

2. 如果每次访问一行都出现 cache miss, 那么最佳性能

$$\frac{1 \text{ GHz} \times 4 \text{ word access}}{(3 + \cancel{6 \times 2 \times 100}) \text{ cycle DRAM latency}} = \frac{38.8}{10} \text{ MFLOPS}$$

如果每次访问一行都是 cache hit, 那么最佳性能

$$\frac{1 \text{ GHz} \times 4 \text{ word access}}{4 \text{ cycle DRAM latency}} = 1 \text{ GFLOPS}$$

$$3. \frac{1 \text{ GHz} \times 8 \text{ word access}}{(\cancel{100} + 3 + 4) \text{ cycle DRAM latency}} = 74.77 \text{ MFLOPS}$$