

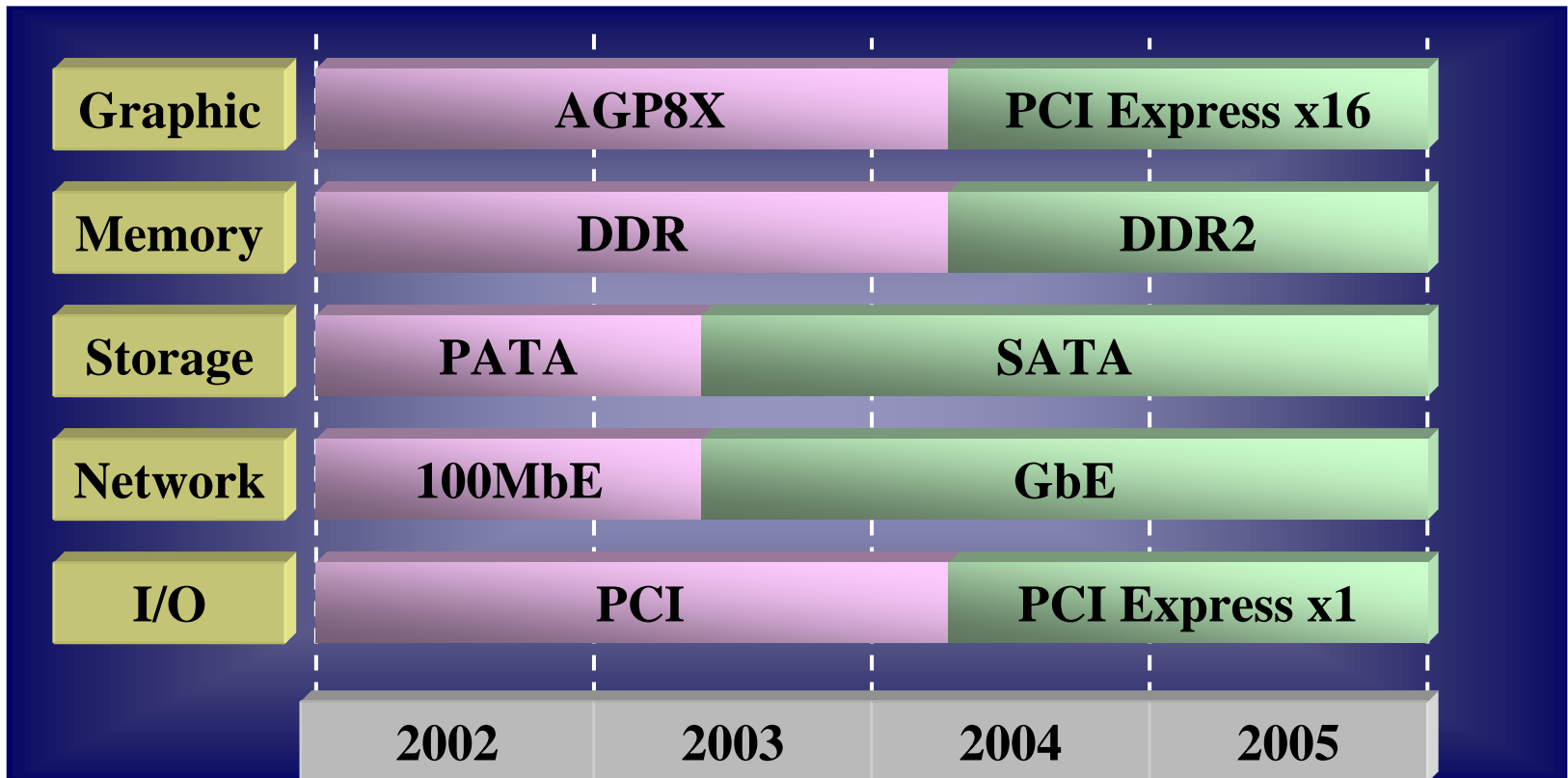
*SiS656/965*

*~ Leading Edge P4 Chipset ~*

**Technical Marketing Dept.  
Computing Product Division.  
Silicon Integrated Systems Corp.  
February, 2004**

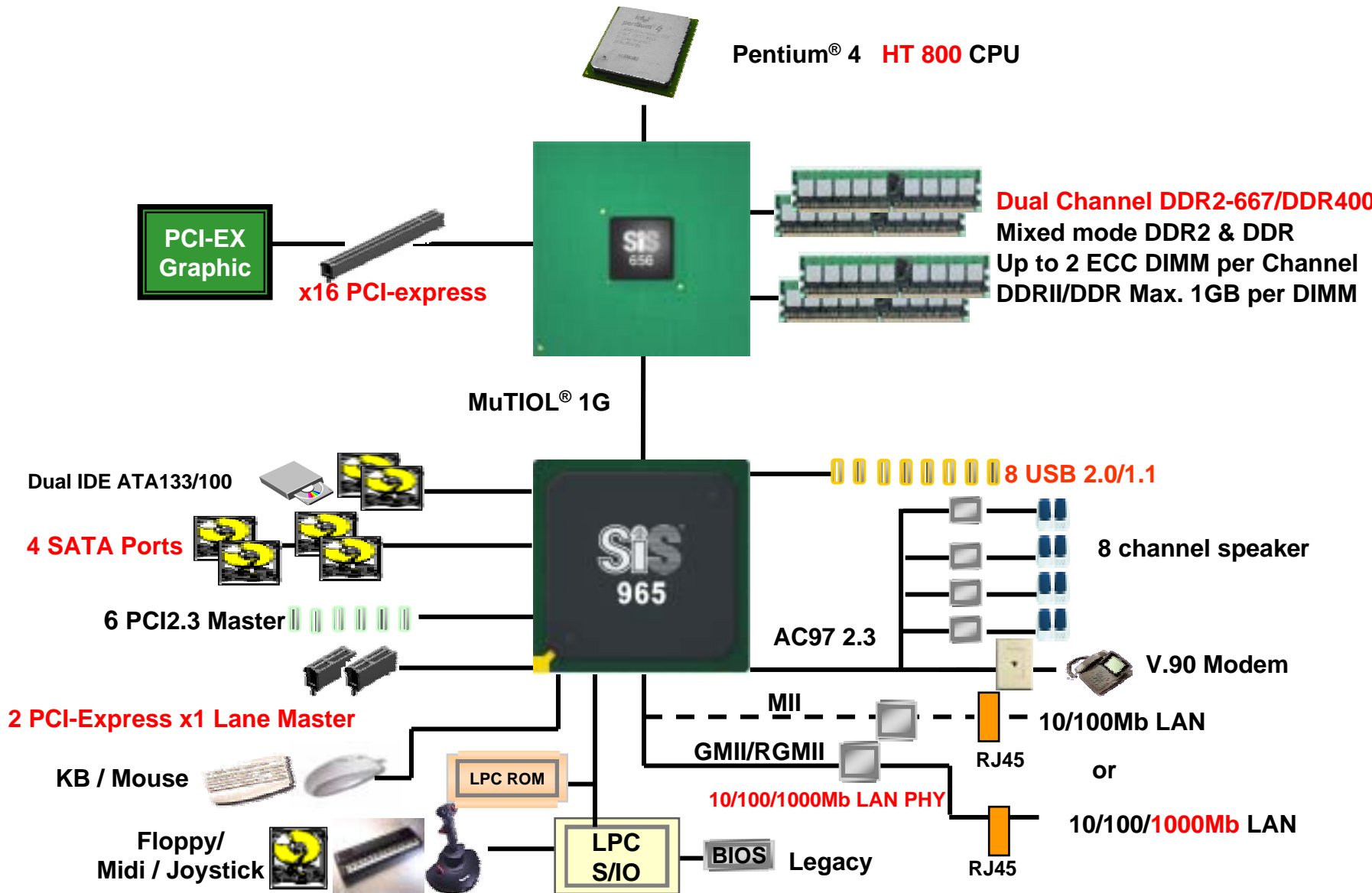


- **PC Technical Trends**
- **SiS656/965 Architecture Overview**
- **Advanced Feature of SiS656/965**
  - Evolutionary PCI-Express Graphic Port
  - High Performance Dual DDR2/DDR Supporting
  - Speedy Gb Ethernet Utilization
  - Powerful RAID Function Implement
  - Mighty Advanced Hyper Streaming
- **Attractive**
- **Software and Design Kit Support**

