

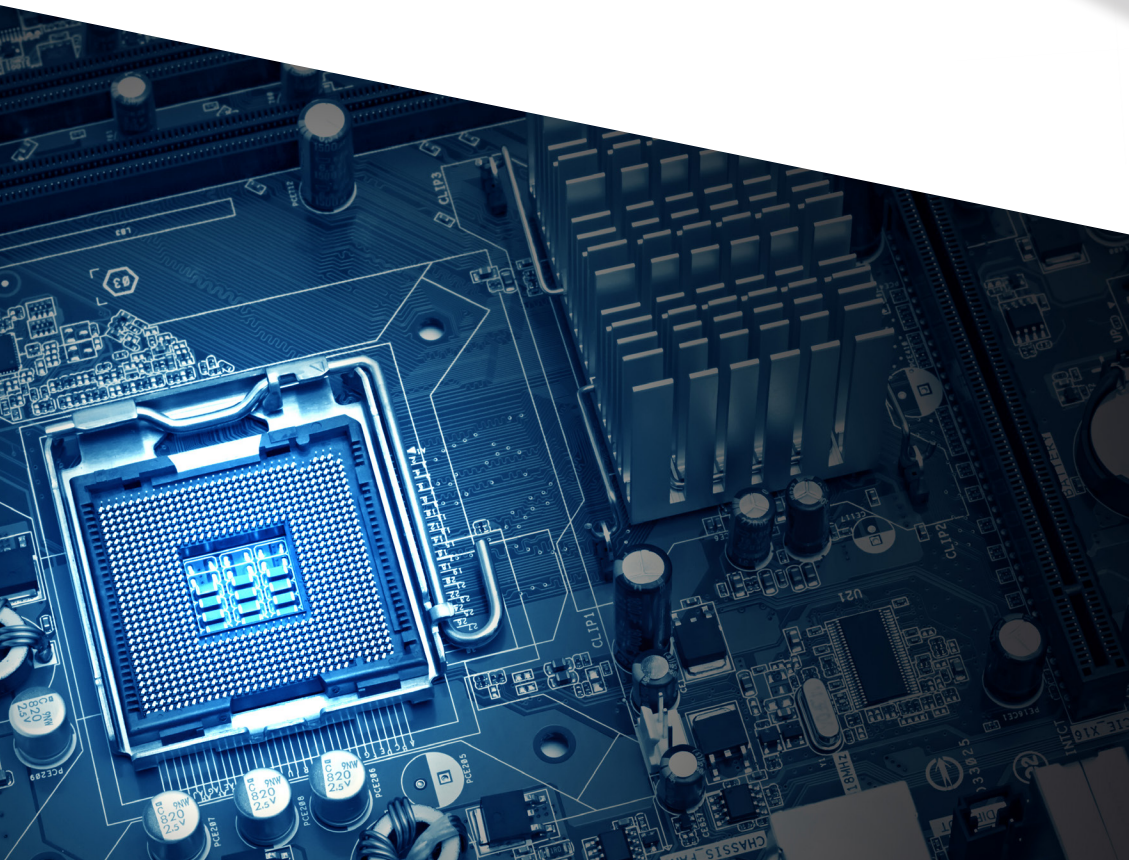
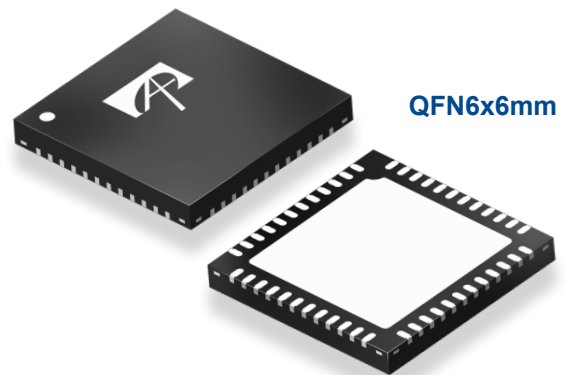


ALPHA & OMEGA
SEMICONDUCTOR



Intel Panther Lake and Wildcat Lake PC Total Solutions

- Low P_Q Digital Multiphase PWM Controllers
- DrMOS and Smart Power Stage (with I_{MON})
- COT Buck Converters



