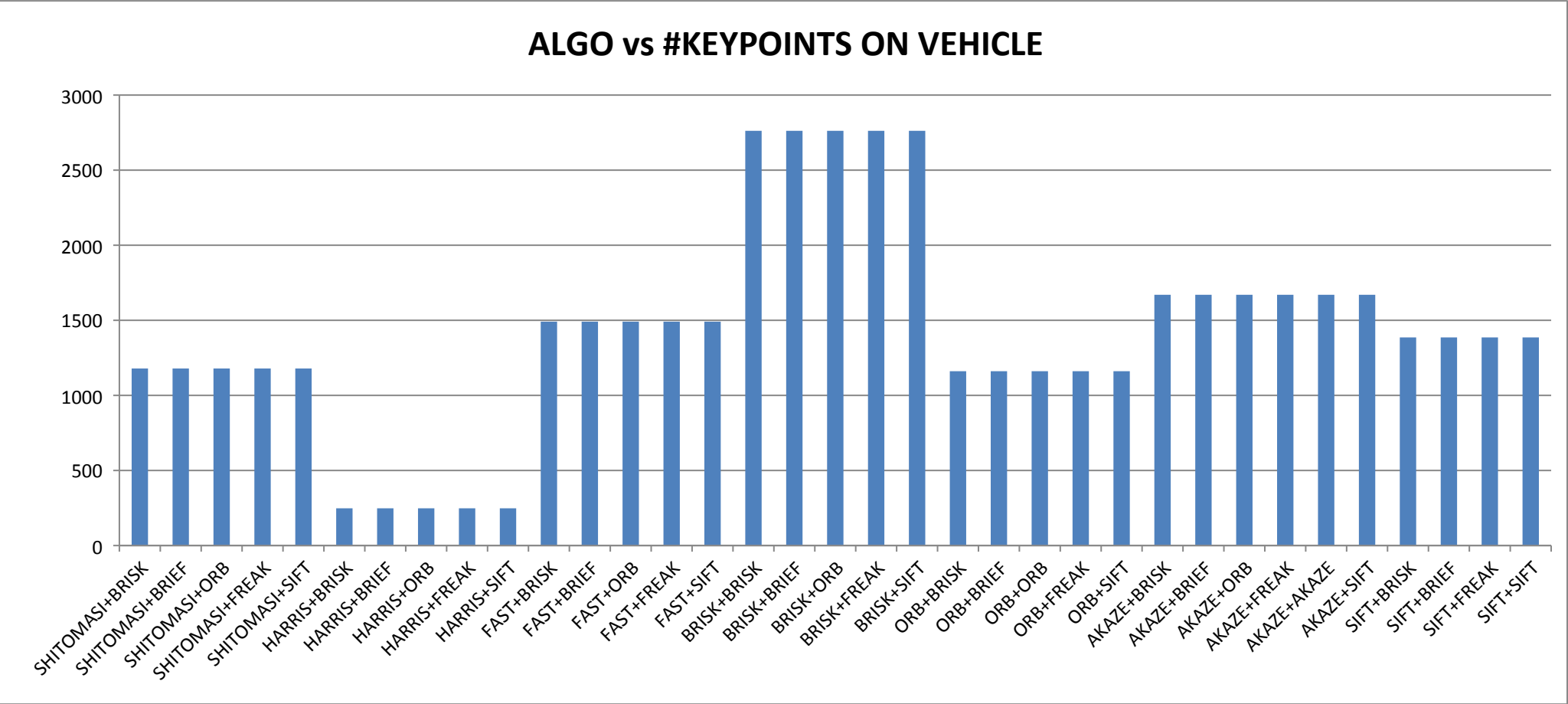


ALGO COMBO	#KEYPOINTS	#KEYPOINTS ON VEHICLE	#DESCRIPTORS	#MATCHED KEYPOINTS	DETECTOR & DESCRIPTOR TIME(ms)	TOTAL TIME ELAPSED(ms)
SHITOMASI+BRISK	13423	1179	75456	767	224.184	1258.95
SHITOMASI+BRIEF	13423	1179	37728	944	200.885	1092.15
SHITOMASI+ORB	13423	1179	37728	908	215.292	1186.8
SHITOMASI+FREAK	13423	1179	75456	768	648.262	3628.82
SHITOMASI+SIFT	13423	1179	150912	927	345.826	1913.02
HARRIS+BRISK	1737	248	15872	142	173.661	905.608
HARRIS+BRIEF	1737	248	7936	173	167.528	884.861
HARRIS+ORB	1737	248	7936	162	177.636	938.225
HARRIS+FREAK	1737	248	15872	144	658.773	3552.63
HARRIS+SIFT	1737	248	31744	163	346.98	1854.71
FAST+BRISK	17874	1491	95424	899	34.8963	206.295
FAST+BRIEF	17874	1491	47712	1099	19.6583	116.758
FAST+ORB	17874	1491	47712	1071	22.1472	128.219
FAST+FREAK	17874	1491	95424	878	532.798	2945.65
FAST+SIFT	17874	1491	190848	1046	339	1841.89
BRISK+BRISK	27116	2762	176768	1570	517.705	2870.6
