

SIZE	TOTAL TIME	TIME/PIXEL	INSTRUCTIONS/PIXEL	ROTATION	MAP
538450	84401563	156.75	156.75	90	BLOCK
538450	28326581	52.61	52.61	90	COL
538450	22006563	40.87	40.87	90	ROW
538450	102638717	190.62	190.62	180	BLOCK
538450	30326860	56.32	56.32	180	COL
538450	16076380	29.86	29.86	180	ROW
538450	102219801	189.84	189.84	270	BLOCK
538450	28316949	52.59	52.59	270	COL
538450	20499224	38.07	38.07	270	ROW

SIZE	TOTAL TIME	TIME/PIXEL	INSTRUCTIONS/PIXEL	ROTATION	MAP
4578168	700835377	153.08	153.08	90	BLOCK
4578168	259377410	56.66	56.66	90	COL
4578168	206738281	45.16	45.16	90	ROW
4578168	1002918295	219.07	219.07	180	BLOCK
4578168	305521041	66.73	66.73	180	COL
4578168	115734155	25.27	25.27	180	ROW
4578168	935521453	204.34	204.34	270	BLOCK
4578168	208876265	45.62	45.62	270	COL
4578168	211447348	46.19	46.19	270	ROW

SIZE	TOTAL TIME	TIME/PIXEL	INSTRUCTIONS/PIXEL	ROTATION	MAP
6041764	1060833007	175.58	175.58	90	BLOCK
6041764	344631685	57.04	57.04	90	COL
6041764	281118735	46.529	46.529	90	ROW
6041764	1287400807	213.08	213.08	180	BLOCK
6041764	395532296	65.47	65.47	180	COL
6041764	156381783	25.88	25.88	180	ROW
6041764	1170620892	193.75	193.75	270	BLOCK
6041764	283111260	46.85	46.85	270	COL
6041764	279845053	46.32	46.32	270	ROW

SIZE	TOTAL TIME	TIME/PIXEL	INSTRUCTIONS/PIXEL	ROTATION	MAP
376996	58922608	156.29	156.29	90	BLOCK
376996	19299028	51.19	51.19	90	COL
376996	12981181	34.43	34.43	90	ROW
376996	61751699	163.79	163.79	180	BLOCK
376996	22192149	58.87	58.87	180	COL
376996	10557107	28.00	28.00	180	ROW
376996	65231365	173.03	173.03	270	BLOCK

376996	15843527	42.03	42.03	270	COL
376996	13284811	53.24	53.24	270	ROW

SIZE	TOTAL TIME	TIME/PIXEL	INSTRUCTIONS/PIXEL	ROTATION	MAP
14745600	2995090940	203.18	203.18	90	BLOCK
14745600	873554626	59.24	59.24	90	COL
14745600	689963614	46.79	46.79	90	ROW
14745600	3010248335	204.15	204.15	180	BLOCK
14745600	1039899199	70.52	70.52	180	COL
14745600	374659737	25.41	25.41	180	ROW
14745600	3042194011	206.31	206.31	270	BLOCK
14745600	700644708	47.52	47.52	270	COL
14745600	706817517	47.93	47.93	270	ROW

Calculations made on Halligan Dell computer

Model : 60

Model Name : Intel® Core™ i5-4590 CPU @ 3.30GHz

Mapping by blocks is fastest on a 90 degree rotation, followed by 180 degrees and finally slowest on 270 degrees. Mapping by rows is fastest on 180, which is also the fastest map among all maps and rotations, followed by 90 and then 270. Mapping by columns is fastest on 270 degrees, followed by 90 degrees, and finally 180 degrees. Mapping by column only beats row on rotations of 270 degrees but other than that mapping by row is the fastest map. In terms of what we expected, row major and column major perform as we predicted relative to one another. Block major however, performs slower than we had predicted. This may be because we have implemented it incorrectly or because our predictions were incorrect.