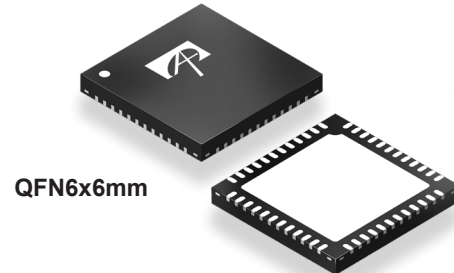
Power IC
Notebook
Solutions



Complete Digital Multiphase Controller and Power Stage Total Solution for Intel Panther Lake and Wildcat Lake Notebook

Product Line-up

- Intel PTL/WCL IMVP 9.3 Multiphase Controller
- Pairing Power Stage Total Solution
- COT Buck Converter for Intel VNNAON Power
- USB3.0/3.1 Protection IC/MOS/TVS
- MOSFETs for system/adaptor/battery



Digital Multiphase Controller (AOZ71049QI)

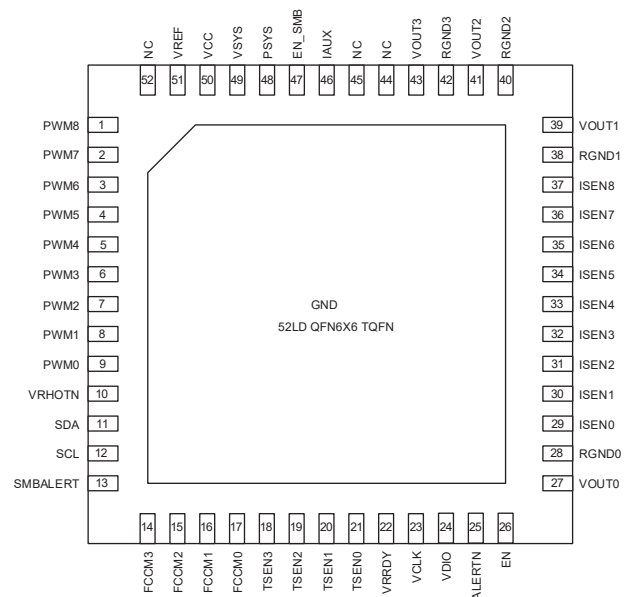
- Up to 4+2+1+2 Output; support Intel IMVP8/9/9.1/9.2/9.3 SVID
- User-friendly GUI for compensation and configurations with minimal external RC components
- Supports FVM to protect CPU
- A²TM ensure fast transient performance while keeping phase current balance
- QFN6x6-52L to QFN7x7-60L to cover all applications

COT Buck Converter (AOZ22559QI)

- Wide V_{IN} range with high I_{OUT} 15A capability supporting Intel I_{CCMAX} up to 30A
- Integration within QFN4x4 package
- High efficiency with Low $R_{DS(ON)}$ FETs
- Better thermal balance while high current

