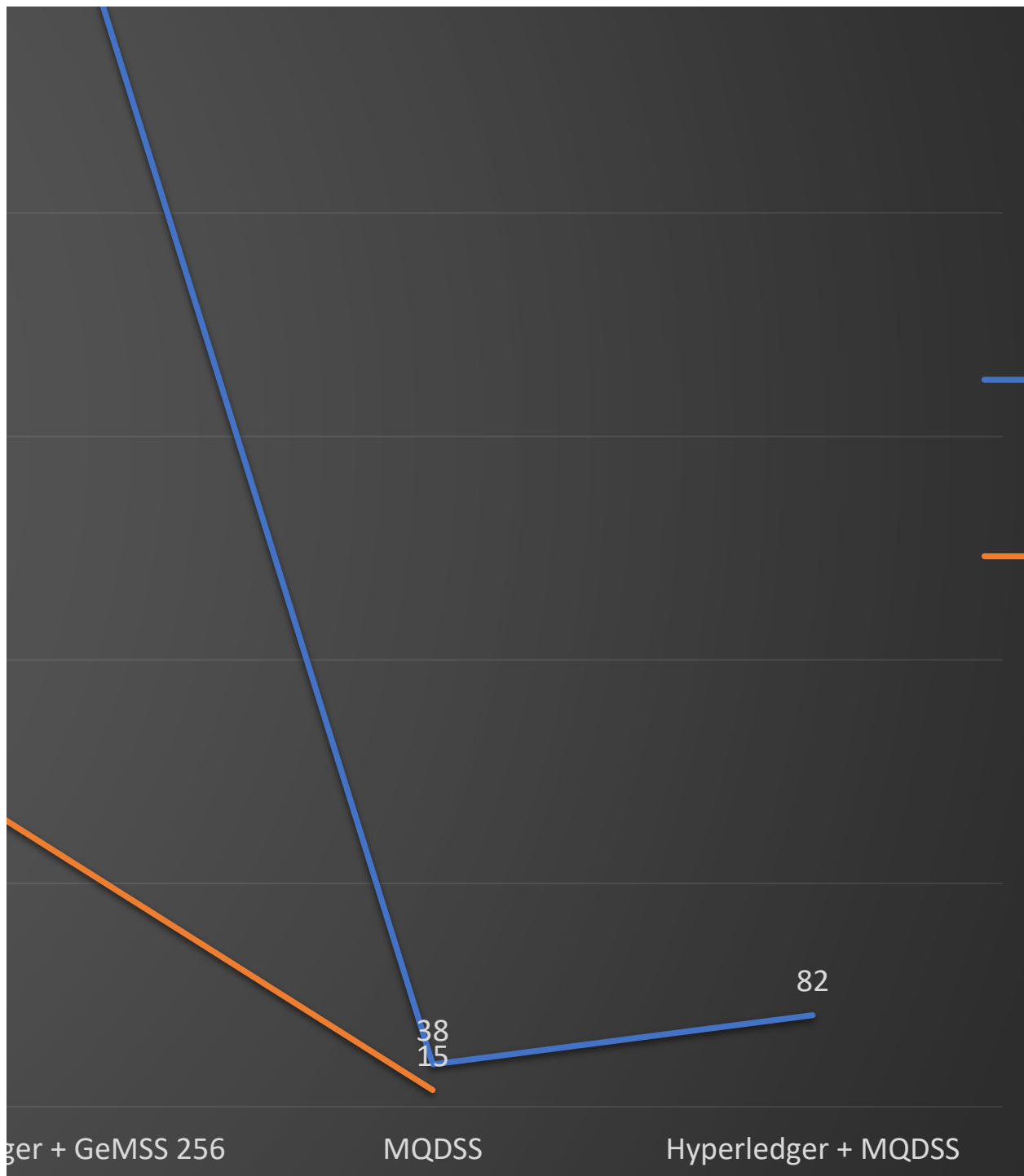
Key Generation Time for each duo of algorithms



