

Graph Data

Figure 2

n	dim_{B,x}	dim_{B,y}	Gflops
256	1	1	1
256	1	2	1.9
256	1	4	3.8
256	1	8	7.5
256	1	16	15
256	1	32	28.5
256	1	64	45.4
256	1	128	58.3
256	1	256	53.2
256	1	512	48.8
256	1	1024	27.1
256	2	1	1.9
256	2	2	3.7
256	2	4	7.3
256	2	8	14
256	2	16	27.7
256	2	32	40.1
256	2	64	51.9
256	2	128	53.6
256	2	256	52.6
256	2	512	47
256	2	1024	0
256	4	1	3.1
256	4	2	6.2
256	4	4	12.2
256	4	8	22.2
256	4	16	33.1
256	4	32	32.5
256	4	64	35.1
256	4	128	38.6
256	4	256	39
256	4	512	0
256	4	1024	0
256	8	1	4.2
256	8	2	8.3
256	8	4	17
256	8	8	20.5
256	8	16	20
256	8	32	20.6
256	8	64	22.3
256	8	128	23.7

Figure 4

n	dim_{B,*}	Gflops
256	1	0.4
256	2	2.7
256	4	15.9
256	8	39.4
256	16	37.9
256	32	53.4
512	1	0.4
512	2	2.7
512	4	13.6
512	8	39.3
512	16	39.1
512	32	40.9
1024	1	0.4
1024	2	2.2
1024	4	13.5
1024	8	40.2
1024	16	39.8
1024	32	60
2048	1	0.3
2048	2	2.2
2048	4	13.7
2048	8	37.3
2048	16	39.5
2048	32	59.3

256	8	256	0
256	8	512	0
256	8	1024	0
256	16	1	5.3
256	16	2	10.1
256	16	4	10.4
256	16	8	10
256	16	16	11.5
256	16	32	13.2
256	16	64	12.5
256	16	128	0
256	16	256	0
256	16	512	0
256	16	1024	0
256	32	1	8
256	32	2	7.1
256	32	4	6.8
256	32	8	8.9
256	32	16	13.1
256	32	32	12.1
256	32	64	0
256	32	128	0
256	32	256	0
256	32	512	0
256	32	1024	0
256	64	1	5.5
256	64	2	5.2
256	64	4	5.9
256	64	8	9.3
256	64	16	7
256	64	32	0
256	64	64	0
256	64	128	0
256	64	256	0
256	64	512	0
256	64	1024	0
256	128	1	4.6
256	128	2	5.2
256	128	4	6.5
256	128	8	7.6
256	128	16	0
256	128	32	0
256	128	64	0
256	128	128	0
256	128	256	0
256	128	512	0
256	128	1024	0

256	256	1	4.6
256	256	2	4.9
256	256	4	5.3
256	256	8	0
256	256	16	0
256	256	32	0
256	256	64	0
256	256	128	0
256	256	256	0
256	256	512	0
256	256	1024	0
256	512	1	4.8
256	512	2	6.1
256	512	4	0
256	512	8	0
256	512	16	0
256	512	32	0
256	512	64	0
256	512	128	0
256	512	256	0
256	512	512	0
256	512	1024	0
256	1024	1	6
256	1024	2	0
256	1024	4	0
256	1024	8	0
256	1024	16	0
256	1024	32	0
256	1024	64	0
256	1024	128	0
256	1024	256	0
256	1024	512	0
256	1024	1024	0
512	1	1	1
512	1	2	1.9
512	1	4	3.8
512	1	8	7.5
512	1	16	15.2
512	1	32	29.3
512	1	64	41.3
512	1	128	48.2
512	1	256	45.2
512	1	512	53.4
512	1	1024	38.5
512	2	1	1.9
512	2	2	3.7
512	2	4	7.3

