

/proc/cpuinfo

Intel(R) Core(TM) i5-4460 CPU @ 3.20GHz  
cache size : 6144 KB

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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 0, 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):	75123	71990	71719	71732	72330	71576	72835	72642	72006	71987	71667	72048.4
popcount2 (lenguaje C – while):	49356	49428	49819	50650	49240	40062	50225	50711	49632	49371	39382	47852
popcount3 (leng.AMS – cuerpo while):	12624	12573	12625	12703	12606	12582	12746	13347	12623	12614	12577	12699.6
popcount4 (len.CS:APP 3.49-group 8b)	20163	20158	20167	20175	20164	20357	20540	20446	20268	20158	20162	20259.5
popcount5 (asm SSE3 - pshufb 128b)	827	825	829	826	831	831	828	836	831	830	829	829.6
popcount6 (asm SSE4 - popcount 32b)	2736	2734	2737	2737	2736	2891	2756	2759	2735	2738	2736	2755.9
popcount7 (asm SSE4 - popcnt 2x32b)	1679	1679	1680	1679	1682	1680	1703	1679	1681	1680	1677	1682

Optimización -O1	0	1	2	3	4	5	6	7	8	9	10	media
popcount1 (lenguaje C – for):	23608	20902	20664	20632	20836	20701	20828	20861	20683	21116	20818	20804.1
popcount2 (lenguaje C – while):	10385	10011	9859	10101	10605	9884	10238	11078	10016	10214	9459	10146.5
popcount3 (leng.AMS – cuerpo while):	10304	10258	10305	10286	10277	10263	10279	10275	10304	10280	10278	10280.5
popcount4 (len.CS:APP 3.49-group 8b)	5923	5883	5886	5883	5886	5886	5884	5885	5884	5883	5885	5884.5
popcount5 (asm SSE3 - pshufb 128b)	392	392	395	398	393	391	392	390	393	388	390	392.2
popcount6 (asm SSE4 - popcount 32b)	456	461	459	453	454	456	453	454	450	454	456	455
popcount7 (asm SSE4 - popcnt 2x32b)	943	942	945	939	938	938	941	942	939	937	940	940.1

Optimización -O2	0	1	2	3	4	5	6	7	8	9	10	media
popcount1 (lenguaje C – for):	16937	15812	15496	15542	15575	15551	15596	15512	15513	15497	15504	15559.8
popcount2 (lenguaje C – while):	8356	9344	7859	8534	8427	8327	8361	8493	9052	8040	7893	8433
popcount3 (leng.AMS – cuerpo while):	12871	12384	12387	12383	12381	12382	12381	12461	12383	12382	12383	12390.7
popcount4 (len.CS:APP 3.49-group 8b)	6336	6193	6193	6193	6126	6174	6137	6174	6157	6189	6153	6168.9
popcount5 (asm SSE3 - pshufb 128b)	408	390	395	391	393	390	390	392	390	389	388	390.8
popcount6 (asm SSE4 - popcount 32b)	470	458	456	455	454	455	455	455	458	457	456	455.9
popcount7 (asm SSE4 - popcnt 2x32b)	970	952	949	945	950	948	948	943	947	942	947	947.1

POPCOUNT:	-O0	-O1	-O2
popcount1	72048	20804.1	15559.8
popcount2	47852	10146.5	8433
popcount3	12700	10280.5	12390.7
popcount4	20260	5884.5	6168.9
popcount5	829.6	392.2	390.8
popcount6	2755.9	455	455.9
popcount7	1682	940.1	947.1