Hyperledger + MQDSS
2006
1018
82

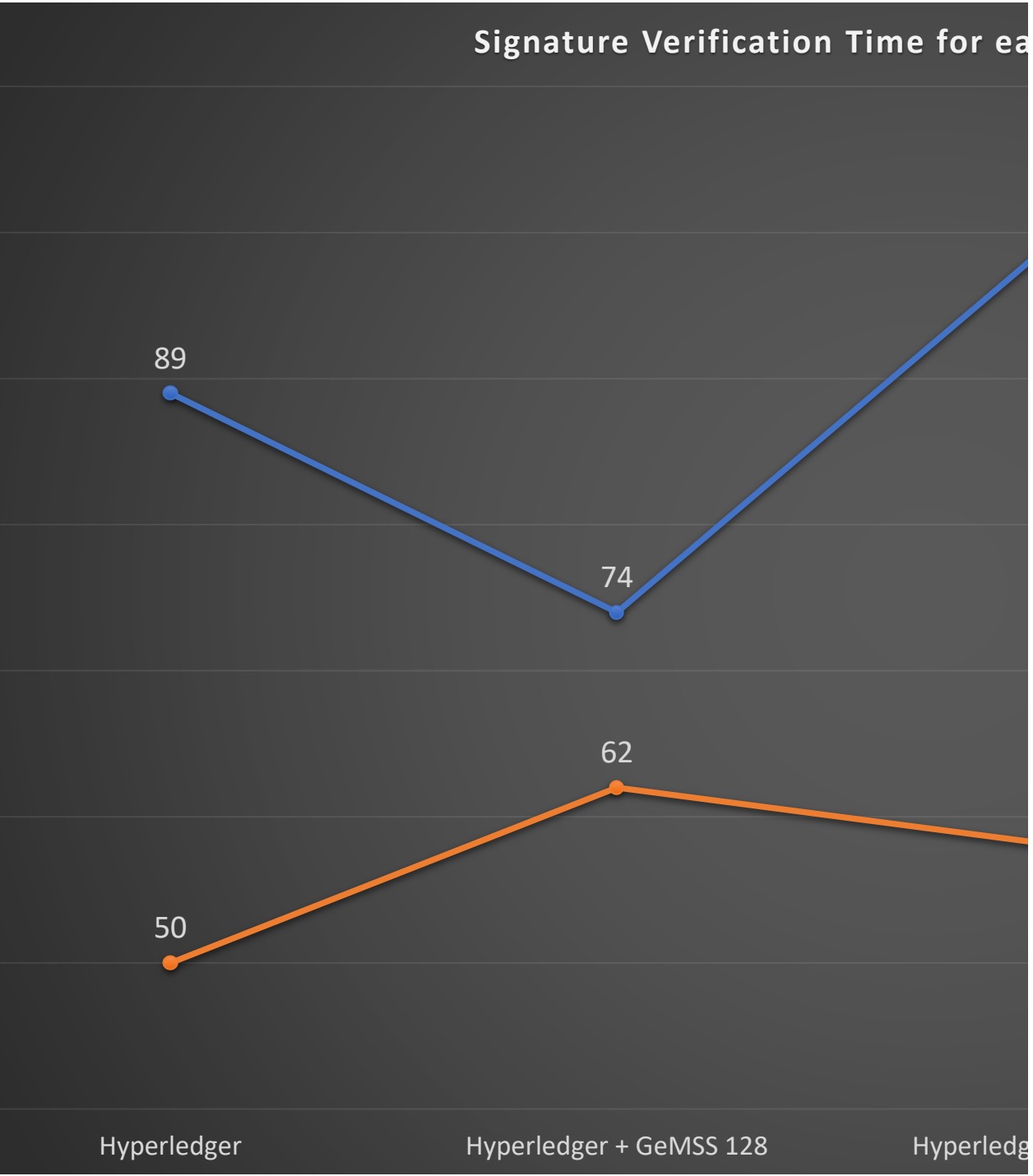
96	270	445