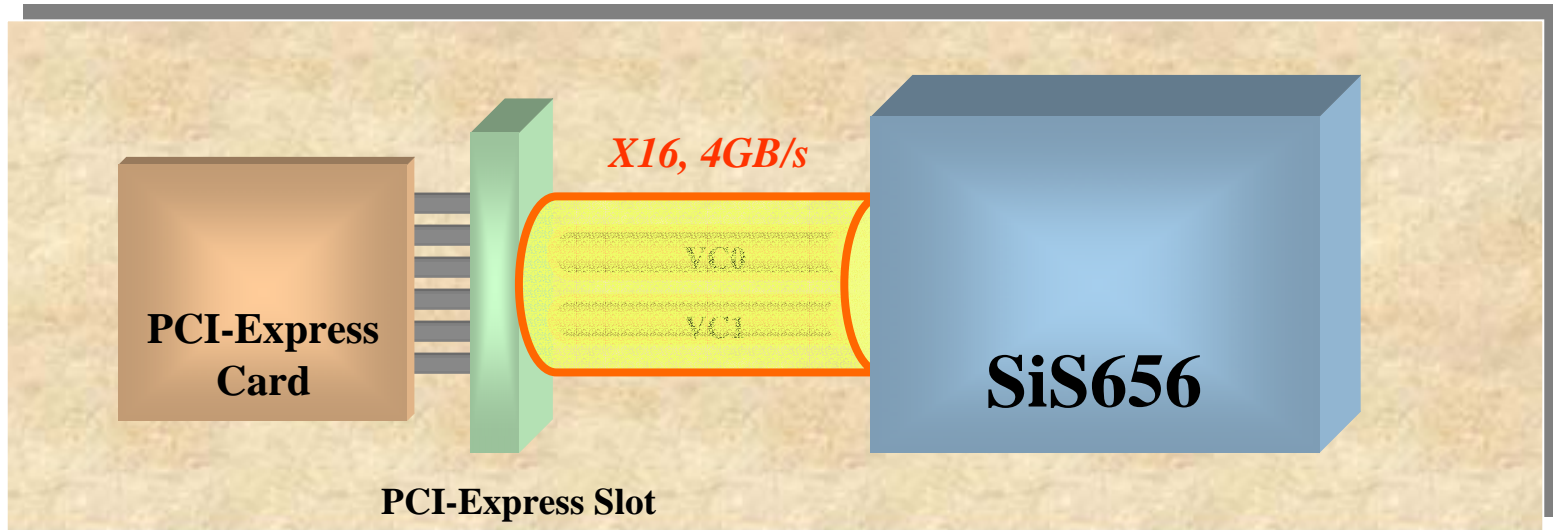


- Interfaces are going faster and faster
- Parallel interfaces are replaced by serial interfaces
- The changes of new interfaces enable the next PC era

# SiS656/965 Architecture Overview



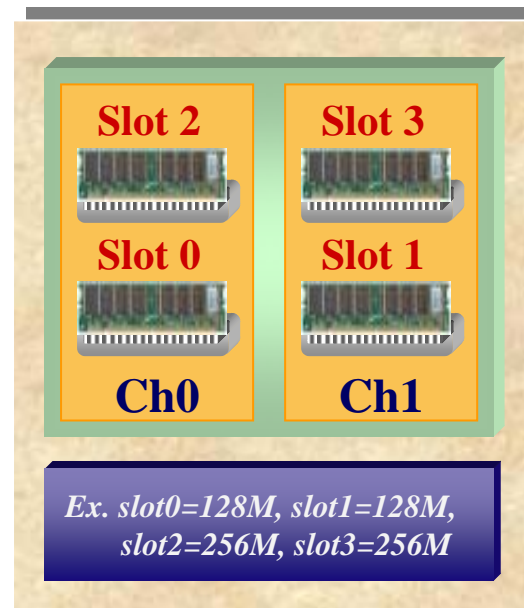
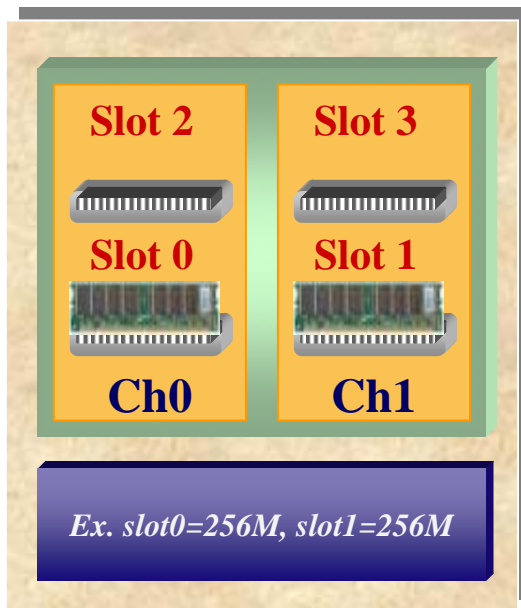
### High Bandwidth 16 Lane PCI Express Graphic Port



