

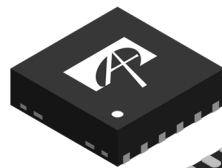


ALPHA & OMEGA
SEMICONDUCTOR

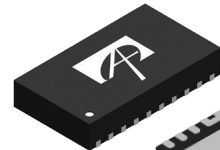
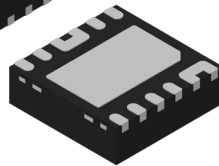


ECPower™ Type-C Protection Switches

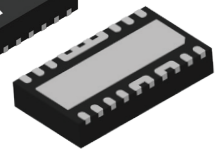
- USB-PD Power Profile Full Compliance
- SPR and EPR Capable Products
- Ideal Diode True Reverse Current Blocking
- Lowest on Resistance
- Compact 2-in-1 Combo Sink / Source Switch
- High Voltage Source Switch



AOZ13987/984



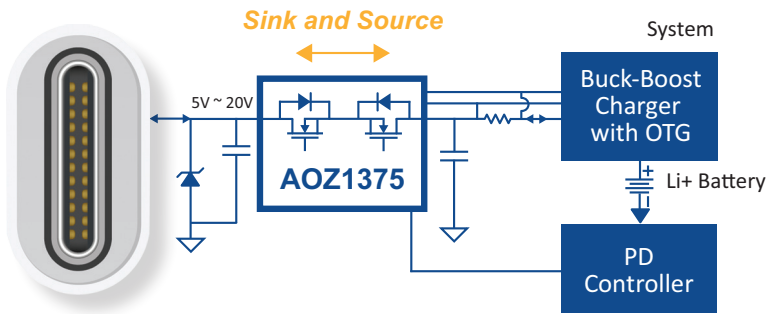
AOZ1380/2



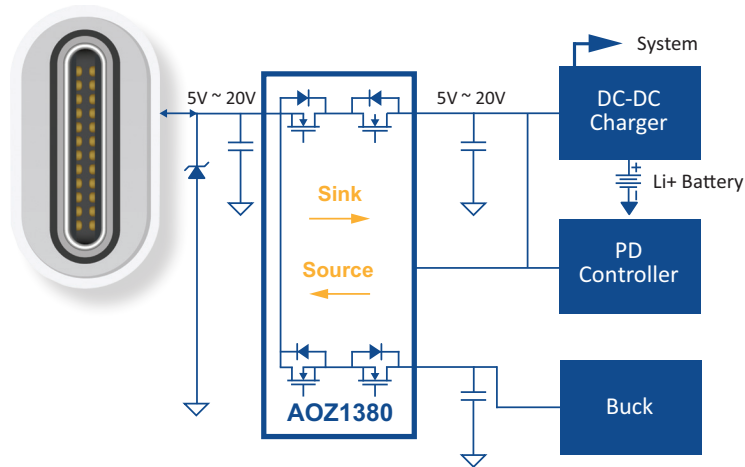
PICs
ECPower™
Type-C
Protection Switches