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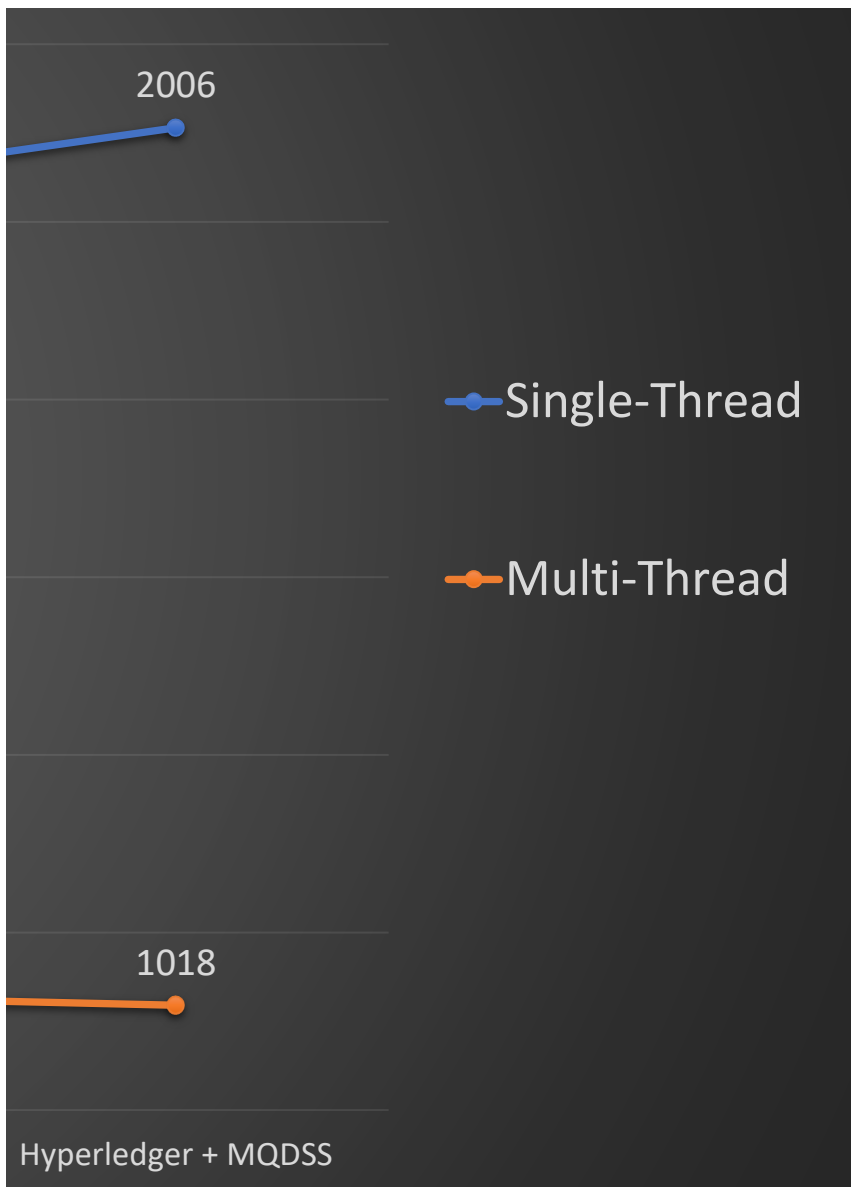