BRISK+BRIEF	27116	2762	88384	1704	493.556	2754.17
BRISK+ORB	27116	2762	88384	1514	538.139	2984.75
BRISK+FREAK	27116	2762	164032	1524	1000.74	5534.56
BRISK+SIFT	27116	2762	353536	1646	1174.22	6563.78
ORB+BRISK	5000	1161	68480	751	108.702	611.683
ORB+BRIEF	5000	1161	37152	545	97.5069	539.106
ORB+ORB	5000	1161	37152	763	142.137	782.61
ORB+FREAK	5000	1161	39680	420	588.445	3231.43
ORB+SIFT	5000	1161	148608	763	874.398	4616.1
AKAZE+BRISK	13429	1670	106880	1215	1207.93	6644.78
AKAZE+BRIEF	13429	1670	53440	1266	1239.98	6710.97
AKAZE+ORB	13429	1670	53440	1182	1229.72	6790.82
AKAZE+FREAK	13429	1670	106880	1187	1746.5	9505.76
AKAZE+AKAZE	13429	1670	101870	1259	2336.14	12692.6
AKAZE+SIFT	13429	1670	213760	1270	1636.79	8822.25
SIFT+BRISK	13862	1386	88640	592	1767.71	9764.66
SIFT+BRIEF	13862	1386	44352	702	1706.95	9357.13
SIFT+FREAK	13862	1386	87936	593	2214.17	12202.5
SIFT+SIFT	13862	1386	177408	800	2535.73	14354.3