- Compliant to PCI Express Base Specification revision 1.0a
- Support PCI Express base frequency of 2.5GHz and bandwidth per pair of 250MB/s
- Support the maximum bandwidth each direction of 4GB/s in x16 configuration
- Implement two virtual channel (VC) for Isochronous video display
- Support Active State Power Management

### Performance 128 Bit Mode Support

For Identical Type and Size DIMM Population

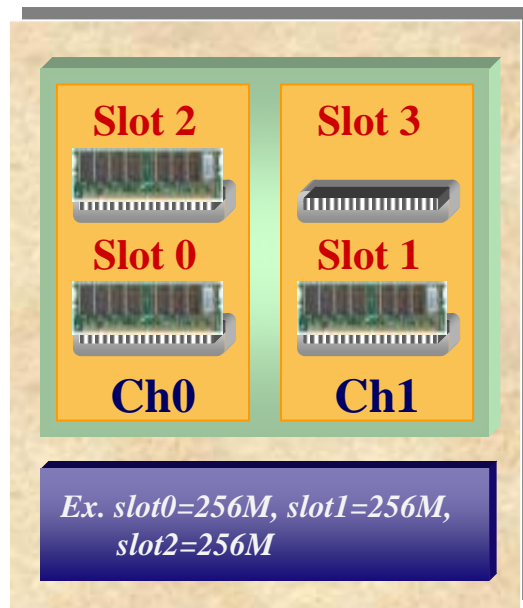


- ❑ 128 bit mode enable the optimize dual channel support

**Performance!!**

### Flexible Concurrent Dual 64 Bit Mode Support

For Different Type or Size DIMM Population



- Dual 64 bit mode enable the flexible dual channel support
- Ease of upgrade capability

**Flexibility!!**

### The Booming Ethernet Application



On Line Gaming, Real Time...



File Download, Info Sharing...

**Gb Ethernet**  
~ Entertain Your World



Internet Browser, e-Shopping...



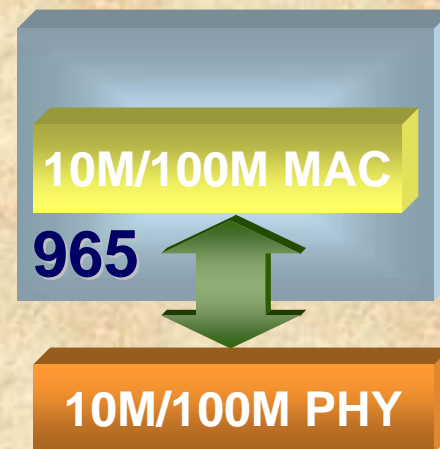
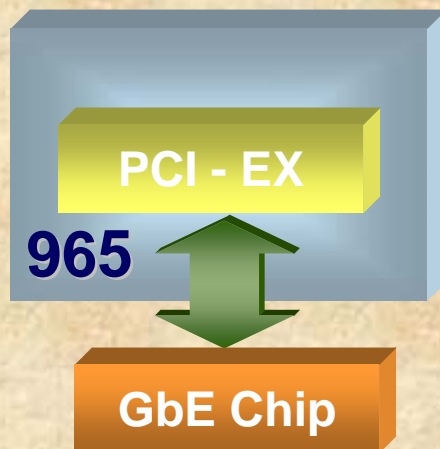
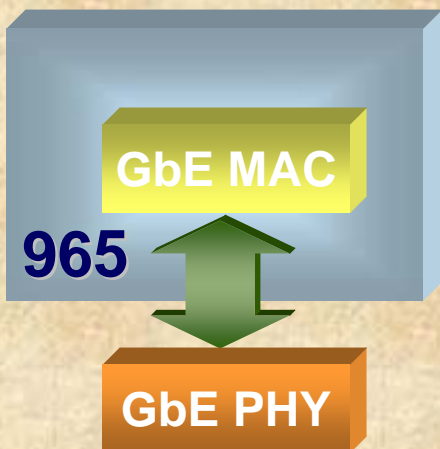
### Flexible Ethernet Solution