512	2	8	14.5
512	2	16	28.8
512	2	32	43.8
512	2	64	46.8
512	2	128	49.2
512	2	256	49.7
512	2	512	54.3
512	2	1024	0
512	4	1	2.5
512	4	2	4.9
512	4	4	9.9
512	4	8	20.6
512	4	16	30.7
512	4	32	28.9
512	4	64	30.4
512	4	128	32.5
512	4	256	37.4
512	4	512	0
512	4	1024	0
512	8	1	3.6
512	8	2	7.3
512	8	4	17
512	8	8	18.6
512	8	16	16.7
512	8	32	17.1
512	8	64	21
512	8	128	20.7
512	8	256	0
512	8	512	0
512	8	1024	0
512	16	1	4.9
512	16	2	9.2
512	16	4	9.4
512	16	8	8.9
512	16	16	9.6
512	16	32	11.5
512	16	64	9.9
512	16	128	0
512	16	256	0
512	16	512	0
512	16	1024	0
512	32	1	6
512	32	2	5.1
512	32	4	4.5
512	32	8	4.6
512	32	16	5.1
512	32	32	5

512	32	64	0
512	32	128	0
512	32	256	0
512	32	512	0
512	32	1024	0
512	64	1	4.8
512	64	2	4.4
512	64	4	4.7
512	64	8	5.1
512	64	16	5.2
512	64	32	0
512	64	64	0
512	64	128	0
512	64	256	0
512	64	512	0
512	64	1024	0
512	128	1	3.6
512	128	2	4.1
512	128	4	4.1
512	128	8	4
512	128	16	0
512	128	32	0
512	128	64	0
512	128	128	0
512	128	256	0
512	128	512	0
512	128	1024	0
512	256	1	3.8
512	256	2	4.3
512	256	4	4.6
512	256	8	0
512	256	16	0
512	256	32	0
512	256	64	0
512	256	128	0
512	256	256	0
512	256	512	0
512	256	1024	0
512	512	1	3.7
512	512	2	4.1
512	512	4	0
512	512	8	0
512	512	16	0
512	512	32	0
512	512	64	0
512	512	128	0
512	512	256	0

512	512	512	0
512	512	1024	0
512	1024	1	4.8
512	1024	2	0
512	1024	4	0
512	1024	8	0
512	1024	16	0
512	1024	32	0
512	1024	64	0
512	1024	128	0
512	1024	256	0
512	1024	512	0
512	1024	1024	0
1024	1	1	1
1024	1	2	1.9
1024	1	4	3.8
1024	1	8	7.6
1024	1	16	13.1
1024	1	32	21.9
1024	1	64	38.7
1024	1	128	46
1024	1	256	47.5
1024	1	512	41.8
1024	1	1024	43.3
1024	2	1	1.3
1024	2	2	2.7
1024	2	4	5.4
1024	2	8	10.7
1024	2	16	21.8
1024	2	32	37
1024	2	64	48.3
1024	2	128	48.6
1024	2	256	56.6
1024	2	512	56.1
1024	2	1024	0
1024	4	1	2.3
1024	4	2	4.7
1024	4	4	9.4
1024	4	8	18.6
1024	4	16	34.2
1024	4	32	35.7
1024	4	64	38.5
1024	4	128	38.4
1024	4	256	41.1
1024	4	512	0
1024	4	1024	0
1024	8	1	3.5

1024	8	2	7
1024	8	4	14.1
1024	8	8	22.8
1024	8	16	19.9
1024	8	32	21
1024	8	64	25.5
1024	8	128	25.7
1024	8	256	0
1024	8	512	0
1024	8	1024	0
1024	16	1	4.9
1024	16	2	10.5
1024	16	4	9.8
1024	16	8	8.6
1024	16	16	8.7
1024	16	32	9.2
1024	16	64	8.6
1024	16	128	0
1024	16	256	0
1024	16	512	0
1024	16	1024	0
1024	32	1	7.2
1024	32	2	6.8
1024	32	4	4.8
1024	32	8	6.1
1024	32	16	7.2
1024	32	32	7.3
1024	32	64	0
1024	32	128	0
1024	32	256	0
1024	32	512	0
1024	32	1024	0
1024	64	1	4.3
1024	64	2	3.8
1024	64	4	4.8
1024	64	8	5.5
1024	64	16	5.1
1024	64	32	0
1024	64	64	0
1024	64	128	0
1024	64	256	0
1024	64	512	0
1024	64	1024	0
1024	128	1	2.5
1024	128	2	3.6
1024	128	4	4.4
1024	128	8	5.8