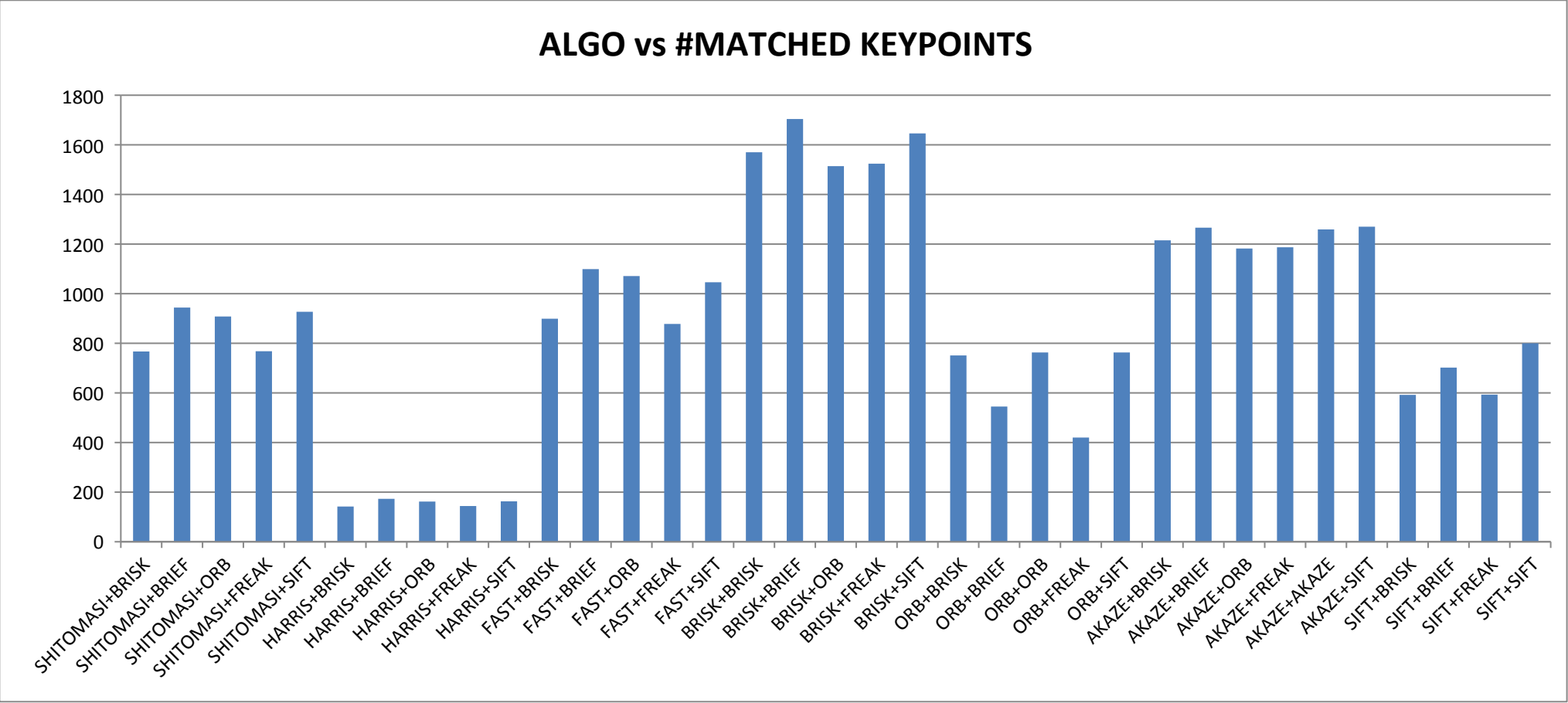
ALGO COMBO

SHITOMASI+BRISK	1179
SHITOMASI+BRIEF	1179
SHITOMASI+ORB	1179
SHITOMASI+FREAK	1179
SHITOMASI+SIFT	1179
HARRIS+BRISK	248
HARRIS+BRIEF	248
HARRIS+ORB	248
HARRIS+FREAK	248
HARRIS+SIFT	248
FAST+BRISK	1491
FAST+BRIEF	1491
FAST+ORB	1491
FAST+FREAK	1491
FAST+SIFT	1491
BRISK+BRISK	2762
BRISK+BRIEF	2762
BRISK+ORB	2762
BRISK+FREAK	2762
BRISK+SIFT	2762
ORB+BRISK	1161
ORB+BRIEF	1161
ORB+ORB	1161
ORB+FREAK	1161
ORB+SIFT	1161
AKAZE+BRISK	1670
AKAZE+BRIEF	1670
AKAZE+ORB	1670
AKAZE+FREAK	1670
AKAZE+AKAZE	1670
AKAZE+SIFT	1670
SIFT+BRISK	1386
SIFT+BRIEF	1386
SIFT+FREAK	1386
SIFT+SIFT	1386

