

Types of Memory

■ Access

Access time = word select time + read/write time

- RAM(Random Access Memory)

: access time (FD, HD, RAM)

- SAM(Sequential Access Memory)

: access time word 가 (magnetic tape)

■

- Volatile memory()

: (RAM)

- Nonvolatile Memory()

: (FD, HD, ROM)

■ Read

- Destructive read-out memory

: Read

- Nondestructive read-out memory

Types of Memory

■ Operation

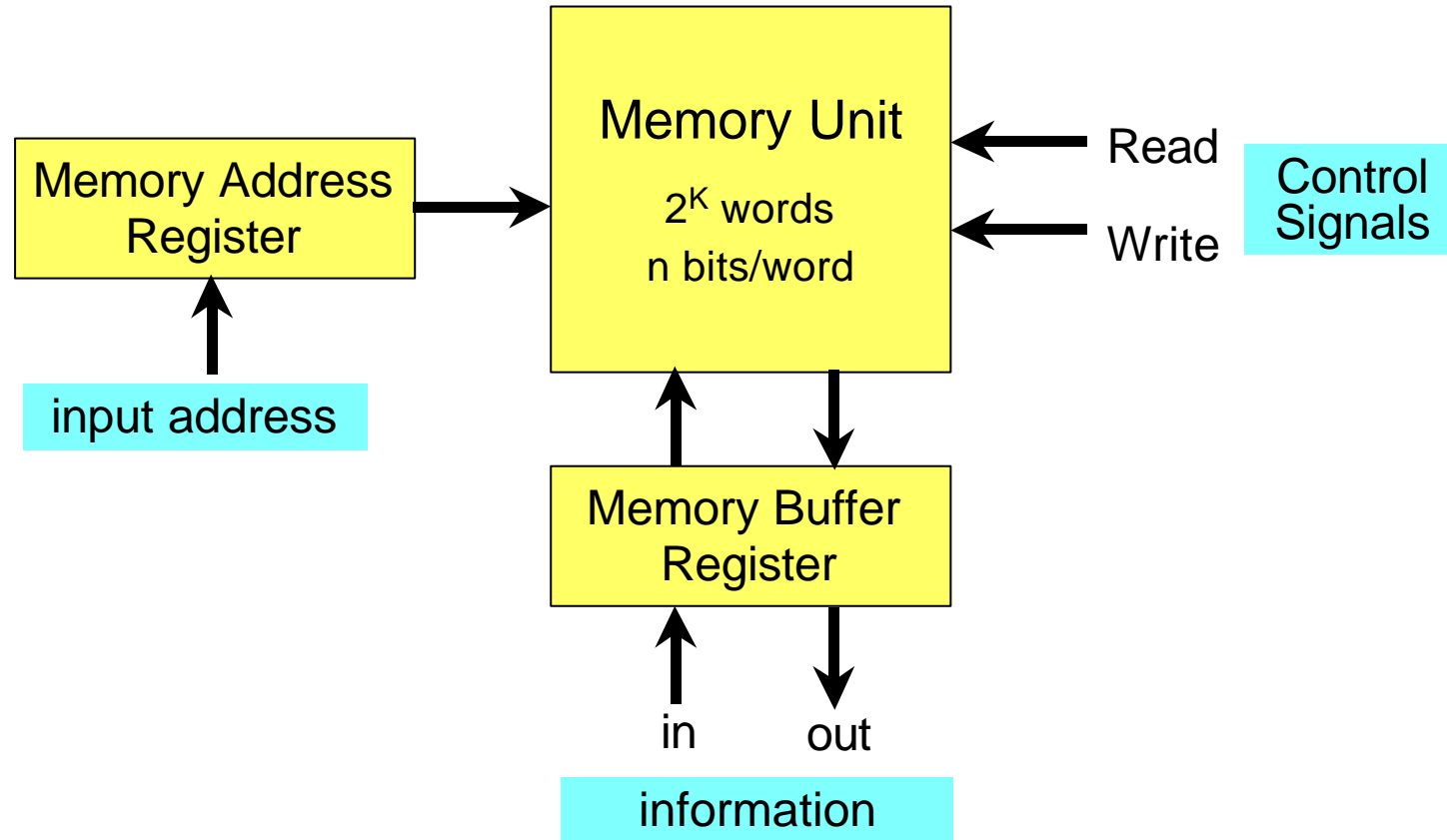
- Static RAM (SRAM)