1024	128	16	0
1024	128	32	0
1024	128	64	0
1024	128	128	0
1024	128	256	0
1024	128	512	0
1024	128	1024	0
1024	256	1	2.6
1024	256	2	3.4
1024	256	4	4.1
1024	256	8	0
1024	256	16	0
1024	256	32	0
1024	256	64	0
1024	256	128	0
1024	256	256	0
1024	256	512	0
1024	256	1024	0
1024	512	1	2.6
1024	512	2	3
1024	512	4	0
1024	512	8	0
1024	512	16	0
1024	512	32	0
1024	512	64	0
1024	512	128	0
1024	512	256	0
1024	512	512	0
1024	512	1024	0
1024	1024	1	2.8
1024	1024	2	0
1024	1024	4	0
1024	1024	8	0
1024	1024	16	0
1024	1024	32	0
1024	1024	64	0
1024	1024	128	0
1024	1024	256	0
1024	1024	512	0
1024	1024	1024	0
2048	1	1	1
2048	1	2	1.4
2048	1	4	2.8
2048	1	8	5.6
2048	1	16	11.5
2048	1	32	21.6
2048	1	64	38.5

2048	1	128	43.2
2048	1	256	45.6
2048	1	512	36.7
2048	1	1024	28
2048	2	1	1.4
2048	2	2	2.7
2048	2	4	5.5
2048	2	8	10.9
2048	2	16	22.3
2048	2	32	37.7
2048	2	64	47.2
2048	2	128	52.7
2048	2	256	54.7
2048	2	512	56.6
2048	2	1024	0
2048	4	1	2.3
2048	4	2	4.7
2048	4	4	9.3
2048	4	8	18.9
2048	4	16	33.6
2048	4	32	35.4
2048	4	64	37.6
2048	4	128	39.9
2048	4	256	42.3
2048	4	512	0
2048	4	1024	0
2048	8	1	3.6
2048	8	2	7.3
2048	8	4	15.9
2048	8	8	20.2
2048	8	16	17.6
2048	8	32	19
2048	8	64	22.4
2048	8	128	23
2048	8	256	0
2048	8	512	0
2048	8	1024	0
2048	16	1	4.8
2048	16	2	9.6
2048	16	4	9.5
2048	16	8	8.3
2048	16	16	8.6
2048	16	32	10.4
2048	16	64	10.9
2048	16	128	0
2048	16	256	0
2048	16	512	0

2048	16	1024	0
2048	32	1	6
2048	32	2	5.1
2048	32	4	3.6
2048	32	8	4.4
2048	32	16	5.2
2048	32	32	5.6
2048	32	64	0
2048	32	128	0
2048	32	256	0
2048	32	512	0
2048	32	1024	0
2048	64	1	3.9
2048	64	2	3
2048	64	4	3.6
2048	64	8	5
2048	64	16	6
2048	64	32	0
2048	64	64	0
2048	64	128	0
2048	64	256	0
2048	64	512	0
2048	64	1024	0
2048	128	1	2.4
2048	128	2	2.9
2048	128	4	3.8
2048	128	8	4.5
2048	128	16	0
2048	128	32	0
2048	128	64	0
2048	128	128	0
2048	128	256	0
2048	128	512	0
2048	128	1024	0
2048	256	1	2.4
2048	256	2	2.7
2048	256	4	3.3
2048	256	8	0
2048	256	16	0
2048	256	32	0
2048	256	64	0
2048	256	128	0
2048	256	256	0
2048	256	512	0
2048	256	1024	0
2048	512	1	2.3
2048	512	2	2.5