#KEYPOINTS ON VEHICLE



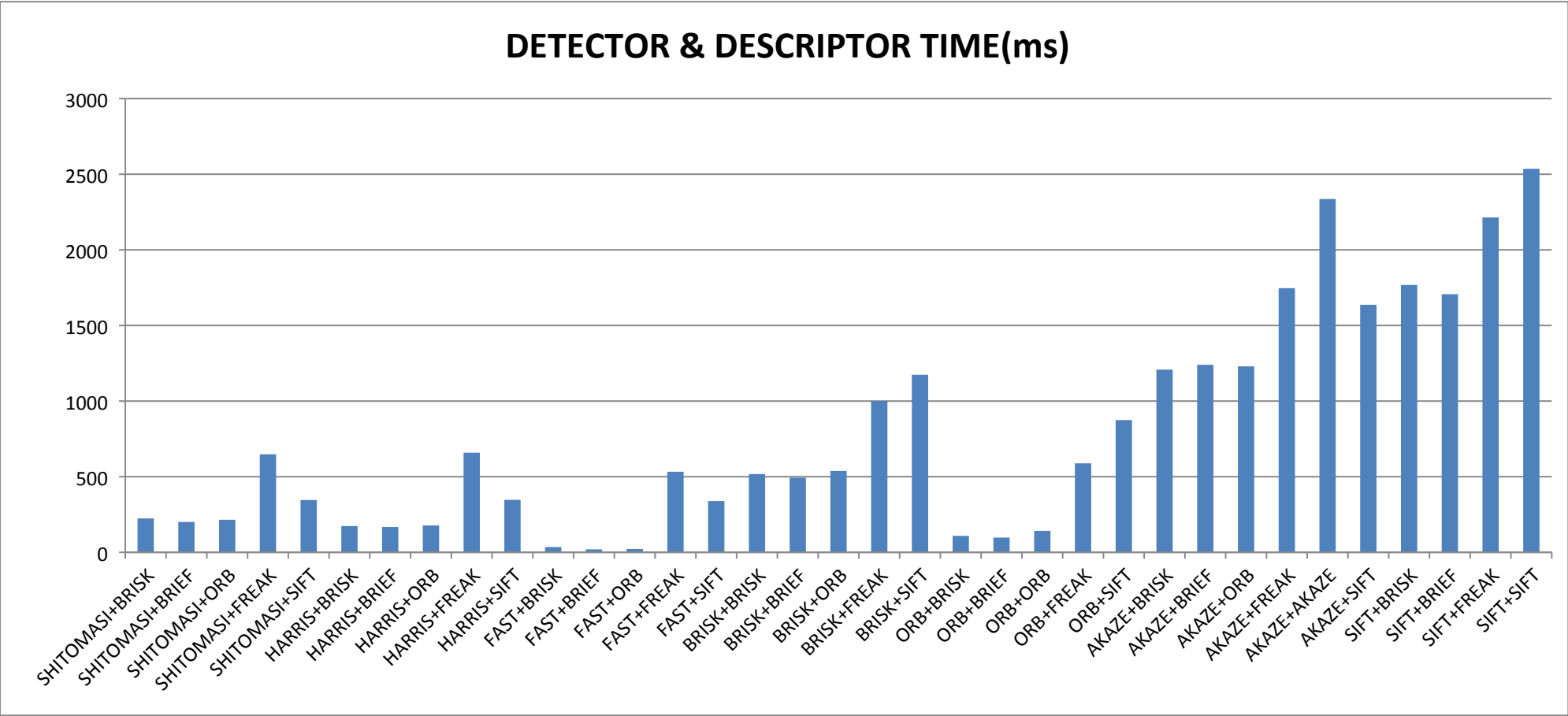
ALGO COMBO	#MATCHED KEYPOINTS
SHITOMASI+BRISK	767
SHITOMASI+BRIEF	944
SHITOMASI+ORB	908
SHITOMASI+FREAK	768
SHITOMASI+SIFT	927
HARRIS+BRISK	142
HARRIS+BRIEF	173
HARRIS+ORB	162
HARRIS+FREAK	144
HARRIS+SIFT	163
FAST+BRISK	899
FAST+BRIEF	1099
FAST+ORB	1071
FAST+FREAK	878
FAST+SIFT	1046
BRISK+BRISK	1570
BRISK+BRIEF	1704
BRISK+ORB	1514
BRISK+FREAK	1524
BRISK+SIFT	1646
ORB+BRISK	751
ORB+BRIEF	545
ORB+ORB	763
ORB+FREAK	420
ORB+SIFT	763
AKAZE+BRISK	1215
AKAZE+BRIEF	1266
AKAZE+ORB	1182
AKAZE+FREAK	1187
AKAZE+AKAZE	1259
AKAZE+SIFT	1270
SIFT+BRISK	592
SIFT+BRIEF	702
SIFT+FREAK	593
SIFT+SIFT	800



