

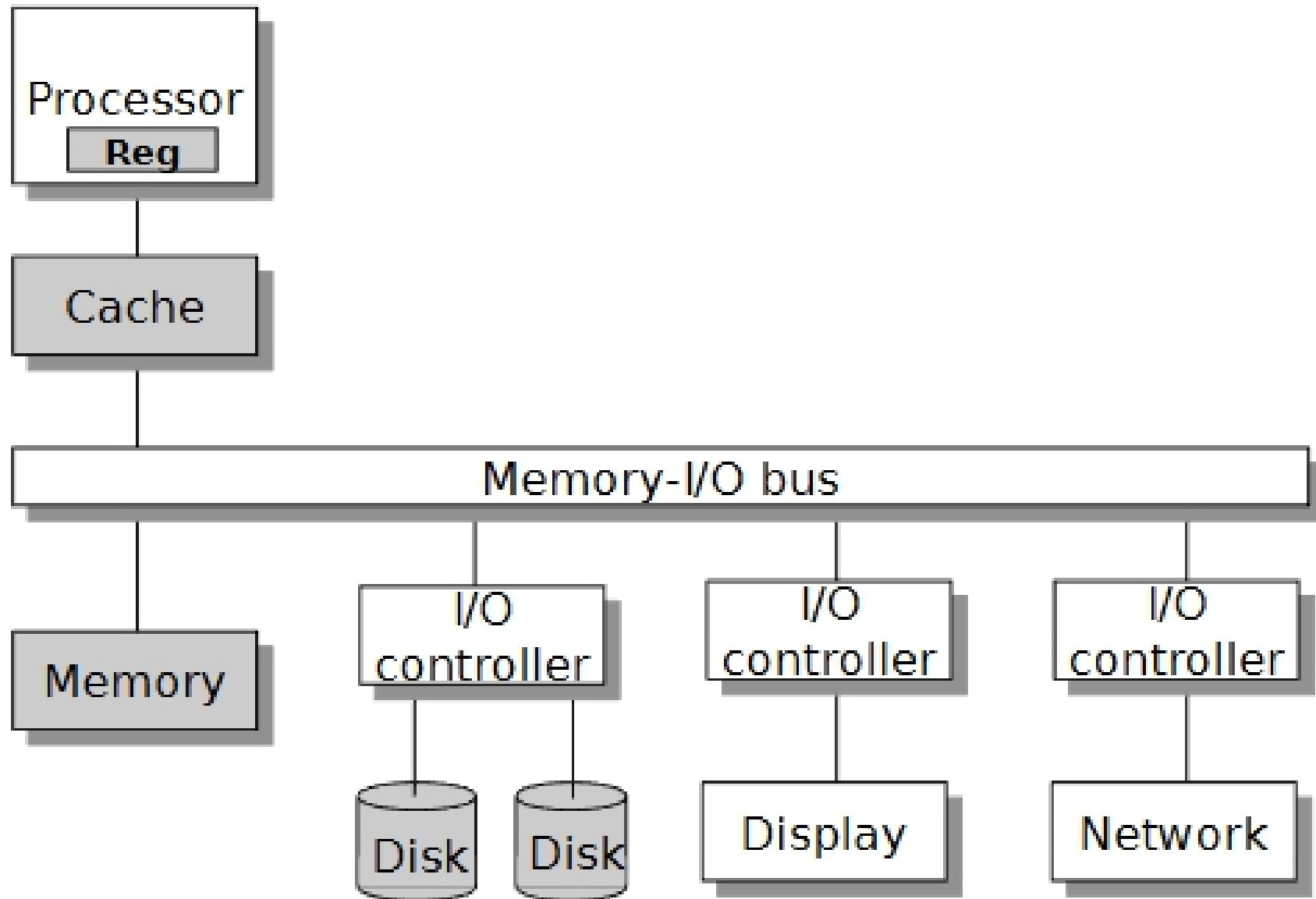
15-213

Memory Technology March 14, 2000

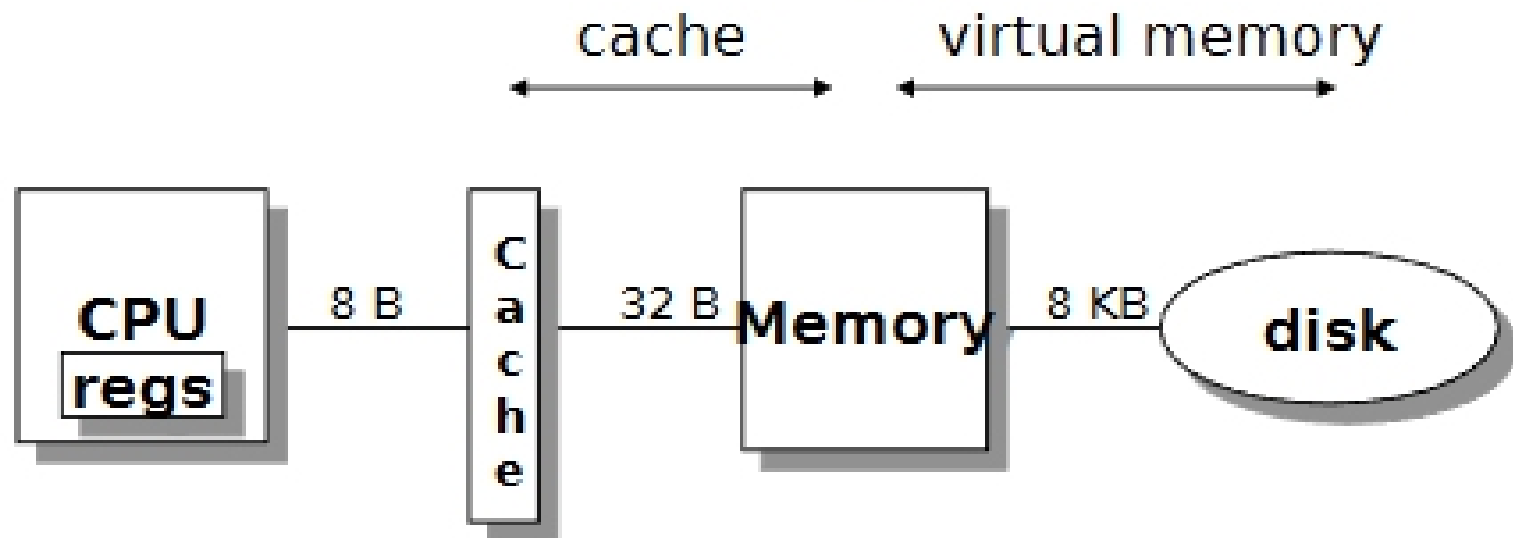
Topics

- Memory Hierarchy Basics
- Static RAM
- Dynamic RAM
- Magnetic Disks
- Access Time Gap

Computer System



Levels in Memory Hierarchy



	Register	Cache	Memory	Disk Memory
size:	200 B	32KB - 4MB	128 MB	20 GB
speed:	2 ns	4 ns	60 ns	8 ms
\$/Mbyte:		\$100/MB	\$1.50/MB	\$0.05/MB
block size:	8 B	32 B	8 KB	

larger, slower, cheaper