2048	512	4	0
2048	512	8	0
2048	512	16	0
2048	512	32	0
2048	512	64	0
2048	512	128	0
2048	512	256	0
2048	512	512	0
2048	512	1024	0
2048	1024	1	2.3
2048	1024	2	0
2048	1024	4	0
2048	1024	8	0
2048	1024	16	0
2048	1024	32	0
2048	1024	64	0
2048	1024	128	0
2048	1024	256	0
2048	1024	512	0
2048	1024	1024	0

Figure 6

n	dim_{B,*}	Gflops
256	1	0.4
256	2	2.7
256	4	16.4
256	8	62.2
256	16	88.8
256	32	87.1
512	1	0.4
512	2	2.3
512	4	14
512	8	62.9
512	16	93.8
512	32	91.4
1024	1	0.4
1024	2	2.2
1024	4	14.2
1024	8	63.7
1024	16	94.4
1024	32	94.6
2048	1	0.3
2048	2	2.2
2048	4	14.2
2048	8	62.9
2048	16	94.7
2048	32	96.1

Figure 8

n	dim_{B,*}	Gflops
256	1	1.3
256	2	7.7
256	4	29.2
256	8	82.4
256	16	118
256	32	0
512	1	1.2
512	2	6.8
512	4	27.8
512	8	96.3
512	16	127.6
512	32	0
1024	1	1
1024	2	6.8
1024	4	28.4
1024	8	101.5
1024	16	130.1
1024	32	0
2048	1	1
2048	2	6.8
2048	4	27.4
2048	8	98.4
2048	16	133
2048	32	0

Host co

n
256
512
1024
2048

mputation

Gflops

0.800001

0.736525

0.408128

0.15197

Figure 11

n

#threads

Gflops

512

1

9.61256

544

1

9.686763

576

1

9.709212

608

1

9.775898

640

1

9.87618

672

1

9.88015

704

1

9.90821

736

1

9.934683

768

1

9.927782

800

1

9.894389

832

1

9.927882

864

1

9.987845

896

1

9.981838

928

1

10.01262

960

1

10.04305

992

1

10.03305

1024

1

9.920559

1056

1

10.04263

1088

1

10.01373

1120

1

10.06181

1152

1

10.0884

1184

1

10.07853

1216

1

10.10036

1248

1

10.12243

1280

1

10.06233

1312

1

9.599184

1344

1

9.216098

1376

1

8.651113

1408

1

9.651652

1440

1

8.71121

1472

1

9.14004

1504

1

9.776097

512

2

18.52543

544

2

17.98502

576

2

17.89538

608

2

18.77313

640

2

18.70794

672

2

18.91751

704

2

19.28334

736

2

19.07111

768

2

19.17547

Figure 12

existing data reused

800	2	19.15683
832	2	18.90608
864	2	18.71993
896	2	19.39154
928	2	19.44405
960	2	19.52752
992	2	19.56562
1024	2	19.62048
1056	2	19.65197
1088	2	19.48023
1120	2	19.49622
1152	2	19.69966
1184	2	19.80088
1216	2	19.72614
1248	2	19.78384
1280	2	19.79072
1312	2	14.68908
1344	2	16.47473
1376	2	18.63057
1408	2	17.9883
1440	2	15.46029
1472	2	18.75079
1504	2	15.82966
512	3	26.4826
544	3	25.98007
576	3	26.41132
608	3	26.4128
640	3	26.65324
672	3	27.1063
704	3	26.69893
736	3	27.84543
768	3	26.59197
800	3	27.64138
832	3	27.81069
864	3	28.42522
896	3	28.69694
928	3	28.11594
960	3	27.4349
992	3	28.12211
1024	3	28.25533
1056	3	28.48454
1088	3	28.12852
1120	3	28.79998
1152	3	27.99518
1184	3	28.65722
1216	3	28.80118
1248	3	29.59199