Hyperledger + GeMSS 192	Hyperledger + GeMSS 256	Hyperledger + MQDSS
2050	1938	2006
1020	1029	1018
737	1130	82
impossible en multi-thread	impossible en multi-thread	impossible en multi-thread

100	90	marche pas, je sais pas pourquoi
58	52	marche pas, je sais pas pourquoi



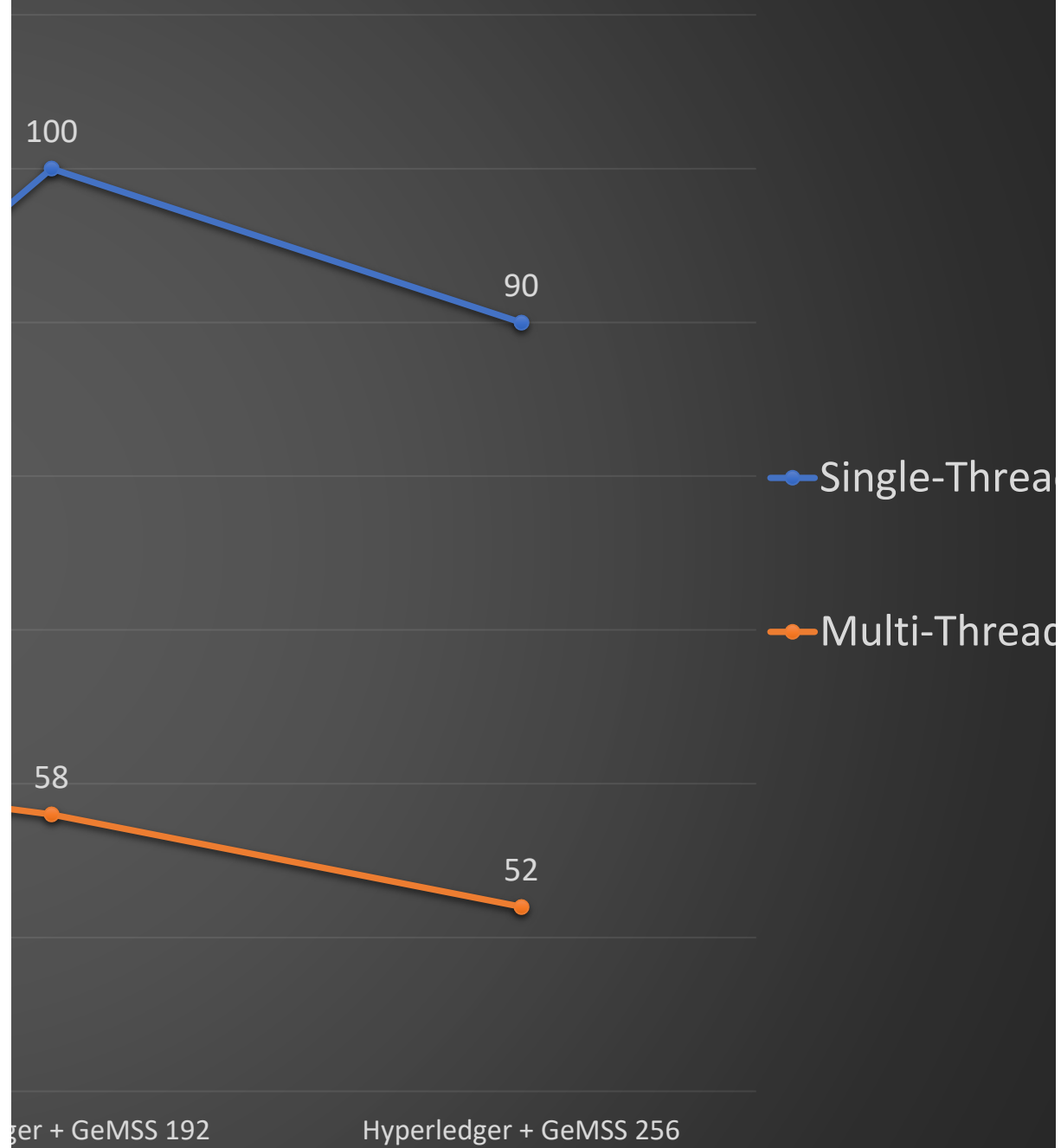




- Single-Thread

- Multi-Thread

Each duo of algorithms



d
d