

# High-Performance DrMOS/SPS Power Module

 Complete Power Stage Solutions for CPU and GPU Core Power Selected by AMD, Intel and NVIDIA

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- Offer widest PWM Controller Compatible Solution
- Flexible Power Solution in same Packages
- Industry's Highest Current Density



# **General Description**

AOS provides the highest current density DrMOS and SPS Power Modules for various high power density applications. The latest generation of DrMOS together with AOS PWM controller supports total power solution for Intel computing platforms. Our DrMOS and SPS portfolio also provides the widest compatible solutions for many PWM controllers.

### Flexible Solution for CPU and GPU Core Power Selected by AMD, Intel and **NVIDIA**

AOZ531xNQI and AOZ531xUQI DrMOS series provide complete power stage solutions for the latest graphic cards for all GPUs.

AOZ5277QI and AOZ5279QI Smart Power Stage features IMON, TMON, and ZCD for high performance GPU.

## Data Centers, Telecom and Networking

AOZ527xQI series is the standard Smart Power Stage (SPS) in QFN5x6 package with full IMON and TMON support. It is suitable for high power requirement for server solutions.

## Low I<sub>o</sub> SPS for Mobile Computing **Applications**

AOZ521x3QI series is the standard Smart Power Stage (SPS) in QFN4x5 package with full IMON and TMON support. It has the low Io for notebook applications.



Part Number	DC Current (A)	V <sub>⊪</sub> Range (V)	OCP/NCP	lmon/Tmon	Applications	Package
AOZ5310NQI-A	60	3 ~ 18	No	No	Graphic Card	QFN5x5
AOZ53228*	60	3 ~ 18	Yes	No	Graphic Card	QFN5x5
AOZ53261	55	3 ~ 25	Yes	No	Graphic Card	QFN5x5
AOZ53263*	70	3 ~ 20	Yes	No	Graphic Card	QFN5x5
AOZ5505QI	30	4.5 ~ 25	No	No	Notebook	QFN4.5x3.5
AOZ5506QI	45	4.5 ~ 25	No	No	Notebook	QFN4.5x3.5
AOZ5507QI	30	4.5 ~ 25	No	No	Notebook	QFN4.5x3.5
AOZ5508QI	35	4.5 ~ 25	No	No	Notebook	QFN4.5x3.5
AOZ5516QI	55	4.5 ~ 25	No	No	Notebook	QFN5x5
AOZ5517QI	60	4.5 ~ 25	No	No	Gaming PC	QFN5x5
AOZ5518QI	65	4.5 ~ 25	No	No	Gaming PC	QFN5x5
AOZ5116QI	55	4.5 ~ 25	No	No	Notebook	QFN5x5
AOZ5117QI	60	4.5 ~ 25	No	No	Gaming PC	QFN5x5

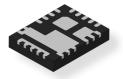
## **DrMOS Product Selection Guide**

\* = Available Q2'25

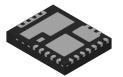
# **SPS Product Selection Guide**

Part Number	DC Current (A)	V <sub>⊪</sub> Range (V)	OCP/NCP	Imon/Tmon	Applications	Package
AOZ52183QI	45	3 ~ 25	Yes	Yes	Notebook	QFN4x5
AOZ52173QI*	30	3 ~ 25	Yes	Yes	Notebook	QFN4x5
AOZ52153QI*	28	3 ~ 25	Yes	Yes	Notebook	QFN4x5
AOZ5278QI	55	3 ~ 20	Yes	Yes	Graphic Card	QFN5x6
AOZ5277QI	60	3 ~ 20	Yes	Yes	Graphic Card	QFN5x6
AOZ5279QI	60	3 ~ 25	Yes	Yes	Gaming PC	QFN5x6
AOZ5276QI	90	3 ~ 20	Yes	Yes	Server and Data Center	QFN5x6
AOZ5276QI-03	105	3 ~ 20	Yes	Yes	Telecom	QFN5x6

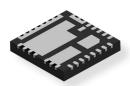
\* = Available Q2'25



QFN 4.5mm x 3.5mm



QFN 4mm x 5mm



QFN 5mm x 5mm



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Alpha and Omega Semiconductor Limited (AOS) is a designer, developer, and global supplier of a broad range of discrete power devices, wide bandgap power devices, power management ICs, and modules, including a wide portfolio of Power MOSFET, SiC, IGBT, IPM, TVS, HV Gate Drivers, Power IC, and Digital Power products. AOS' portfolio of products targets high-volume applications, including personal computers, graphics cards, datacenters, AI servers, smartphones, consumer and industrial motor controls, TVs, lightings, automotive electronics, and power supply units for various equipment.



