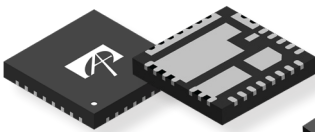


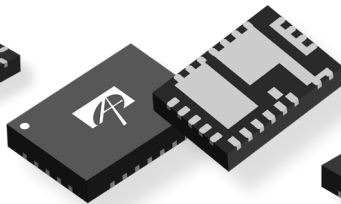


High-Performance DrMOS/SPS Power Module

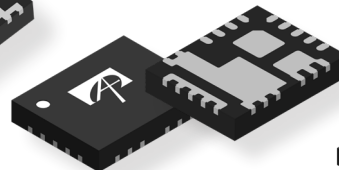
- Complete Power Stage Solutions for all Graphic Cards
- Most Compatible Power Stage Solutions for Industry Leading PWM Controllers
- Flexible Power Solution in same Packages
- Industry's Highest Current Density



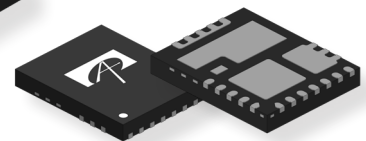
QFN 5mm x 5mm



QFN 5mm x 6mm



QFN 3.5mm x 4.5mm



QFN 4mm x 5mm



Power IC
DrMOS/SPS



General Description

High-Performance DrMOS/SPS Power Module for Graphic Cards

AOS provides the highest current density DrMOS and SPS Power Modules for various high power density applications. The latest generation of DrMOS and SPS 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. The latest generation of DrMOS with OCP/NCP also supply the robust power stage solution for the latest graphic cards from NVIDIA and AMD.

Flexible Solution for Graphic Cards

AOZ53221QI and AOZ5326XQI DrMOS series with OCP and NCP provide complete power stage solutions for the latest graphic cards from NVIDIA and AMD.

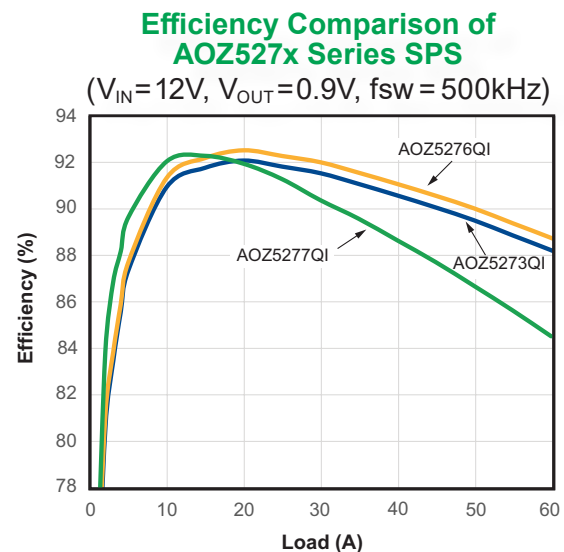
AOS next generation DrMOS with OCP and NCP can support 90A contentious current with 100% duty cycle. This unique feature can ensure the

power stage delivery maximum energy while preventing inductor choke saturation with current running away.

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.



DrMOS and SPS Product Selection Table

Part Number	DC Current (A)	V_{IN} Range (V)	OCP/NCP	Imon/Tmon	Applications	Package
AOZ5310N	60	3 ~ 18	No	No	Graphic Card	QFN5x5
AOZ53221	60	3 ~ 18	Yes	No	Graphic Card	QFN5x5
AOZ53261	55	3 ~ 25	Yes	No	Gaming PC	QFN5x5
AOZ53262	70	3 ~ 20	Yes	No	Graphic Card	QFN5x5
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

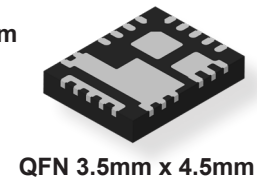
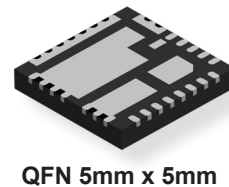
High-Performance DrMOS/SPS Power Module for Notebook

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 45A output current
 - Up to 65 A for 20 ms pulse @ 14 V VIN
 - Up to 60 A pulse for 20 ms pulse @ 22 V VIN
 - Up to 80 A 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



DrMOS and SPS Product Selection

Part Number	Min V _{IN} (V)	Max V _{IN} (V)	I _{mon} /T _{mon}	Applications	Package
AOZ5506QI	45	4.5 ~ 25	No	Notebook	QFN3.5x4.5
AOZ5505QI	30	4.5 ~ 25	No	Notebook	QFN3.5x4.5
AOZ5507QI	30	4.5 ~ 25	No	Notebook	QFN3.5x4.5
AOZ5508QI	35	4.5 ~ 25	No	Notebook	QFN3.5x4.5
AOZ5516QI	55	4.5 ~ 25	No	Notebook	QFN5x5
AOZ5517QI	60	4.5 ~ 25	No	Gaming PC	QFN5x5
AOZ5518QI	65	4.5 ~ 25	No	Gaming PC	QFN5x5
AOZ5116QI	55	4.5 ~ 25	No	Notebook	QFN5x5
AOZ5117QI	60	4.5 ~ 25	No	Gaming PC	QFN5x5
AOZ52183QI	45	3 ~ 25	Yes	Notebook	QFN5x5
AOZ52173QI	30	3 ~ 25	Yes	Notebook	QFN4x5
AOZ52153QI	28	3 ~ 25	Yes	Notebook	QFN4x5

PICs | High Performance DrMOS/SPS Power Module

High-Performance DrMOS/SPS Power Module for Workstations, Desktops, and Motherboards

Features

- Best choice of cost-to-performance ratio
- Optimized for 12V input operation
- QFN 5x5 DrMOS
 - 55A to 80A output current
 - Up to 80A peak for 10ms
 - Up to 120A peak for 10ms
 - Have the options for OCP/NCP

- QFN 5x6 SPS supporting FCCM
 - 60A to 80A output current
 - Up to 100A peak for 10ms
 - Up to 150A peak for 10ms

Applications

- Workstations (WS)
- Desktop (DT)
- Motherboard (MB)
- Graphic Card (GC)

DrMOS and SPS Product Selection

Part Number	DC Current (A)	V _{IN} Range (V)	OCP/NCP	Imon/Tmon	Applications	Package
AOZ5516QI-03	55	4.5 ~ 18	No	No	WS, DT, MB, GC	QFN5x5
AOZ5517QI-03	60	4.5 ~ 18	No	No	WS, DT, MB, GC	QFN5x5
AOZ5518QI-03	80	4.5 ~ 18	No	No	WS, DT, MB, GC	QFN5x5
AOZ5116QI-03	55	4.5 ~ 18	No	No	WS, DT, MB, GC	QFN5x5
AOZ5117QI-02	60	4.5 ~ 18	No	No	WS, DT, MB, GC	QFN5x5
AOZ5310N	60	4.5 ~ 18	No	No	WS, DT, MB, GC	QFN5x5
AOZ53221	60	4.5 ~ 18	Yes	No	WS, DT, MB, GC	QFN5x5
AOZ52177QI	70	4.5 ~ 18	Yes	Yes	WS, DT, MB, GC	QFN5x6
AOZ52178QI	90	4.5 ~ 18	Yes	Yes	WS, DT, MB, GC	QFN5x6



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