



**ASUS**

**CGCG STUDIO**  
CREATES COMPUTING  
PLATFORM WITH  
ASUS SERVERS

With firm roots in producing commercial films, CGCG studio is one of the few companies in Taiwan that can produce large-scale international 3D animated films. CGCG studio is also a three-time winner of the SIGGRAPH\* awards and a designated partner of many international production companies. The company has co-produced a number of popular cartoons, including Bob the Builder (with SD Entertainment/HiT Entertainment), LEGO® BIONICLE®, the world-renowned 3D animated series Star Wars - The Clone Wars, and FanBoy and Chum Chum (with Nickelodeon Animation Studios).

## HIGH RELIABILITY AND SERVICEABILITY

In order to refine animation quality with better 3D effects and improve production efficiency by reducing render times, the IT department of CGCG studio added 80 ASUS servers for the animation computing platform of the design team. Dong-Yuan Lu, Assistant Manager of the IT department at CGCG studio, said, "The ASUS servers have been highly stable during the 5-6 years of use. A few power supply units have required replacement, but this didn't affect the operations of the animation platform. ASUS quickly replaced the affected power supplies, and their responsive service became an important factor in our decision to work with ASUS over the long term. Now, when we have new projects, we naturally give priority to ASUS products, such as the ASUS RS720Q-E8-RS8-P server."



## POWERFUL PERFORMANCE WITH CUSTOMIZED DESIGN

The ASUS RS720Q-E8-RS8-P server introduced into the CGCG platform supports Intel's Xeon® E5-2600 series processor. A key feature of the server is its support for four independent nodes. Each node can be installed with two processors to provide up to 112 computing cores and 1024GB of memory, which is in line with the company's overall computing needs. The processor can also support the ASUS PIKE II expansion card, which supports 6GB/s SATA and 12GB/s SAS interfaces and provides RAID data protection, thereby expanding storage space, improving data read and write performance, and ensuring data stability during animation rendering. When designing the RS720Q-E8 server, ASUS decided to adopt a special funnel-shaped air duct design to complement its internal cabling configuration. The air duct guides air to effectively cool down each component without extra cooling fans.

Dong-Yuan Lu also mentioned, "ASUS servers have always been stable while providing high performance. The ASUS RS720Q-E8-RS8-P server design of its single-node expansion allows us to purchase computing resources required by the project as needed. That enables us to use our procurement budget effectively and also helps us avoid having idle computing resources."

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**"THE ASUS RS720Q-E8-RS8-P SERVER HAS CUT OUR ANIMATION RENDERING TIME BY 50%."**

**DONG-YUAN LU,  
ASSISTANT MANAGER,  
IT DEPARTMENT AT CGCG**

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## **PREMIUM COMPONENTS AND COOLING EFFICIENCY**

To ensure the quality of the ASUS RS720Q-E8-RS8-P server, the rare ASUS Beat Thermal Chokes and DrMOS 12K durable solid capacitors have been utilized in its design. This configuration improves calculation efficiency and reduces the generation of heat, enabling it to work for up to 12,000 hours in high-temperature environments. The server also uses two 80 PLUS 2000W platinum-grade power supplies that can be mutually redundant. So, in addition to having up to 94% power efficiency, even if one of the power supplies fails, there will be no interruption to the application service. When a faulty part is discovered, IT personnel can just quickly hot swap it out.

In order to cut down on server management times for IT personnel, ASUS also developed the ASMB-iKVM remote server management chip, which supports a web management interface and comes pre-installed in the server. Enterprise users can see the status of the server remotely without purchasing expensive KVM equipment, saving users the inconvenience of logging into each system, one by one, thereby helping companies improve overall work efficiency.



"ASUS gave us the software source code of the ASMB-iKVM remote server management chip, allowing us to further develop tools that can monitor processor operations. When it finds an animation operation that has failed, it automatically restarts the server." said by Dong-Yuan Lu.

There are currently more than 100 rack servers in CGCG's data center. The IT department has decided to purchase ASUS RS720Q-E8-RS8-P servers to gradually replace the old servers. This upgrade will allow CGCG to significantly reduce electricity costs while simplifying management of its entire data center.

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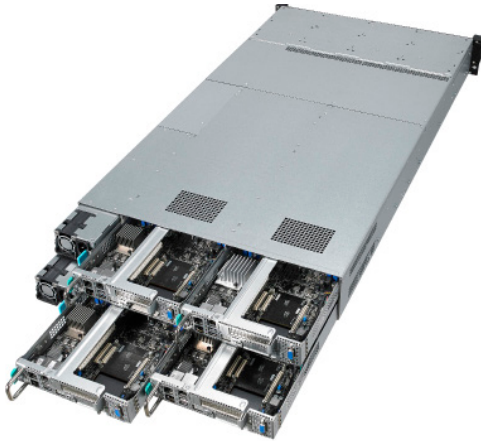
**"ASUS SERVERS ALLOW  
OUR IT DEPARTMENT  
WITH ONLY FIVE PEOPLE  
EASILY MANAGE A DATA  
CENTER WITH MORE  
THAN ONE HUNDRED  
COMPUTERS."**

DONG-YUAN LU,  
ASSISTANT MANAGER,  
IT DEPARTMENT AT CGCG

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# HARDWARE



## RS720Q-E9

A 2U4N high-density server designed for compute-intensive workloads such as data-center, data-analysis and private-cloud applications with support for two to eight processors (28 cores per processor) and 48 DIMMs for up to 6TB of DDR4 2666 memory.

# SOFTWARE

## ASUS Control Center (ACC)

A centralized and integrated IT management platform for monitoring and controlling ASUS commercial products, including servers, workstations, and digital signage. ACC enables remote BIOS updates, monitoring of multiple systems via mobile devices, and one-click software updates and dispatching, allowing easier server management for any IT infrastructure.

[>> Learn more about ASUS Control Center](#)

\* SIGGRAPH (Special Interest Group on Computer GRAPHics and Interactive Techniques) is the annual conference on computer graphics (CG) convened by the ACM SIGGRAPH