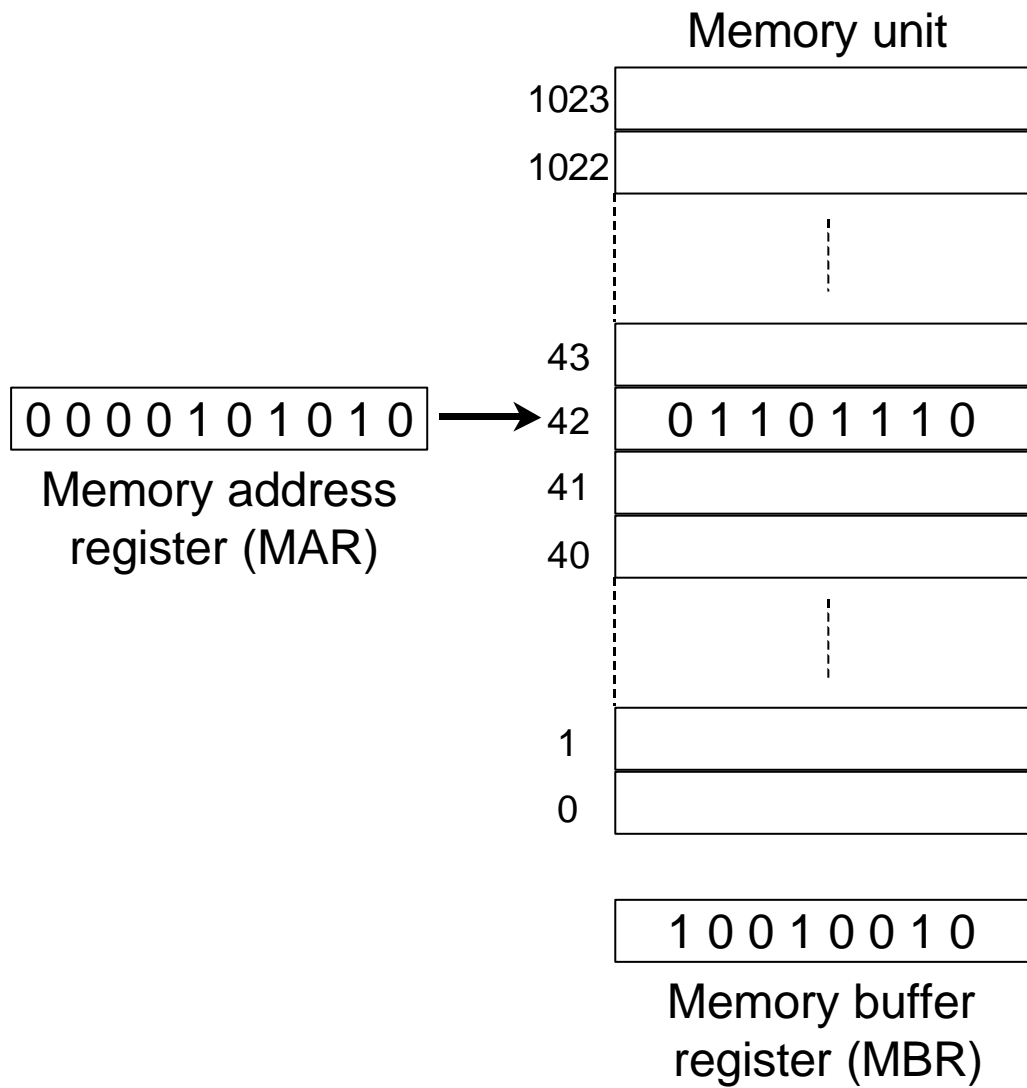
- Flip-flop binary
- power가
- Read/Write time
- Cashe memory

- Dynamic RAM (DRAM)

- Capacitor binary
- msec refreshing()
- Power 가
- Memory 가 (Bit transistor 가)

