

HyperStreaming™ Engine

Upgrade the Overall Performance of PC System

Thanks to the popularity of Internet and multimedia applications, PC users are now very keen on the speed of computing and the efficiency of data transfer. The requirement exceeds the individual component or peripheral level, to reside in the enhancement of the entire system through a smooth orchestration of the ever-advancing pieces and parts. The latest HyperStreaming™ Engine by SiS Technology is exactly developed for users that have strong needs for the coordinated bandwidth and speed.



■ **What is 『HyperStreaming™ Engine』 Technology**

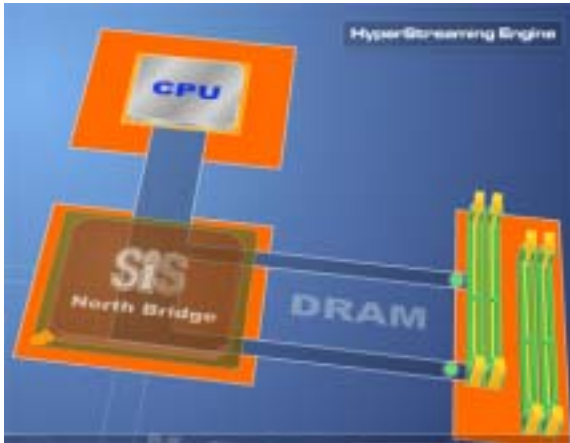
The HyperStreaming™ Engine optimizes the performance of the entire computer system. The four major functions of the "HyperStreaming™ Engine" smartly manage the data streaming to flow effortlessly from the peripherals to the core logic chipsets, between the North and South Bridge and to the front side bus, memory and graphic interface. This greatly improves the total performance, which traditional technologies lag behind.

■ **『HyperStreaming™ Engine』 Four Major Functions**

1. **Single Stream with Low Latency Technology**
2. **Multiple Streams with Pipelining and Concurrent Execution Technology**
3. **Specific Stream with Prioritized Channel Technology**
4. **Smart Stream Flow Control Technology**



■ **Single Stream with Low Latency Technology**



For the single streams of data, such as Internet information transmission (or any network traffic, presumably) and the direct accessing of a single I/O device, e.g. a graphics card, or IDE drive, you might have experienced the delays during data transmission from time to time before. The “**Single Stream with Low Latency**” technology can reduce the lag between the requests for data and the arrival of the information, dramatically reduce the delays to deliver faster system response speed.

++++Performance++++

While accessing the hard drive, users can lower at least 5% ~43% signal latency of a system through HES Technology. These advantages are significant and benefit directly to the users and application programs.

■ **Multiple Streams with Pipelining and Concurrent Execution Technology**



Under the traditional PC architecture, all data shares the same PCI bus. Each data has to wait in line in time sequence for system process, be it sequence or non-sequence data stream. Through the “**Multiple Streams with Pipelining and Concurrent Execution**” technology, the bandwidth for data transmission can be expanded to 1.2GB at the least, which offers higher efficiency for resource allocation and provides more

flexibility in peripheral data processing.

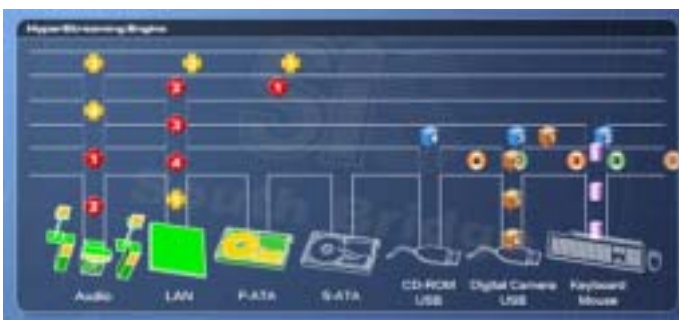
++++Performance++++

When users copy file over 1GB between two hard drives, HyperStreaming™ Engine can accelerate their performance by 15%. If the file size is over 4GB, HyperStreaming™ Engine can reduce 47 seconds process time, which represents a performance increase of 35%.

HyperStreaming™ Engine Chipsets

Intel FSB800 Platform	AMD Platform
SiS648MX (For Notebook Only)	SiS746FX/963
SiSM661FX (For Notebook Only)	SiS748/963L
SiS648FX/963L	SiS755/964
SiS655FX/964	SiS760/964
SiS661FX/964	
SiSR659/964	

■ Specific Stream with Prioritized Channel



Under the traditional PC architecture, the computer can't identify the priorities of data. Therefore devices have to wait in line to transmit data in sequence. The “**Specific Stream with Prioritized Channel**” technology provides certain streams, such as Video and audio signals or Internet signals with priority access through their own

channels. Priority accesses are tagged to ensure the components of the HS architecture speed them on their own way as quickly as possible.

++++Performance++++

There is a 3 to 8.5 per cent performance gain in FTP operations over chipsets from other products.

■ Smart Stream Flow Control

While transmitting the data under the traditional PC architecture, it is time consuming for protocol exchanges



as well as data searching, reading and writing. Therefore, it takes longer to carry out a task. With “**Smart Stream Flow Control**” technology, the data stream will be grouped and managed in an organized and efficient way. It is similar to a system searching for the specific information in a professionally indexed and structured library. It helps to place the frequently accessed data in the memory device for easy access, and prearrange the space for the memory device so that the efficiency for data storage and access is enhanced.