

# Brief Article

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<b>Event Name</b>	<b>Naive</b>	<b>Interchanged</b>
cpu-cycles	547997864	385408603
instructions	931779569	873670026
cache-references	8320994	379814
cache-misses	27905	18545
branch-instructions	133776058	126115011
branch-misses	277424	256916
bus-cycles	0	0
L1-dcache-loads	240142105	243739176
L1-dcache-load-misses	54162900	7343843
L1-dcache-stores	9683369	125326167
L1-dcache-store-misses	290076	98819
LLC-loads	7231132	274505
LLC-load-misses	3056	4625
LLC-stores	259152	203242
LLC-store-misses	27378	14222
dTLB-load-misses	5896	9885
dTLB-store-misses	722	445
iTLB-load-misses	633	0
branch-loads	131571446	123282031
branch-load-misses	6534783	5270872

Table 1: Todos os contadores Naive

<b>EVENT NAME</b>	<b>NAIVE</b>	<b>INTERCHANGE</b>
Elapsed time (seconds)	0.189498719	0.144975696
Instructions per cycle	1.70 IPC	2.27 IPC
L1 cache miss ratio	0.2255	0.030
L1 cache miss rate PTI	58.13	7.88
Data TLB miss ratio	0.00071	0.026
Data TLB miss rate PTI	0.0063	0.011
Branch mispredict ratio	0.0021	0.00204
Branch mispredict rate PTI	0.29774	0.2940

Table 2: Todos os contadores Interchanged