Random Access Memory

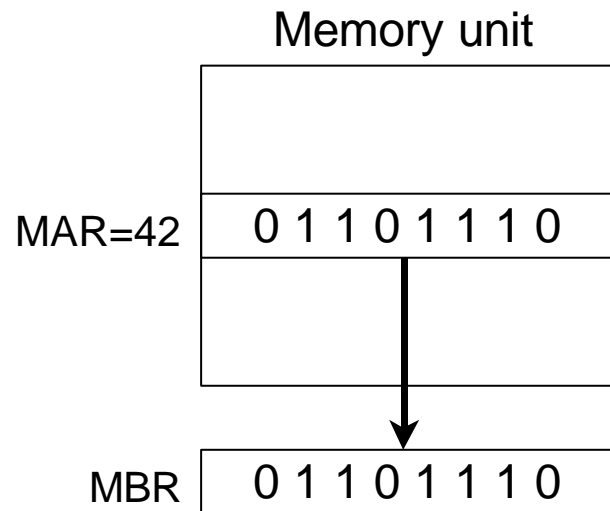




Read/Write Operation

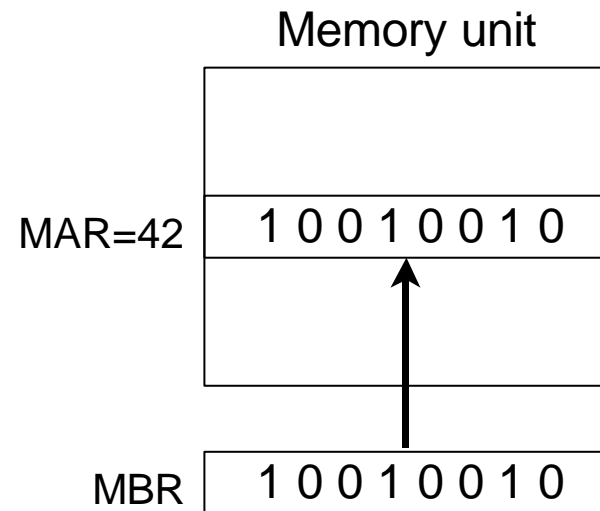
■ Read operation

- Address MAR load
- Read control signal 가