1280	3	29.09469
1312	3	25.10908
1344	3	20.16246
1376	3	26.53368
1408	3	26.10436
1440	3	28.32246
1472	3	26.9168
1504	3	26.78189
512	4	33.08998
544	4	34.40824
576	4	34.97817
608	4	35.45995
640	4	35.33845
672	4	34.07705
704	4	35.80402
736	4	38.11314
768	4	38.14499
800	4	37.04803
832	4	35.92716
864	4	36.9361
896	4	37.71162
928	4	37.3102
960	4	28.83839
992	4	38.32538
1024	4	17.04999
1056	4	36.57501
1088	4	33.49031
1120	4	37.83681
1152	4	38.59584
1184	4	37.15941
1216	4	39.42106
1248	4	39.20189
1280	4	39.18324
1312	4	33.09561
1344	4	22.62306
1376	4	24.49729
1408	4	34.87053
1440	4	33.77887
1472	4	26.58716
1504	4	32.70791
512	5	36.29816
544	5	37.52967
576	5	38.86698
608	5	37.60817
640	5	40.69831
672	5	40.32238
704	5	20.81681

736	5	41.29815
768	5	41.531
800	5	40.41938
832	5	42.68952
864	5	35.25991
896	5	42.97121
928	5	43.21321
960	5	43.92546
992	5	44.03845
1024	5	44.01825
1056	5	43.84537
1088	5	44.12719
1120	5	44.83803
1152	5	44.62137
1184	5	44.35513
1216	5	45.17538
1248	5	44.3505
1280	5	45.25489
1312	5	24.63813
1344	5	25.39203
1376	5	39.8546
1408	5	44.60763
1440	5	26.60678
1472	5	33.04354
1504	5	28.64947
512	6	44.31752
544	6	45.85935
576	6	45.42497
608	6	47.75841
640	6	49.48921
672	6	50.81664
704	6	50.85202
736	6	51.87912
768	6	50.94986
800	6	51.34738
832	6	52.19361
864	6	52.53224
896	6	52.7382
928	6	53.64734
960	6	53.80085
992	6	51.02111
1024	6	53.70885
1056	6	53.28132
1088	6	53.87712
1120	6	49.58426
1152	6	53.91202
1184	6	28.77202

1216	6	54.89864
1248	6	53.16869
1280	6	54.336
1312	6	26.92499
1344	6	30.92665
1376	6	50.76055
1408	6	46.02028
1440	6	33.76592
1472	6	45.16223
1504	6	50.53403
512	7	43.58699
544	7	44.31594
576	7	46.89764
608	7	47.24335
640	7	50.72987
672	7	49.87626
704	7	51.69366
736	7	52.19423
768	7	52.75604
800	7	52.03334
832	7	53.15905
864	7	53.12481
896	7	55.73812
928	7	55.27834
960	7	53.40304
992	7	39.03275
1024	7	57.4238
1056	7	52.89442
1088	7	47.69273
1120	7	58.07182
1152	7	59.265
1184	7	55.28218
1216	7	54.69814
1248	7	59.97322
1280	7	60.6414
1312	7	27.41123
1344	7	39.74138
1376	7	32.79031
1408	7	53.48955
1440	7	36.16405
1472	7	36.09839
1504	7	32.61715
512	8	28.93905
544	8	29.69565
576	8	56.4257
608	8	56.30712
640	8	30.32968

672	8	31.17843
704	8	31.05263
736	8	61.85674
768	8	31.70208
800	8	63.79823
832	8	64.86211
864	8	66.42287
896	8	64.91065
928	8	32.82817
960	8	62.20239
992	8	32.83292
1024	8	32.87606
1056	8	33.04607
1088	8	64.72365
1120	8	69.94583
1152	8	33.33378
1184	8	71.10838
1216	8	47.33169
1248	8	71.54534
1280	8	71.54232
1312	8	28.86934
1344	8	40.90824
1376	8	60.75865
1408	8	67.9101
1440	8	54.67503
1472	8	38.24766
1504	8	56.992

