

Delivering more DRAM bandwidth

- **Independent DRAM controllers**

- Optimized DRAM paging
- Re-architect NB for higher BW
- Write bursting
- DRAM prefetcher
- Core prefetchers

- ▶ **Concurrency**
- ▶ **More DRAM banks**
 - ▶ reduces page conflicts
- ▶ **Longer burst length**
 - ▶ improves command efficiency