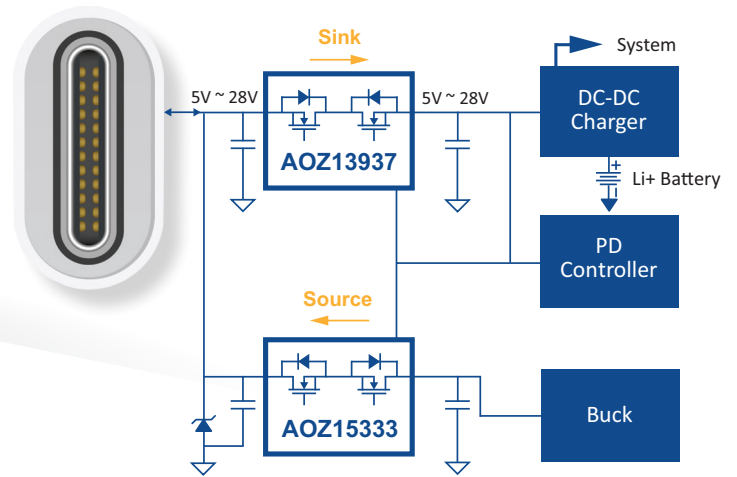
APPLICATIONS



AOZ1375 Implementation in Single-Port OTG USB



AOZ138x Family Offers Combo Sink and Source Switch in Single Package



AOZ13937 Offers Ideal Diode TRCB AOZ15333 Offer Fast Role Swap Support



Features and Advantages

AOZ1375 Features

- 20V/5A bidirectional load switch
- 17.8mΩ typical on resistance
- Protection Features:

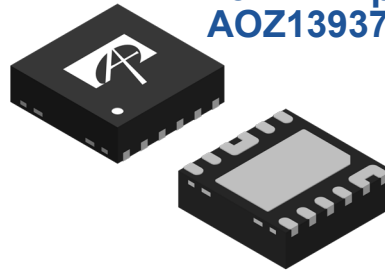
Reverse Current Blocking, Adjustable Soft Start, Adjustable Current Limit, Over-Voltage Protection, Under-Voltage Lockout, Short-Circuit Protection, Thermal Shutdown

AOZ15333 Features

- 28V sourcing protection switch
- 39V absolute max
- 45mΩ typical on resistance
- Startup SOA management
- Protection Features:

True Reverse Blocking, Adjustable Soft Start, Adjustable Current Limit, Over-Voltage Protection, Under-Voltage Lockout, Short-Circuit Protection, Thermal Shutdown, Fast Role Swap

28V EPR protection switches AOZ13937/AOZ15333

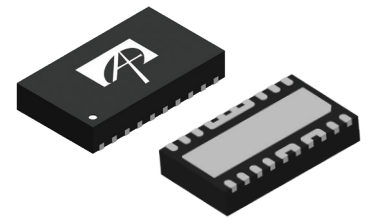


AOZ13937 Features

- 32V/8A sinking protection switch
- 20mΩ typical on resistance
- 20A Peak Current Capability
- Protection Features:

Ideal Diode True Reverse Current Blocking, Adjustable Soft Start, Over-Voltage Protection, Under-Voltage Lockout, Thermal Enhanced DFN Package, Startup Short-Circuit Protection, Thermal Shutdown

AOZ138x



AOZ138x Features

- 20V combo protection switch
- AOZ1382 offers Ideal Diode Sink Function
- 20mΩ sink switch
- 39mΩ source switch
- Protection Features:

*True Reverse Blocking, Over-Voltage Protection, Under-Voltage Lockout, Thermal Enhanced Package, Thermal Shutdown
Additional for Source: Adjustable Current Limit, Fast Role Swap*