Figure 10

n	dim_{B,x}	dim_{B,y}	Gflops
256	1	1	1.2
256	1	2	1.7
256	1	4	3
256	1	8	4.6
256	1	16	6.3
256	1	32	9
256	1	64	8.6
256	1	128	8
256	1	256	0
256	1	512	0
256	1	1024	0
256	2	1	2.2
256	2	2	7.4
256	2	4	9
256	2	8	13
256	2	16	21.7
256	2	32	19.8
256	2	64	18.1
256	2	128	17.5
256	2	256	0
256	2	512	0
256	2	1024	0
256	4	1	4.3
256	4	2	11.9
256	4	4	30.2
256	4	8	34.9
256	4	16	27.7
256	4	32	18.6
256	4	64	20.4
256	4	128	17.1
256	4	256	0
256	4	512	0
256	4	1024	0
256	8	1	8.3
256	8	2	18.8
256	8	4	55.3
256	8	8	84.5
256	8	16	64
256	8	32	45.4
256	8	64	24
256	8	128	0

256	8	256	0
256	8	512	0
256	8	1024	0
256	16	1	15.4
256	16	2	40.3
256	16	4	69.2
256	16	8	91.9
256	16	16	118.3
256	16	32	59.7
256	16	64	0
256	16	128	0
256	16	256	0
256	16	512	0
256	16	1024	0
256	32	1	29.9
256	32	2	46.1
256	32	4	44.7
256	32	8	62.3
256	32	16	57.7
256	32	32	0
256	32	64	0
256	32	128	0
256	32	256	0
256	32	512	0
256	32	1024	0
256	64	1	36.2
256	64	2	43.2
256	64	4	42.6
256	64	8	29.7
256	64	16	0
256	64	32	0
256	64	64	0
256	64	128	0
256	64	256	0
256	64	512	0
256	64	1024	0
256	128	1	37
256	128	2	42.6
256	128	4	35.5
256	128	8	0
256	128	16	0
256	128	32	0
256	128	64	0
256	128	128	0
256	128	256	0
256	128	512	0
256	128	1024	0

256	256	1	0
256	256	2	0
256	256	4	0
256	256	8	0
256	256	16	0
256	256	32	0
256	256	64	0
256	256	128	0
256	256	256	0
256	256	512	0
256	256	1024	0
256	512	1	0
256	512	2	0
256	512	4	0
256	512	8	0
256	512	16	0
256	512	32	0
256	512	64	0
256	512	128	0
256	512	256	0
256	512	512	0
256	512	1024	0
256	1024	1	0
256	1024	2	0
256	1024	4	0
256	1024	8	0
256	1024	16	0
256	1024	32	0
256	1024	64	0
256	1024	128	0
256	1024	256	0
256	1024	512	0
256	1024	1024	0
512	1	1	1.1
512	1	2	1.6
512	1	4	2.8
512	1	8	4.4
512	1	16	5.3
512	1	32	6.5
512	1	64	6.7
512	1	128	6.5
512	1	256	7
512	1	512	0
512	1	1024	0
512	2	1	1.9
512	2	2	6.5
512	2	4	8.7

512	2	8	12.9
512	2	16	18.9
512	2	32	20.2
512	2	64	20.6
512	2	128	18.9
512	2	256	19.1
512	2	512	0
512	2	1024	0
512	4	1	3.7
512	4	2	10.9
512	4	4	28.1
512	4	8	36.7
512	4	16	29.9
512	4	32	21.8
512	4	64	21.7
512	4	128	20.8
512	4	256	0
512	4	512	0
512	4	1024	0
512	8	1	7.3
512	8	2	19.2
512	8	4	57.6
512	8	8	96.8
512	8	16	68.1
512	8	32	47.1
512	8	64	29.4
512	8	128	0
512	8	256	0
512	8	512	0
512	8	1024	0
512	16	1	14.5
512	16	2	40.3
512	16	4	73.9
512	16	8	97.6
512	16	16	127.6
512	16	32	73.5
512	16	64	0
512	16	128	0
512	16	256	0
512	16	512	0
512	16	1024	0
512	32	1	27.9
512	32	2	48.9
512	32	4	53.4
512	32	8	67.5
512	32	16	69.4
512	32	32	0

