Benchmark Name	Parameters			Mean TPS	Mean Latency
	RL	TXs in batch	BI		
DoNothing DoNothing	50	1	1	199.29	1.59
DoNothing DoNothing	50	1	2	200.18	3.28
DoNothing DoNothing	50	1	5	107.47	75.96
DoNothing DoNothing	50	1	10	49.89	147.49
DoNothing DoNothing	100	1	1	400.09	1.96
DoNothing DoNothing	100	1	2	396.43	5.49
DoNothing DoNothing	100	1	5	48.46	178.65
DoNothing DoNothing	100	1	10	290.87	88.19
DoNothing DoNothing	200	1	1	772.71	3.02
DoNothing DoNothing	200	1	2	664.96	7.51
DoNothing DoNothing	200	1	5	71.05	186.73
DoNothing DoNothing	200	1	10	222.52	166.15
DoNothing DoNothing	400	1	1	773.88	3
DoNothing DoNothing	400	1	2	667.32	7.58
DoNothing DoNothing	400	1	5	244.25	73.32
DoNothing DoNothing	400	1	10	237.34	106.26
DoNothing DoNothing	50	50	1	200.42	1.58
DoNothing DoNothing	50	50	2	199.37	2.81
DoNothing DoNothing	50	50	5	186.13	29.94
DoNothing DoNothing	50	50	10	73.66	80.87
DoNothing DoNothing	100	50	1	399.57	1.73
DoNothing DoNothing	100	50	2	396.17	3.51
DoNothing DoNothing	100	50	5	85.09	141.14
DoNothing DoNothing	100	50	10	53.09	153.4
DoNothing DoNothing	200	50	1	798.26	2.28
DoNothing DoNothing	200	50	2	795.66	5.94
DoNothing DoNothing	200	50	5	60.6	201.13
DoNothing DoNothing	200	50	10	0	0
DoNothing DoNothing	**400**	**50**	**1**	**1517.46**	**21.25**
DoNothing DoNothing	400	50	2	779.11	101.3
DoNothing DoNothing	400	50	5	228.26	197.4
DoNothing DoNothing	400	50	10	37.66	304.98
DoNothing DoNothing	50	100	1	200.6	1.26
DoNothing DoNothing	50	100	2	199.21	3.37
DoNothing DoNothing	50	100	5	183.57	38.77
DoNothing DoNothing	50	100	10	193.11	19.78
DoNothing DoNothing	100	100	1	401.27	1.66
DoNothing DoNothing	100	100	2	398.34	3.87
DoNothing DoNothing	100	100	5	123.2	59.78
DoNothing DoNothing	100	100	10	46	134.3
DoNothing DoNothing	200	100	1	799.14	2.46
DoNothing DoNothing	200	100	2	792.31	7.18
DoNothing DoNothing	200	100	5	169.11	72.45
DoNothing DoNothing	200	100	10	129.68	255
DoNothing DoNothing	400	100	1	1496.06	25.13
DoNothing DoNothing	400	100	2	579.21	160.84
DoNothing DoNothing	400	100	5	82.32	165.61