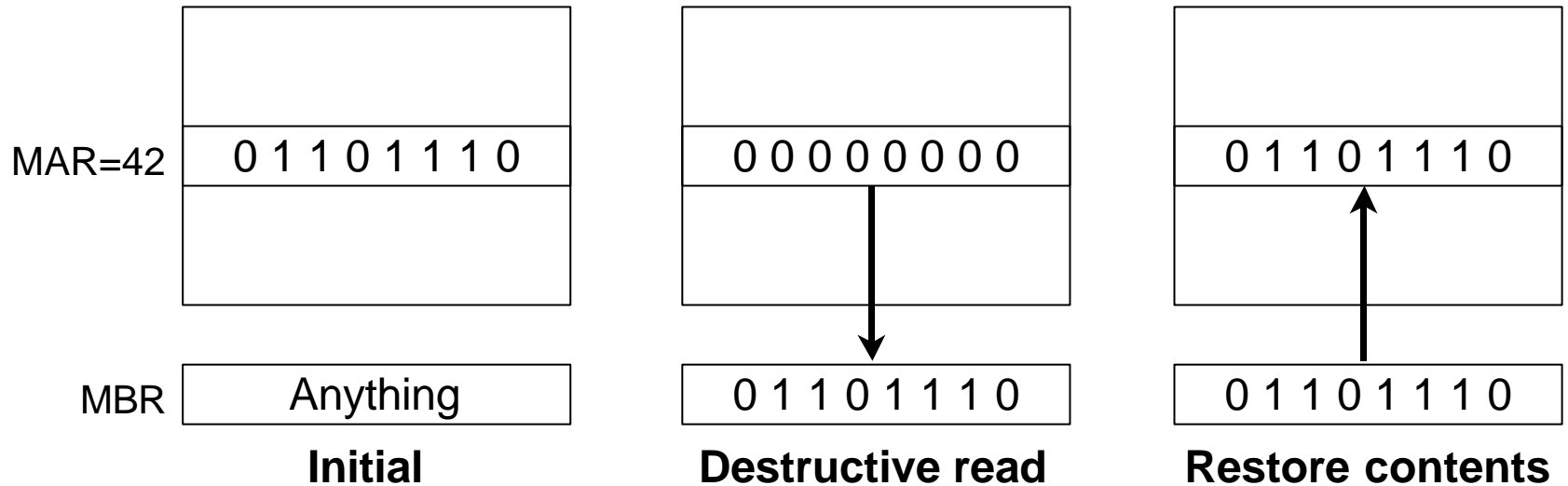
■ Write operation

- Address MAR load
- Data MBR load
- Write control signal 가

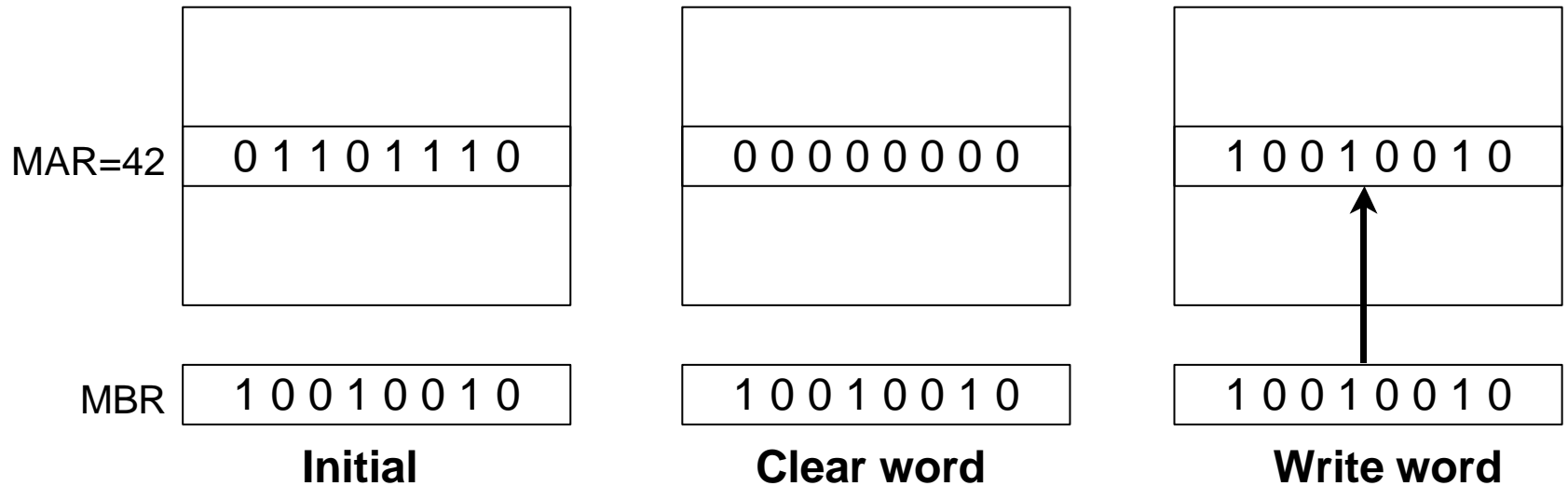


Read/Write Operation in Magnetic Core Memory

