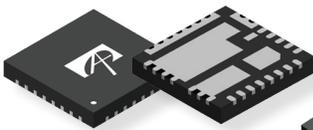


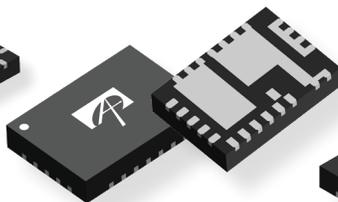


High-Performance DrMOS/SPS Power Module

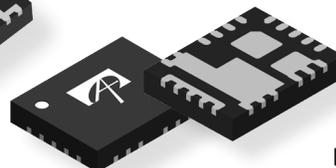
- Complete Power Stage Solutions for Latest Graphic Cards from Nvidia and AMD
- Offer widest PWM Controller Compatible Solution
- Flexible Power Solution in same Packages
- Industry's Highest Current Density



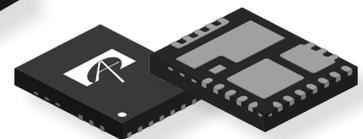
QFN 5mm x 5mm



QFN 5mm x 6mm



QFN 3.5mm x 4.5mm



QFN 4mm x 5mm



Power IC
DrMOS/SPS

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 Graphic Cards

AOZ531xNQI and AOZ531xUQI DrMOS series provide complete power stage solutions for the latest graphic cards from NVIDIA and AMD.

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



Data Centers, Telecom and Networking

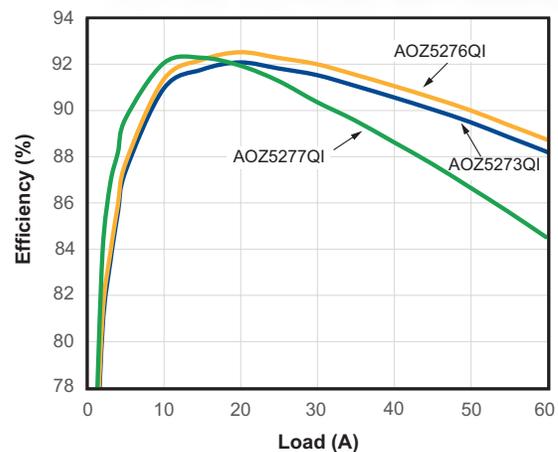
AOZ527xQI series is the standard Smart Power Stage (SPS) in QFN5x6 package with full IMON and TMON support. It is suitable for high power requirement for server solutions.

Low IQ SPS for Notebook Applications

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

Efficiency Comparison of AOZ527x Series SPS

($V_{IN}=12V$, $V_{OUT}=0.9V$, $f_{sw}=500kHz$)



SPS Product Selection Table

Part Number	DC Current (A)	V_{IN} Range (V)	Pre-OVP	Application
AOZ5277QI	60	3 ~ 20	Disable	Server and Data Storage
AOZ5277QI-01	60	3 ~ 20	Active	Discrete Graphic Card
AOZ5279QI	60	3 ~ 25	Disable	Gaming Laptop
AOZ5279QI-01	60	3 ~ 25	Active	Gaming Laptop
AOZ5273QI	70	3 ~ 20	Active	Server and Data Storage
AOZ5273QI-01	70	3 ~ 20	Disable	Telecom
AOZ5276QI	90	3 ~ 20	Active	Server and Data Storage
AOZ5276QI-01	90	3 ~ 20	Disable	Telecom
AOZ5278QI	55	3 ~ 20	Disable	Discrete Graphic Card
AOZ52183QI*	45	3 to 25	Disable	Notebook
AOZ52173QI*	30	3 to 25	Disable	Notebook
AOZ52163QI*	25	3 to 25	Disable	Notebook
AOZ5276QI-03	100	3 ~ 20	Disable	Telecom

* Available Q2 23

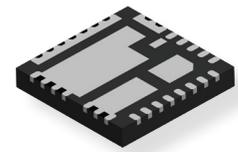
Features

- High efficiency synchronous buck power stage module
- 4.5V to 25V input range
- QFN5x5 DrMOS
 - 55A to 65A output current
 - Up to 80A peak for 10 ms pulse
 - Up to 120A peak for 10 μ s pulse
- QFN3.5x4.5 DrMOS
 - 30A to 35A output current
 - Up to 50A peak for 10 ms pulse
 - Up to 80A peak for 10 μ s pulse

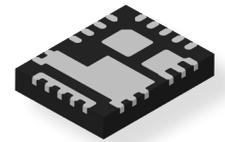
- QFN4x5 SPS
 - 25A to 45A output current
 - Up to 65A for 20 ms pulse @ 14 V VIN
 - Up to 60A pulse for 20 ms pulse @ 22V VIN
 - Up to 80A for 10 μ s pulse

Applications

- Notebook computer
- Add-in-card graphic unit
- Server client
- Gaming console
- High power multiphase POL



QFN 5mm x 5mm



QFN 3.5mm x 4.5mm

DrMOS and SPS Product Selection Table

Part Number	Min V _{IN} (V)	Max V _{IN} (V)	DC Current (A)	Application	Thermal Report	Package
AOZ5507QI	4.5	25	30	Ultrabook	No	QFN3.5x4.5-22L
AOZ5508QI	4.5	25	35	Ultrabook	No	QFN3.5x4.5-22L
AOZ5516QI	4.5	25	55	Notebook	No	QFN5x5-31L
AOZ5516QI-02	4.5	25	55	Notebook	Flag	QFN5x5-31L
AOZ5517QI	4.5	25	60	Notebook	No	QFN5x5-31L
AOZ5517QI-02	4.5	25	60	Notebook	Flag	QFN5x5-31L
AOZ5518QI	4.5	25	65	Notebook	No	QFN5x5-31L
AOZ5116QI	4.5	25	55	Notebook	Flag	QFN5x5-31L
AOZ5117QI	4.5	25	60	Notebook	Flag	QFN5x5-31L
AOZ5118QI	4.5	25	65	Notebook	Flag	QFN5x5-31L
AOZ5311NQI	2.5	20	55	Discrete Graphic Card	Flag	QFN5x5-31L
AOZ5312NQI	2.5	20	60	Discrete Graphic Card	Flag	QFN5x5-31L
AOZ5313NQI	2.5	20	65	Discrete Graphic Card	Flag	QFN5x5-31L
AOZ5316NQI	2.5	25	55	Gaming Laptop	Flag	QFN5x5-31L
AOZ5317NQI	2.5	25	60	Gaming Laptop	Flag	QFN5x5-31L
AOZ5318NQI	2.5	25	65	Gaming Laptop	Flag	QFN5x5-31L
AOZ5273QI	3	20	70	SPS for Server / Network	TMON	QFN5x6-39L
AOZ5276QI	3	20	90	SPS for Server/Network	TMON	QFN5x6-39L
AOZ5277QI	3	20	90	SPS for Discrete Graphic Card	TMON	QFN5x6-39L
AOZ5279QI	3	25	60	SPS for Gaming Laptop	TMON	QFN5x6-39L
AOZ52183QI*	3	25	45	SPS for Notebook	TMON	QFN4x5-24L
AOZ52173QI*	3	25	30	SPS for Notebook	TMON	QFN4x5-24L
AOZ52163QI*	3	25	25	SPS for Notebook	TMON	QFN4x5-24L

* Available Q2'23



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