DoNothing DoNothing	400	100	10	86.9	64.55
KeyValue Set	50	1	1	199.96	1.65
KeyValue Set	50	1	2	198.42	3.46
KeyValue Set	50	1	5	60.91	133.8
KeyValue Set	50	1	10	87.62	93.36
KeyValue Set	100	1	1	399.22	2.07
KeyValue Set	100	1	2	394.18	6.11
KeyValue Set	100	1	5	149.09	129.83
KeyValue Set	100	1	10	35.27	132.04
KeyValue Set	200	1	1	691.65	3.43
KeyValue Set	200	1	2	566.53	9.16
KeyValue Set	200	1	5	32.8	247.19
KeyValue Set	200	1	10	43.19	264.86
KeyValue Set	400	1	1	696.3	3.52
KeyValue Set	400	1	2	562.23	9.33
KeyValue Set	400	1	5	155.63	134.26
KeyValue Set	400	1	10	164.98	166.86
KeyValue Set	50	50	1	200	1.55
KeyValue Set	50	50	2	199.38	3.47
KeyValue Set	50	50	5	122.07	80.64
KeyValue Set	50	50	10	148.16	67.39
KeyValue Set	100	50	1	398.28	2.09
KeyValue Set	100	50	2	395.31	4.55
KeyValue Set	100	50	5	302.45	87.65
KeyValue Set	100	50	10	39.81	210.25
KeyValue Set	**200**	**50**	**1**	**797.39**	**3.16**
KeyValue Set	200	50	2	727.82	36.33
KeyValue Set	200	50	5	153.87	59.6
KeyValue Set	200	50	10	39.65	227.22
KeyValue Set	400	50	1	756.59	103.25
KeyValue Set	400	50	2	232.4	215.64
KeyValue Set	400	50	5	29.05	256.56
KeyValue Set	400	50	10	0	0
KeyValue Set	50	100	1	0	0
KeyValue Set	50	100	2	0	0
KeyValue Set	50	100	5	0	0
KeyValue Set	50	100	10	0	0
KeyValue Set	100	100	1	0	0
KeyValue Set	100	100	2	0	0
KeyValue Set	100	100	5	0	0
KeyValue Set	100	100	10	0	0
KeyValue Set	200	100	1	0	0
KeyValue Set	200	100	2	0	0
KeyValue Set	200	100	5	0	0
KeyValue Set	200	100	10	0	0
KeyValue Set	400	100	1	0	0
KeyValue Set	400	100	2	0	0
KeyValue Set	400	100	5	0	0
KeyValue Set	400	100	10	0	0
KeyValue Get	50	1	1	199.52	1.6
KeyValue Get	50	1	2	197.55	3.29
KeyValue Get	50	1	5	197.32	9.24
KeyValue Get	50	1	10	36.88	96.5
KeyValue Get	100	1	1	397.87	1.95
KeyValue Get	100	1	2	398.09	4.46
KeyValue Get	100	1	5	369.14	15.85

KeyValue Get	100	1	10	84.21	41.07
KeyValue Get	200	1	1	743.36	3.07
KeyValue Get	200	1	2	625.66	7.87
KeyValue Get	200	1	5	363.68	29.11
KeyValue Get	200	1	10	127.37	120.92
KeyValue Get	400	1	1	747.32	3.14
KeyValue Get	400	1	2	626.78	7.87
KeyValue Get	400	1	5	276.39	28.65
KeyValue Get	400	1	10	133.52	80.11
KeyValue Get	50	50	1	200.63	1.55
KeyValue Get	50	50	2	198.75	3.06
KeyValue Get	50	50	5	196.73	8.4
KeyValue Get	50	50	10	51.13	116.69
KeyValue Get	100	50	1	399.57	1.73
KeyValue Get	100	50	2	399.57	3.65
KeyValue Get	100	50	5	286.09	11.82
KeyValue Get	100	50	10	95.11	29.31
KeyValue Get	200	50	1	799.13	2.29
KeyValue Get	200	50	2	791.35	6.29
KeyValue Get	200	50	5	171.48	38.64
KeyValue Get	200	50	10	174.91	192.91
KeyValue Get	**400**	**50**	**1**	**1378.8**	**24.9**
KeyValue Get	400	50	2	645.46	102.88
KeyValue Get	400	50	5	89.83	148.58
KeyValue Get	400	50	10	55.43	162.13
KeyValue Get	50	100	1	0	0
KeyValue Get	50	100	2	0	0
KeyValue Get	50	100	5	0	0
KeyValue Get	50	100	10	0	0
KeyValue Get	100	100	1	0	0
KeyValue Get	100	100	2	0	0
KeyValue Get	100	100	5	0	0
KeyValue Get	100	100	10	0	0
KeyValue Get	200	100	1	0	0
KeyValue Get	200	100	2	0	0
KeyValue Get	200	100	5	0	0
KeyValue Get	200	100	10	0	0
KeyValue Get	400	100	1	0	0
KeyValue Get	400	100	2	0	0
KeyValue Get	400	100	5	0	0
KeyValue Get	400	100	10	0	0
BankingApp CreateAccount	50	1	1	199.74	1.63
BankingApp CreateAccount	50	1	2	198.43	3.42
BankingApp CreateAccount	50	1	5	66.07	70.25
BankingApp CreateAccount	50	1	10	82.85	140.07
BankingApp CreateAccount	100	1	1	399.06	2.15
BankingApp CreateAccount	100	1	2	396.54	6.07
BankingApp CreateAccount	100	1	5	37.3	210.14
BankingApp CreateAccount	100	1	10	195.86	111.17
BankingApp CreateAccount	200	1	1	696.05	3.41
BankingApp CreateAccount	200	1	2	579.49	8.59
BankingApp CreateAccount	200	1	5	48.3	196.79
BankingApp CreateAccount	200	1	10	44.17	208.57
BankingApp CreateAccount	400	1	1	698.52	3.43
BankingApp CreateAccount	400	1	2	578.7	8.53
BankingApp CreateAccount	400	1	5	135.02	162.22

