

/proc/cpuinfo Intel(R) Core(TM) i7-7700HQ CPU @ 2.80GHz  
cache size : 6144 KB

gcc -m32 -O3 pop\_count.c -o popcount  
for (( i=0;i<11;i++ ));do echo \$i; ./popcount; done | pr -11 -l 20 -w 80  
Hacemos 11 mediciones porque la primera siempre sale mal

Antonio Jesus Heredia Castillo

### POPCOUNT

Optimizacion 0	0	1	2	3	4	5	6	7	8	9	10	media
popcount1	72525	70079	68619	68838	69744	70901	69805	68291	70498	69427	70903	69705,0037271215
popcount2	35934	35482	35684	35461	36146	36631	36119	36264	37639	35922	36231	36152,9045843329
popcount3	10136	10129	10234	10305	10377	10348	11406	10038	12354	10258	10369	10560,818872501
popcount4	17724	17414	17362	18199	17743	18038	17823	17834	18167	17550	17668	17777,6296636577
popcount5	631	633	834	646	679	655	702	636	701	642	661	676,7312139838
Optimizacion 1	0	1	2	3	4	5	6	7	8	9	10	
popcount1	23548	20752	19957	19753	19443	18810	19574	19640	18936	19083	19034	19490,4846277875
popcount2	8036	7385	7359	7329	8451	7009	7436	7235	7096	7395	7219	7382,4156405529
popcount3	9325	9676	9995	9327	9919	9496	9599	9559	9521	9589	9345	9600,4212021588
popcount4	4023	4046	3964	3935	4312	4064	4131	3959	3761	3920	4111	4017,8288106427
popcount5	389	393	395	361	514	455	454	430	416	374	402	417,2714449944
Optimizacion 2	0	1	2	3	4	5	6	7	8	9	10	
popcount1	14211	12931	11742	11681	11755	11829	11758	11910	11876	11970	11785	11918,9062024708
popcount2	7763	7342	7418	7095	7315	7315	7271	7384	7114	7209	7248	7270,3868083148
popcount3	12660	12006	11296	11601	11318	11277	11337	11329	11569	11404	11825	11493,771585905
popcount4	4957	5069	5118	5199	5064	5162	4960	4949	4960	5094	4892	5045,7767156077
popcount5	384	348	348	369	367	374	349	406	350	402	371	367,8529123826

POPCOUNT	-O0	-O1	-O2
popcount1	69705,0037	19490,4846	11918,906
popcount2	36152,9046	7382,41564	7270,3868
popcount3	10560,8189	9600,4212	11493,772
popcount4	17777,6297	4017,82881	5045,7767
popcount5	676,731214	417,271445	367,85291

