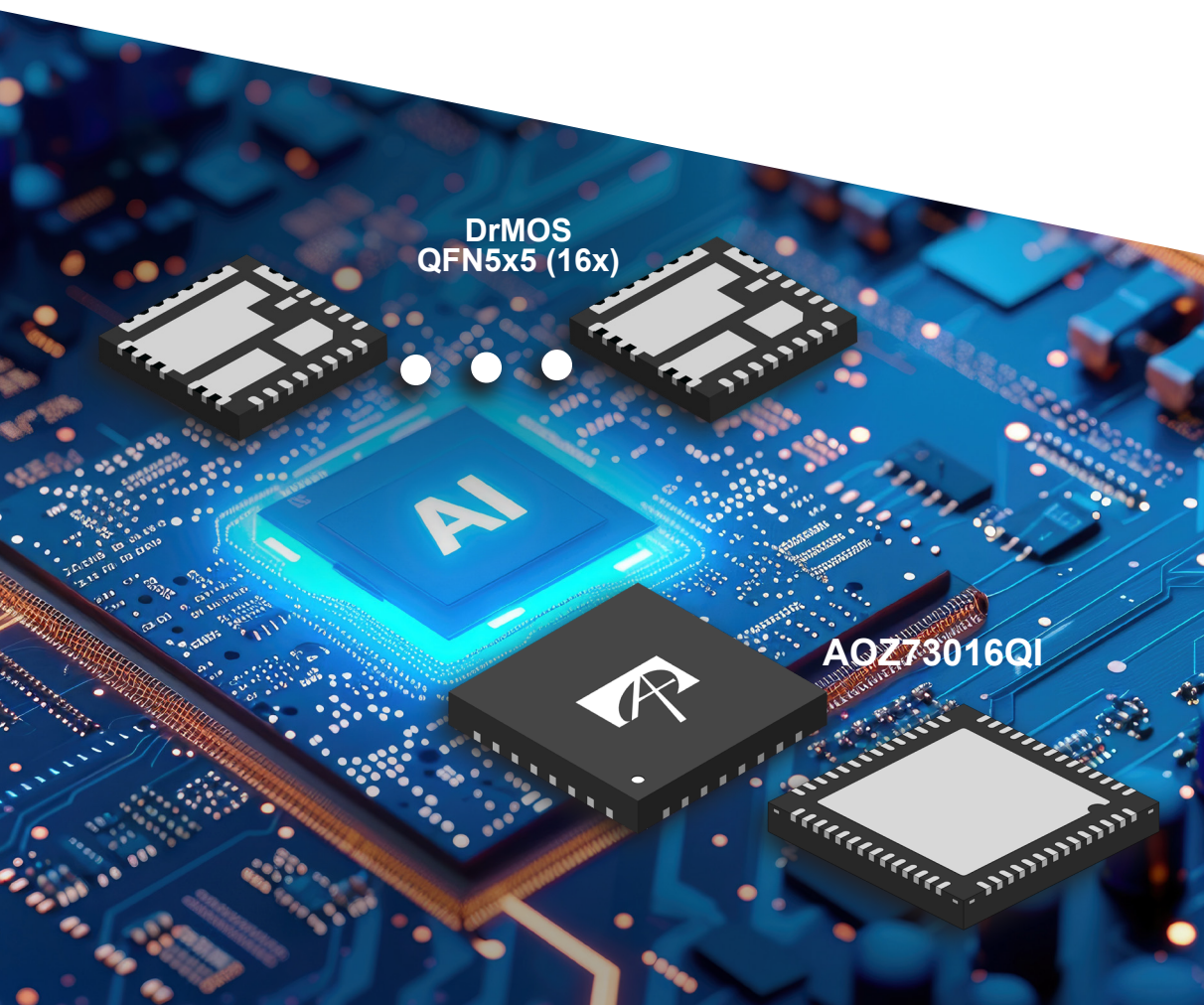




# Leading-Edge PWM Controllers Power AI SoC

- The AOZ73016QI is a 16-phase, 2-rail PWM controller is fully compliant to OpenVReg (OVR-16) specifications, delivers a highly efficient, flexible power solution when paired with AOS' power stages
- The AOZ73004CQI is the world's first 4-phase controller to power AI GPUs and is fully compliant with OpenVReg OVR4-22 spec



Power ICs



# Power ICs | Leading-Edge PWM Controllers Power AI SoC

## Features

- OpenVReg compliant (OVR4-22, OVR-16)
- Up to 16-phase single output rail or  $N + M \leq 16$  phases dual output rails is configurable
- Supports PWMVID, PMBus and is AVSBus compliant
- Digital PWMVID architecture with differential remote sensing to achieve 0.5% regulated VOUT accuracy
- User friendly GUI for compensation and configuration with minimal external RC components
- Supports multi-sourced industry standard DrMOS and Smart Power Stage (SPS)
- ECS programmability with ability to update configuration in the field
- Supports Auto Phase Management (APM) and Discontinuous Mode (DCM) power saving features
  - Proprietary, high performance AOS A<sup>2</sup>™ control scheme
  - 200kHz to 1MHz programmable switching frequency
  - Hysteretic peak current mode control can vary frequency during transient for best-in-class response
- Excellent dynamic phase current balance
- Spread-spectrum Modulation (SSM)
- Output Under-Voltage Protection (UVP)
- Output Over-Voltage Protection (OVP)
- Over-Current Protection (OCP)
- Over-Temperature Protection (OTP)

Part Number	Topology	Package	Max VIN (V)	Driving Source/Sink Current (A)	Current Sense	OCL	Adjustable Dead Time	Fault Indication
<a href="#">AOZ73004CQI</a>	4-Phase	QFN4x4-32	20	0.8/1	Yes	Yes	Yes	Yes
<a href="#">AOZ73016QI</a>	16-Phase	QFN7x7-56	24	0.8/1	Yes	Yes	Yes	Yes



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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.



Powering a Greener Future™