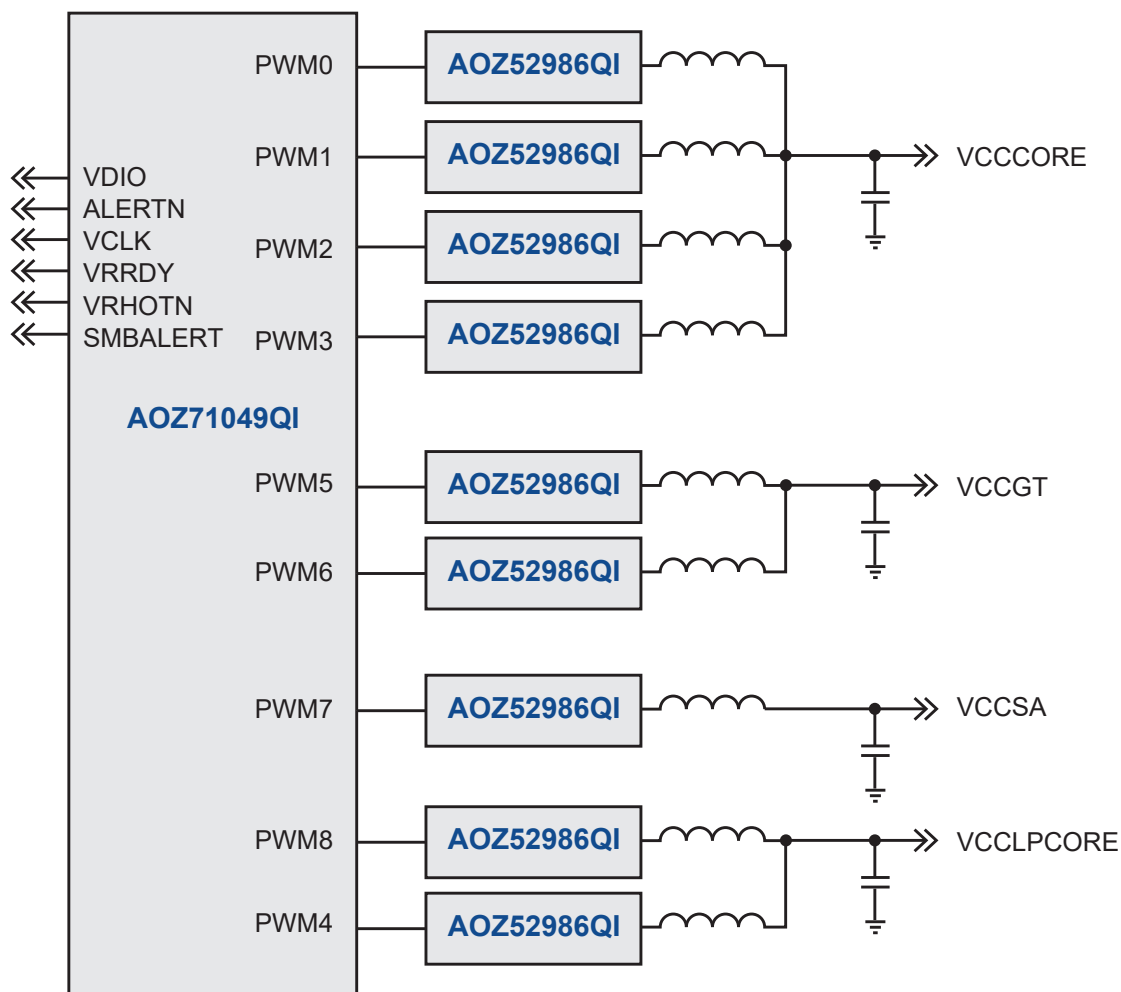
Smart Power Stage (AOZ52986QI)

- 2.7V to 22V power supply range
- 30V HS MOSFET provides better system ruggedness
- 45A continuous output current
- Optimized for switching frequency up to 1.5MHz
- Integrated current monitor (5 μ A/A) with typical 3.5% accuracy over temperature
- Integrated temperature monitor (8mV/°C) with 2% accuracy
- QFN3x4-26L package



AOZ71049QI 4+2+1+2 Controller for PTL Notebook

Typical Application of Low P_Q Digital Controller for PTL/WCL



Product Solutions Tables

Controller Part Number	Package	Configuration	V _{IN} Range	Communication
AOZ71049QI	QFN6x6	Up to 4+2+1+2 for NB	2.5V to 24V	SVID & SMBus
AOZ71149QI	QFN7x7	Up to 4+2+1+2 for NB		
AOZ71146QI	QFN6x6	Up to 2+2+1+1 for NB		

DrMOS & SPS Part Number	Package	Current Rating	10ms Peak Current	BV
AOZ5517QI	QFN5x5	60A/55A	80A	30V
AOZ5516QI				
AOZ5508QI	QFN3.5x4.5	35A/30A	60A	
AOZ5507QI				
AOZ52986QI	QFN3x4	45A	65A	

COT Part Number	Package	Current Rating	V _{IN} Range	BV
AOZ22539QI	QFN4x4	12A	4.5V to 28V	30V
AOZ22559QI	QFN4x4	15A		
AOZ23567QI	QFN5x5	20A		
AOZ23567BQI	QFN5x5	17A		
AOZ2260AQI-10	QFN4x4	6A		

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