Product Selection

Part Number	Ops V_{IN} (V)	Abs Max V_{OUT} (V)	RDSON	Current Flow	Current Limit	TRCB	Package
AOZ1327DI-01 AOZ1327DI-02	3.4 to 22	28	20	Sink	No	$V_{OUT} > V_{IN}$	DFN3x3-12L
AOZ1324DI-01 AOZ1324DI-02	3.4 to 22	28	32	Sink	No	$V_{OUT} > V_{IN}$	DFN3x3-12L
AOZ13987DI-02	3.4 to 23	28	20	Sink	No	Ideal Diode	DFN3x3-12L
AOZ13984DI-02	3.4 to 23	28	33	Sink	No	Ideal Diode	DFN3x3-12L
AOZ1356DI-01 AOZ1356DI-02	3.4 to 5.5	28	39	Source	Adjustable	$V_{OUT} > V_{IN}$	DFN3x3-12L
AOZ1356LI-01 AOZ1356LI-02	3.4 to 5.5	28	34	Source	Adjustable	$V_{OUT} > V_{IN}$	WLCSP-12 Bumps
AOZ1358LI-01	3.4 to 5.5	28	34	Source	Adjustable	Ideal Diode	WLCSP-16 Bumps
AOZ15333DI	3.3 to 5.5	39	45	Source	Adjustable	$V_{OUT} > V_{IN}$	DFN3x3-12L
AOZ13937DI-01 AOZ13937DI-02	3.3 to 32	39	20	Sink	No	Ideal Diode	DFN3x3-12L
AOZ1377DI-01 AOZ1377DI-02	3.4 to 23	28	34	Source	Adjustable	$V_{OUT} > V_{IN}$	DFN3x3-10L
AOZ1375DI-01 AOZ1375DI-02	3.4 to 23	28	18	Sink or Source	Adjustable (Source)	EN = Low	DFN3x3-12L
AOZ1380DI-01	3.4 to 23	28 on VBUS	20 (Sink) / 39 (Source)	Sink and Source	Adjustable (Source)	$V_{CHG} > V_{BUS}$ $V_{BUS} > V5V$	DFN3x5.2-20L
AOZ1381DI-01	3.4 to 23	28 on VBUS	34 (Sink) / 39 (Source)	Sink and Source	Adjustable (Source)	$V_{CHG} > V_{BUS}$ $V_{BUS} > V5V$	DFN3x5.2-20L
AOZ1382DI-01	3.4 to 23	28 on VBUS	34 (Sink) / 39 (Source)	Sink and Source	Adjustable (Source)	Ideal Diode Sink $V_{BUS} > V5V$	DFN3x5.2-20L
AOZ13287DI-02	3.4 to 23	28	9	Sink	No	Ideal Diode	DFN3.2x5.5-17L
AOZ13987DI-01	3.4 to 23	28	20	Sink	No	Ideal Diode	DFN3x3-12L
AOZ13937DI-03 AOZ13937DI-04	3.3 to 32	39	20	Sink	No	Ideal Diode/EN bar	DFN3x3-12L



AOS SALES OFFICES

UNITED STATES

475 Oakmead Pkwy
Sunnyvale, CA 94085
Phone: +1 (408) 830-9742
Email: Inquiries@aosmd.com

EUROPE

Phone: +49 7941 9039988
Email: AOSEurope@aosmd.com

JAPAN

16F Yurakucho Itocia
Office Tower
2-7-1 Yurakucho, Chiyoda-ku
Tokyo 100-0006
Phone: +81 (3) 6826-1401
Email: AOSJapan@aosmd.com

SOUTH KOREA

10th Floor, Bandi Building
Bongeunsa-ro 114
Gangnam-gu
Seoul 135-907
Phone: +82 (2) 557-8501
Email: AOSKorea@aosmd.com

TAIWAN

9/F, No. 292 Yangguang Street
Neihu District
Taipei City 11491
Phone: +886 (2) 8751-5616
Email: AOSTaiwan@aosmd.com

HONG KONG

Room 701, Tesbury Center
28 Queen's Road East
Wanchai
Phone: +86 (755) 8351-7733
Email: AOSChina@aosmd.com

CHINA

SHENZHEN

East 8/F, Matsunichi Building
#9996 Shennan Blvd.
Shenzhen 518057
Phone: +86 (755) 8351-7733
Email: AOSChina@aosmd.com

SHANGHAI

Room 602-603
Central Park Jing'an
329 Hengfeng Road
Jing'an District
Shanghai 200070
Phone: +86 (21) 6353-3218
Email: AOSChina@aosmd.com

To contact any of our sales partners worldwide, please visit our website at: www.aosmd.com/contact

Alpha and Omega Semiconductor Limited, or AOS, is a designer, developer and global supplier of a broad range of discrete power devices, wide band gap power devices, power management ICs and modules. AOS's products are aimed at, but not limited to applications such as portable computers, flat panel TVs, LED lighting, smart phones, battery backs, consumer and industrial motor controls, automotive electronics, and power supplies for TVs, computers, servers and telecommunication equipment.



Powering a Greener Future™