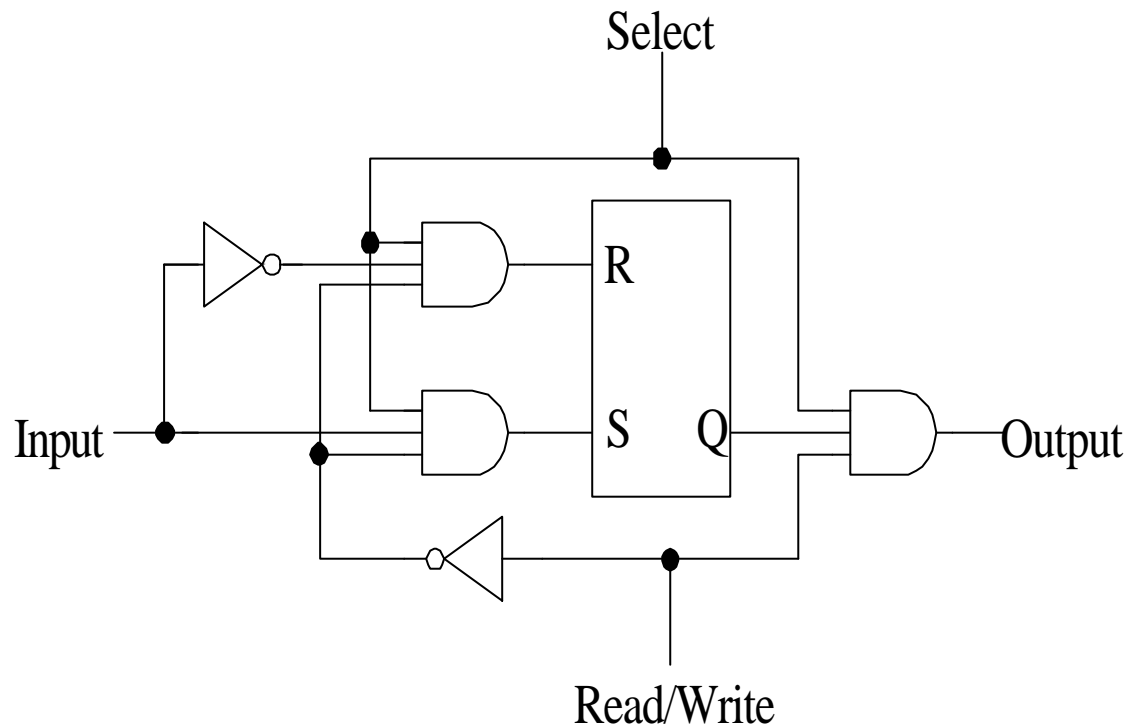
Read



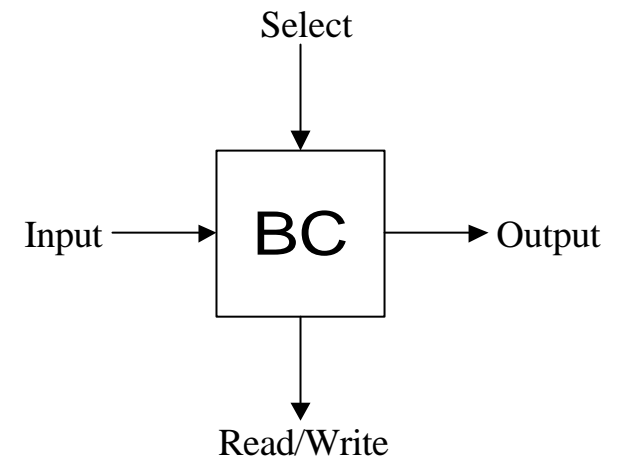
Write



IC Memory Cell



Logic Diagram



Block Diagram

4x3 RAM

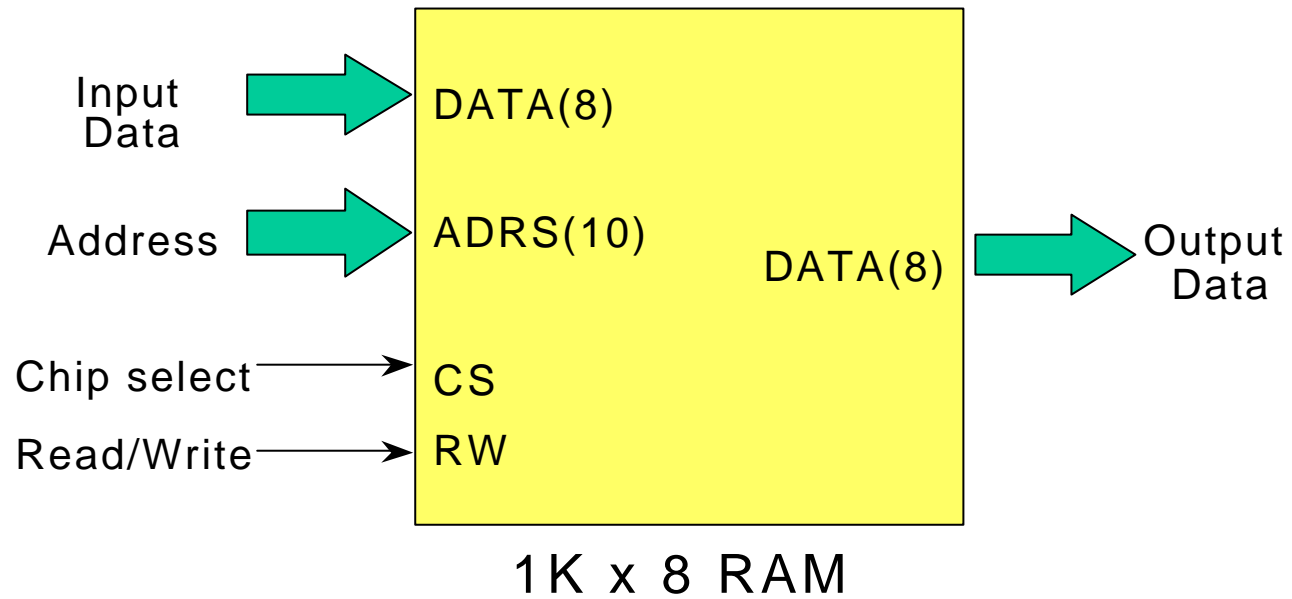
Refer to Vert07.ppt !!