BankingApp CreateAccount	400	1	10	114.58	91.99
BankingApp CreateAccount	50	50	1	200.42	1.57
BankingApp CreateAccount	50	50	2	200	2.95
BankingApp CreateAccount	50	50	5	101.24	84.07
BankingApp CreateAccount	50	50	10	49.37	156.22
BankingApp CreateAccount	100	50	1	399.14	2.03
BankingApp CreateAccount	100	50	2	397.44	4.52
BankingApp CreateAccount	100	50	5	274.46	84.79
BankingApp CreateAccount	100	50	10	93.35	37.19
BankingApp CreateAccount	**200**	**50**	**1**	**795.65**	**3.91**
BankingApp CreateAccount	200	50	2	762.99	25.85
BankingApp CreateAccount	200	50	5	92.94	71.1
BankingApp CreateAccount	200	50	10	87.1	205.68
BankingApp CreateAccount	400	50	1	791.98	98.4
BankingApp CreateAccount	400	50	2	258.78	203.2
BankingApp CreateAccount	400	50	5	164.46	190.7
BankingApp CreateAccount	400	50	10	59.15	70.29
BankingApp CreateAccount	50	100	1	12.55	2.25
BankingApp CreateAccount	50	100	2	15.88	2.6
BankingApp CreateAccount	50	100	5	7.34	11.53
BankingApp CreateAccount	50	100	10	8.67	12.01
BankingApp CreateAccount	100	100	1	46.03	1.33
BankingApp CreateAccount	100	100	2	16.11	2.56
BankingApp CreateAccount	100	100	5	13.36	7.35
BankingApp CreateAccount	100	100	10	7.1	15.43
BankingApp CreateAccount	200	100	1	45.63	2.18
BankingApp CreateAccount	200	100	2	22.22	3.07
BankingApp CreateAccount	200	100	5	14.17	6.81
BankingApp CreateAccount	200	100	10	12.62	15.56
BankingApp CreateAccount	400	100	1	50	3.33
BankingApp CreateAccount	400	100	2	50	3.07
BankingApp CreateAccount	400	100	5	22.02	7.35
BankingApp CreateAccount	400	100	10	12.68	13.28
BankingApp SendPayment	50	1	1	128.17	2.63
BankingApp SendPayment	**50**	**1**	**2**	**151.09**	**4.71**
BankingApp SendPayment	50	1	5	46.03	15.08
BankingApp SendPayment	50	1	10	64.44	33.79
BankingApp SendPayment	100	1	1	28.96	9.69
BankingApp SendPayment	100	1	2	53.65	9.12
BankingApp SendPayment	100	1	5	41.84	40.82
BankingApp SendPayment	100	1	10	31.69	45.34
BankingApp SendPayment	200	1	1	27.02	4.58
BankingApp SendPayment	200	1	2	41.74	8.89
BankingApp SendPayment	200	1	5	39.56	26.31
BankingApp SendPayment	200	1	10	31.56	49.89
BankingApp SendPayment	400	1	1	23.62	4.86
BankingApp SendPayment	400	1	2	43.4	9.45
BankingApp SendPayment	400	1	5	51.46	21.64
BankingApp SendPayment	400	1	10	29.46	41.04
BankingApp SendPayment	50	50	1	77.55	3.13
BankingApp SendPayment	50	50	2	95.24	6.64
BankingApp SendPayment	50	50	5	69.92	35.13
BankingApp SendPayment	50	50	10	31.68	60.88
BankingApp SendPayment	100	50	1	39.01	40.94
BankingApp SendPayment	100	50	2	50.2	34.3
BankingApp SendPayment	100	50	5	30.7	58.7

