CO LAB5 Ccahe說明文件 406410114 郭晏誠

1. Cache 3C Misses 圖表

(1) gcc.din 具有明顯的conflict曲線

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| file：gcc.din | replace policy :FIFO | | block size:8 |  |  |
| cache size\n-way | 1-way mr | 2-way mr | 4-way mr | 8-way mr | f-way mr |
| 8 cache size | 14.98% | 12.64% | 11.70% | 11.37% | 11.15% |
| 16 cache size | 9.26% | 7.27% | 6.26% | 6.06% | 5.94% |
| 32 cache size | 5.66% | 4.31% | 3.77% | 3.65% | 3.52% |
| 64 cache size | 4.12% | 3.11% | 2.92% | 2.85% | 2.83% |
| 128 cache size | 3.16% | 2.65% | 2.54% | 2.57% | 2.63% |
| 256 cache size | 2.65% | 2.37% | 2.28% | 2.23% | 2.20% |

(2)spice.din 到256cache size,2-way後可看出有明顯的Compulsory基本第一次miss的情況

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| file：spice.din | replace policy :FIFO | | block size:8 |  |  |
| cache size\n-way | 1-way mr | 2-way mr | 4-way mr | 8-way mr | f-way mr |
| 8 cache size | 7.79% | 5.10% | 4.10% | 3.71% | 3.52% |
| 16 cache size | 3.82% | 2.20% | 1.43% | 1.23% | 1.07% |
| 32 cache size | 1.75% | 1.13% | 0.97% | 0.89% | 0.88% |
| 64 cache size | 1.01% | 0.77% | 0.73% | 0.72% | 0.69% |
| 128 cache size | 0.90% | 0.71% | 0.70% | 0.69% | 0.69% |
| 256 cache size | 0.88% | 0.70% | 0.69% | 0.69% | 0.69% |