Magnetic Core Memory

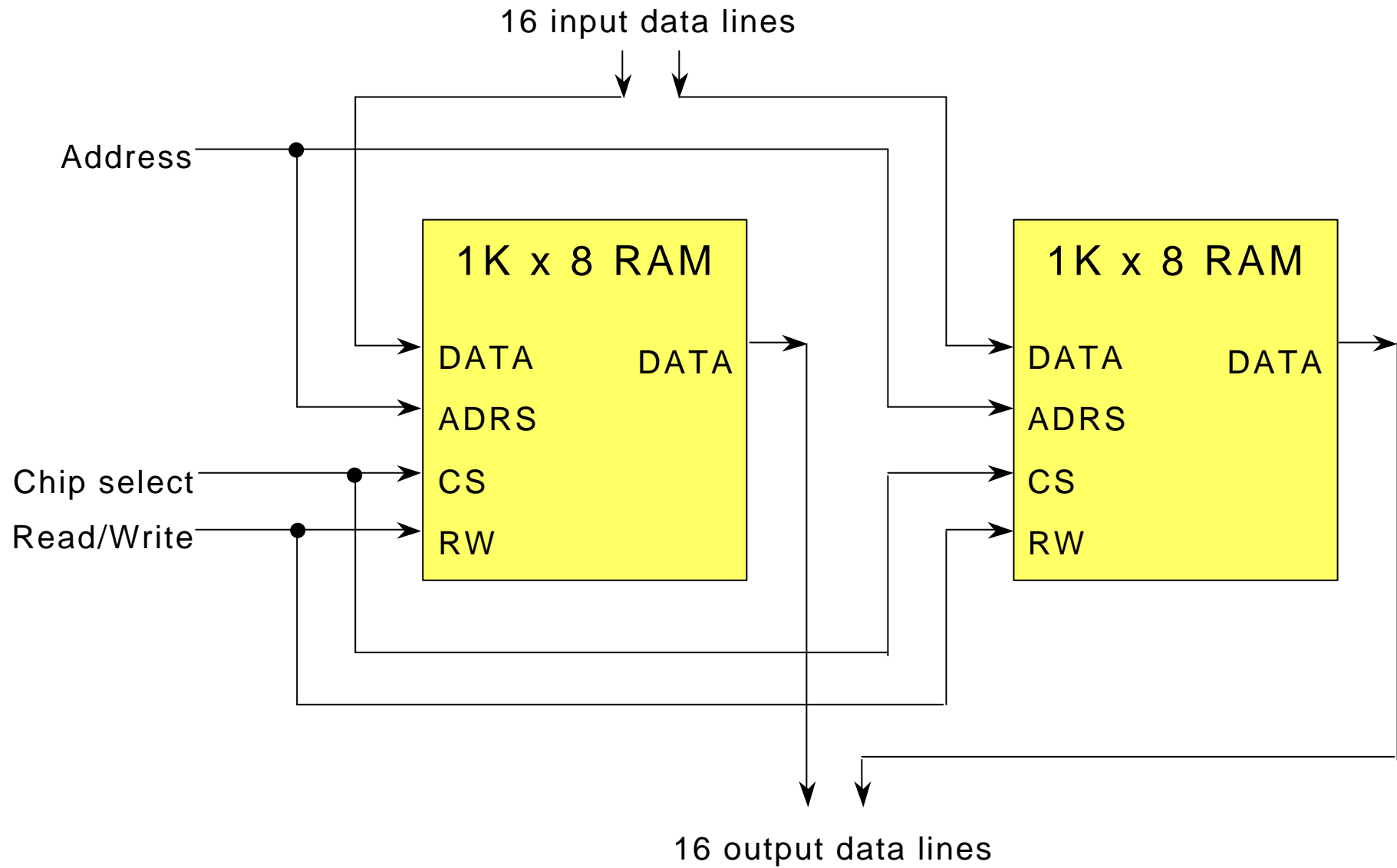
4x3 Magnetic Core Memory

Refer to Vert07.ppt !!

1Kx8 RAM



1Kx16 RAM



4Kx8 RAM

Refer to Vert07.ppt !!