**Fit Multiple Segment!!**

#### Embedded Gb Ethernet Solution

#### External Gb Ethernet Solution

#### Embedded 10M/100M Ethernet Solution

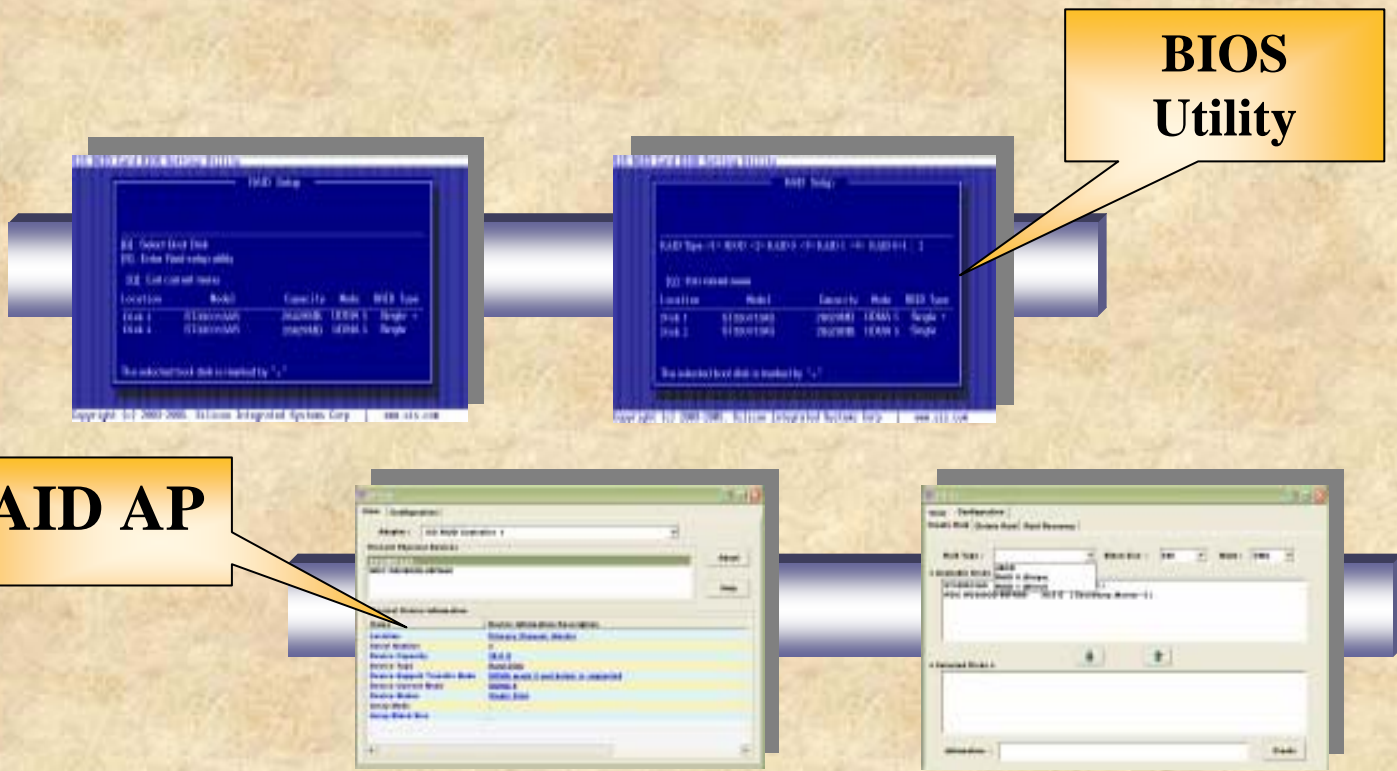


➤ Mainstream high segment

➤ High performance segment

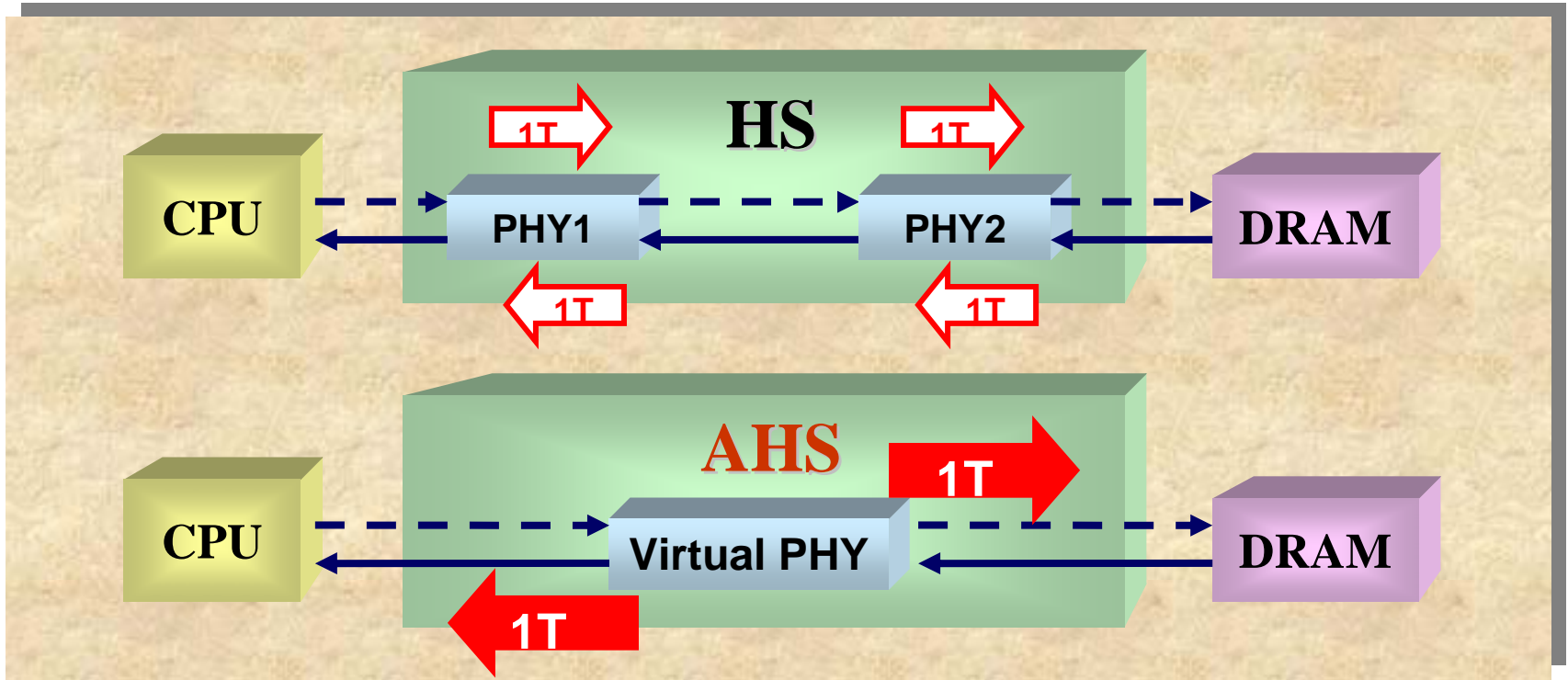
➤ Value segment

## - Friendly RAID Function Implement



- ❑ SiS965 provides 4 SATA ports with RAID function(0,1,0+1 and JBOD)
- ❑ Either BIOS RAID utility or Windows RAID AP to configure RAID function

### Advanced Hyper Streaming



❑ 2T faster than HSE in data transmission

**Acceleration!!**



- ❑ Suitable for variety of applications, from value to performance
- ❑ DDR2/DDR co-layout design smooth the transition
- ❑ 656/662 & 965/966 pin compatible save the design cost