BankingApp SendPayment	100	50	10	46.1	74.53
BankingApp SendPayment	200	50	1	21.69	81.65
BankingApp SendPayment	200	50	2	31.71	56.25
BankingApp SendPayment	200	50	5	17.72	66.09
BankingApp SendPayment	200	50	10	19.47	74.02
BankingApp SendPayment	400	50	1	12.33	90.44
BankingApp SendPayment	400	50	2	16.14	102.81
BankingApp SendPayment	400	50	5	17.39	81.47
BankingApp SendPayment	400	50	10	12.49	95.68
BankingApp SendPayment	50	100	1	3.34	1.79
BankingApp SendPayment	50	100	2	4.98	3.19
BankingApp SendPayment	50	100	5	4.09	15.52
BankingApp SendPayment	50	100	10	1.55	109.21
BankingApp SendPayment	100	100	1	6.08	2.36
BankingApp SendPayment	100	100	2	1.72	11.54
BankingApp SendPayment	100	100	5	1.66	69.47
BankingApp SendPayment	100	100	10	0.44	54.39
BankingApp SendPayment	200	100	1	5.08	15.42
BankingApp SendPayment	200	100	2	2.67	13.78
BankingApp SendPayment	200	100	5	0.11	257.94
BankingApp SendPayment	200	100	10	0.04	125.58
BankingApp SendPayment	400	100	1	4.86	9.36
BankingApp SendPayment	400	100	2	1.69	25.94
BankingApp SendPayment	400	100	5	0.82	192.56
BankingApp SendPayment	400	100	10	0	0
BankingApp Balance	50	1	1	43.01	2.4
BankingApp Balance	**50**	**1**	**2**	**150.93**	**4.4**
BankingApp Balance	50	1	5	71.08	12.73
BankingApp Balance	50	1	10	98.99	28.81
BankingApp Balance	100	1	1	34.23	3.98
BankingApp Balance	100	1	2	41.82	9.49
BankingApp Balance	100	1	5	69.79	20.05
BankingApp Balance	100	1	10	36.86	52.04
BankingApp Balance	200	1	1	3.91	6.17
BankingApp Balance	200	1	2	22.95	7.7
BankingApp Balance	200	1	5	56.07	22.48
BankingApp Balance	200	1	10	45.71	51.86
BankingApp Balance	400	1	1	0	0
BankingApp Balance	400	1	2	28.84	7.59
BankingApp Balance	400	1	5	42.06	22.44
BankingApp Balance	400	1	10	43.55	51.29
BankingApp Balance	50	50	1	51.12	2.98
BankingApp Balance	50	50	2	49.85	5.17
BankingApp Balance	50	50	5	63.5	17.21
BankingApp Balance	50	50	10	74.47	53.29
BankingApp Balance	100	50	1	0	0
BankingApp Balance	100	50	2	0	0
BankingApp Balance	100	50	5	41.41	36.16
BankingApp Balance	100	50	10	60.54	57.16
BankingApp Balance	200	50	1	10.34	16.45
BankingApp Balance	200	50	2	0	0
BankingApp Balance	200	50	5	21.57	56.34
BankingApp Balance	200	50	10	22.52	83.3
BankingApp Balance	400	50	1	15.12	51.21
BankingApp Balance	400	50	2	0	0
BankingApp Balance	400	50	5	15.48	70.11

BankingApp Balance	400	50	10	16.02	92.99
BankingApp Balance	50	100	1	10.62	1.64
BankingApp Balance	50	100	2	10.72	2.83
BankingApp Balance	50	100	5	7.55	8.86
BankingApp Balance	50	100	10	8.47	19.03
BankingApp Balance	100	100	1	14.22	1.61
BankingApp Balance	100	100	2	10.89	3.88
BankingApp Balance	100	100	5	9.32	12.44
BankingApp Balance	100	100	10	3.94	27.08
BankingApp Balance	200	100	1	35.83	2.01
BankingApp Balance	200	100	2	15.38	3.91
BankingApp Balance	200	100	5	6.72	13.52
BankingApp Balance	200	100	10	4.52	37.85
BankingApp Balance	400	100	1	28.57	4.41
BankingApp Balance	400	100	2	11.28	16.04
BankingApp Balance	400	100	5	2.62	51.35
BankingApp Balance	400	100	10	6.17	85.67

Table 1. Graphene - all values, full table

Benchmark Name	Parameters			Max TPS	Mean Latency
	RL	TXs in batch	BI		
DoNothing DoNothing	400	50	1	1517.46	21.25
KeyValue Set	200	50	1	797.39	3.16
KeyValue Get	400	50	1	1378.80	24.90
BankingApp CreateAccount	200	50	1	795.65	3.91
BankingApp SendPayment	50	1	2	151.09	4.71
BankingApp Balance	50	1	2	150.93	4.40

Table 2. Graphene - optimal values