HUIWEI GROUP

Powering the AI infrastructure era

Huiwei Group | Taiwan and Shanghai / SiC power devices · AI server power · 800VDC architecture

A discussion with global engineering and procurement teams

A focused path from devices to systems

Huiwei connects SiC device selection with the power architectures used in AI infrastructure.

Power semiconductors	650V, 1200V and 1700V SiC MOSFETs; 650V and 3300V SiC diodes
Server power	Device evaluation for PFC and high density power conversion
System concepts	800VDC distribution and 13.8kV to 800VDC solid state transformer research

Find a device for the design stage

Public datasheets provide starting points for electrical screening. Final selection requires application testing.

650V	SiC diodes and MOSFETs for front end and PFC evaluation
1200V	MOSFET options for higher voltage conversion stages
1700V	MOSFET option for industrial and high voltage evaluation
3300V	90A SiC Schottky diode for high voltage module evaluation

Where Huiwei can help

Start with a specific operating point, then compare device options and validation needs.

01	Share topology, bus voltage, switching frequency and thermal limits
02	Shortlist available Huiwei datasheets and package options
03	Define samples, bench tests and qualification requirements
04	Discuss system integration with the customer and qualified partners

AI server power opportunities

SiC devices can be evaluated across existing server power designs and future 800VDC architectures.

Today	PFC and conversion stage device evaluation in ATX and CRPS power supplies
Next	6.4kW and 7.4kW class CRPS design discussions
Exploration	800VDC distribution, backup power interfaces and rack integration

An architecture for engineering dialogue

A reference concept links medium voltage input, conversion and rack power. Design and safety depend on the deployment.

13.8kVAC input → SiC SST concept → 800VDC distribution

800VDC distribution → rack conversion and BBU interface → AI compute racks

AI NIC / DPU is a separate networking workstream.

Two operating centers; wider ambitions

Current operations are based in Taiwan and Shanghai.

Taiwan	Huiwei Technology: group headquarters, SiC and AI server power work
Shanghai	Shanghai Huiweida Semiconductor: semiconductor and China market work
Tokyo	Company formation and related review in progress
Phoenix	U.S. operation under planning

Start a technical conversation

Tell us your topology, power target and validation timeline. We will identify the most relevant public device documentation and next steps.

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Product datasheets: www.huiwei.com.tw/downloads.html