

/proc/cpuinfo

AMD E1-1200 APU with Radeon(tm) HD Graphics 512 KB  
cache size: 512 KB

**POPcount:** gcc -m32 popcount.c -o popcount -O<n>  
for((i=0;i<11;i++));do echo \$i; ./popcount;done |pr -11 -l 20 -w 80  
ignorar medición, repetir columna si alguna medición se sale demasiado de la media

Optimización -O0	0	1	2	3	4	5	6	7	8	9	10	media
popcount1 (lenguaje C- for)	395743	395188	394874	394856	394790	394524	394767	394447	395000	395056	395093	395140,5
popcount2 (lenguaje C- while)	218972	218701	218534	218508	219547	218726	219198	219041	219068	219997	218424	218562,5
popcount3 (leng.ASM -cuerpo while)	50976	50939	50876	50974	50931	50915	50917	50891	50907	50946	50903	50921
popcount4 (ICS:APP 3,49-group 8b)	129800	129417	130014	130069	130856	130424	129522	129675	129311	129968	129752	129584,5
popcount5 (asm SSE3 – pshufb 128b)	7770	7743	7725	7696	7736	7704	7729	7707	7735	7743	7725	7734
popcount6 (asm SSE4 – popcount 32b)	21935	21850	21513	21585	22070	22173	21797	23166	21998	21887	21907	21878,5
popcount7 (asm SSE4 – popcnt 2x32b)	16276	16212	16216	16241	16191	16189	16203	16216	16182	16182	16145	16178,5

Optimización -O1	0	1	2	3	4	5	6	7	8	9	10	media
popcount1 (lenguaje C- for)	89515	89346	89346	90841	89510	89469	89403	89542	89476	89426	89455	89400,5
popcount2 (lenguaje C- while)	45004	44826	44921	44912	45063	44876	45019	44869	44932	44895	44909	44867,5
popcount3 (leng.ASM -cuerpo while)	43862	44109	44076	44730	45101	44352	44144	44980	44113	44126	44071	44090
popcount4 (ICS:APP 3,49-group 8b)	40319	40346	40311	40416	40508	40386	40375	40359	40378	40416	40416	40381
popcount5 (asm SSE3 – pshufb 128b)	4464	4437	4422	4436	4482	4436	4428	4473	4485	4465	4434	4435,5
popcount6 (asm SSE4 – popcount 32b)	6284	6270	6338	6295	6344	6300	6333	6297	6321	6302	6268	6269
popcount7 (asm SSE4 – popcnt 2x32b)	5583	5593	5549	5646	5553	5598	5556	5590	5540	5590	5622	5607,5

Optimización -O2	0	1	2	3	4	5	6	7	8	9	10	media
popcount1 (lenguaje C- for)	88656	88349	87820	87859	87797	87839	87827	87807	87805	87905	87768	88058,5
popcount2 (lenguaje C- while)	38716	38572	38541	38574	38589	38541	38553	38582	38552	38574	38592	38582
popcount3 (leng.ASM -cuerpo while)	44264	43981	44520	43540	44038	43767	43770	43766	43790	43985	43862	43921,5
popcount4 (ICS:APP 3,49-group 8b)	39585	39571	39528	39529	39682	39517	39616	39592	39540	39532	39546	39558,5
popcount5 (asm SSE3 – pshufb 128b)	4451	4433	4484	4430	4439	4459	4438	4437	4466	4426	4435	4434
popcount6 (asm SSE4 – popcount 32b)	6309	6273	6302	6306	6328	6279	6313	6273	6281	6311	6272	6272,5
popcount7 (asm SSE4 – popcnt 2x32b)	5549	5585	5557	5550	5530	5575	5552	5589	5576	5564	5587	5586

POPcount	O0	O1	O2
popcount1	395140,5	89400,5	88058,5
popcount2	218562,5	44867,5	38582
popcount3	50921	44090	43921,5
popcount4	129584,5	40381	39558,5
popcount5	7734	4435,5	4434
popcount6	21878,5	6269	6272,5
popcount7	16178,5	5607,5	5586