512	32	64	0
512	32	128	0
512	32	256	0
512	32	512	0
512	32	1024	0
512	64	1	38.6
512	64	2	50.3
512	64	4	51.8
512	64	8	35.4
512	64	16	0
512	64	32	0
512	64	64	0
512	64	128	0
512	64	256	0
512	64	512	0
512	64	1024	0
512	128	1	41
512	128	2	46.3
512	128	4	43.1
512	128	8	0
512	128	16	0
512	128	32	0
512	128	64	0
512	128	128	0
512	128	256	0
512	128	512	0
512	128	1024	0
512	256	1	37.5
512	256	2	36.2
512	256	4	0
512	256	8	0
512	256	16	0
512	256	32	0
512	256	64	0
512	256	128	0
512	256	256	0
512	256	512	0
512	256	1024	0
512	512	1	0
512	512	2	0
512	512	4	0
512	512	8	0
512	512	16	0
512	512	32	0
512	512	64	0
512	512	128	0
512	512	256	0

512	512	512	0
512	512	1024	0
512	1024	1	0
512	1024	2	0
512	1024	4	0
512	1024	8	0
512	1024	16	0
512	1024	32	0
512	1024	64	0
512	1024	128	0
512	1024	256	0
512	1024	512	0
512	1024	1024	0
1024	1	1	1
1024	1	2	1.5
1024	1	4	2.7
1024	1	8	4.4
1024	1	16	5.8
1024	1	32	7.1
1024	1	64	4.8
1024	1	128	3.8
1024	1	256	3.5
1024	1	512	7.8
1024	1	1024	0
1024	2	1	1.8
1024	2	2	6.6
1024	2	4	8.8
1024	2	8	13
1024	2	16	20.7
1024	2	32	19.8
1024	2	64	25
1024	2	128	21.4
1024	2	256	17.1
1024	2	512	0
1024	2	1024	0
1024	4	1	3.7
1024	4	2	11.1
1024	4	4	28.8
1024	4	8	37.7
1024	4	16	32.8
1024	4	32	23
1024	4	64	22.5
1024	4	128	22.4
1024	4	256	0
1024	4	512	0
1024	4	1024	0
1024	8	1	7.3

1024	8	2	19.6
1024	8	4	60.3
1024	8	8	103.5
1024	8	16	73.8
1024	8	32	50.6
1024	8	64	31
1024	8	128	0
1024	8	256	0
1024	8	512	0
1024	8	1024	0
1024	16	1	14.7
1024	16	2	42
1024	16	4	74.4
1024	16	8	105.4
1024	16	16	130.1
1024	16	32	78.3
1024	16	64	0
1024	16	128	0
1024	16	256	0
1024	16	512	0
1024	16	1024	0
1024	32	1	28.6
1024	32	2	50.9
1024	32	4	56.5
1024	32	8	69
1024	32	16	74.7
1024	32	32	0
1024	32	64	0
1024	32	128	0
1024	32	256	0
1024	32	512	0
1024	32	1024	0
1024	64	1	41
1024	64	2	52.9
1024	64	4	51.2
1024	64	8	38.4
1024	64	16	0
1024	64	32	0
1024	64	64	0
1024	64	128	0
1024	64	256	0
1024	64	512	0
1024	64	1024	0
1024	128	1	41.7
1024	128	2	47.4
1024	128	4	45.8
1024	128	8	0

1024	128	16	0
1024	128	32	0
1024	128	64	0
1024	128	128	0
1024	128	256	0
1024	128	512	0
1024	128	1024	0
1024	256	1	37.5
1024	256	2	40.7
1024	256	4	0
1024	256	8	0
1024	256	16	0
1024	256	32	0
1024	256	64	0
1024	256	128	0
1024	256	256	0
1024	256	512	0
1024	256	1024	0
1024	512	1	29
1024	512	2	0
1024	512	4	0
1024	512	8	0
1024	512	16	0
1024	512	32	0
1024	512	64	0
1024	512	128	0
1024	512	256	0
1024	512	512	0
1024	512	1024	0
1024	1024	1	0
1024	1024	2	0
1024	1024	4	0
1024	1024	8	0
1024	1024	16	0
1024	1024	32	0
1024	1024	64	0
1024	1024	128	0
1024	1024	256	0
1024	1024	512	0
1024	1024	1024	0