ALGO COMBO

SHITOMASI+BRISK	224.184
SHITOMASI+BRIEF	200.885
SHITOMASI+ORB	215.292
SHITOMASI+FREAK	648.262
SHITOMASI+SIFT	345.826
HARRIS+BRISK	173.661
HARRIS+BRIEF	167.528
HARRIS+ORB	177.636
HARRIS+FREAK	658.773
HARRIS+SIFT	346.98
FAST+BRISK	34.8963
FAST+BRIEF	19.6583
FAST+ORB	22.1472
FAST+FREAK	532.798
FAST+SIFT	339
BRISK+BRISK	517.705
BRISK+BRIEF	493.556
BRISK+ORB	538.139
BRISK+FREAK	1000.74
BRISK+SIFT	1174.22
ORB+BRISK	108.702
ORB+BRIEF	97.5069
ORB+ORB	142.137
ORB+FREAK	588.445
ORB+SIFT	874.398
AKAZE+BRISK	1207.93
AKAZE+BRIEF	1239.98
AKAZE+ORB	1229.72
AKAZE+FREAK	1746.5
AKAZE+AKAZE	2336.14
AKAZE+SIFT	1636.79
SIFT+BRISK	1767.71
SIFT+BRIEF	1706.95
SIFT+FREAK	2214.17
SIFT+SIFT	2535.73

DETECTOR & DESCRIPTOR TIME(ms)



ALGO_COMBO	RANK_MatchedKpts	RANK_Time	Overall_RANK
FAST+BRIEF	12	1	13
FAST+ORB	13	2	15
BRISK+BRIEF	1	16	17
BRISK+BRISK	3	17	20
FAST+BRISK	18	3	21
BRISK+ORB	5	19	24
SHITOMASI+BRIEF	15	10	25
BRISK+SIFT	2	25	27
FAST+SIFT	14	13	27
BRISK+FREAK	4	24	28
SHITOMASI+ORB	17	11	28
ORB+ORB	23	6	29
ORB+BRISK	25	5	30
SHITOMASI+SIFT	16	14	30
ORB+BRIEF	29	4	33
SHITOMASI+BRISK	22	12	34
AKAZE+BRIEF	7	28	35
AKAZE+BRISK	9	26	35
AKAZE+SIFT	6	29	35
FAST+FREAK	19	18	37
AKAZE+ORB	11	27	38
HARRIS+BRIEF	31	7	38
AKAZE+FREAK	10	31	41
AKAZE+AKAZE	8	34	42
HARRIS+ORB	33	9	42
SHITOMASI+FREAK	21	21	42
HARRIS+BRISK	35	8	43
HARRIS+SIFT	32	15	47
ORB+SIFT	24	23	47
ORB+FREAK	30	20	50
SIFT+SIFT	20	35	55
HARRIS+FREAK	34	22	56
SIFT+BRIEF	26	30	56
SIFT+BRISK	28	32	60
SIFT+FREAK	27	33	60