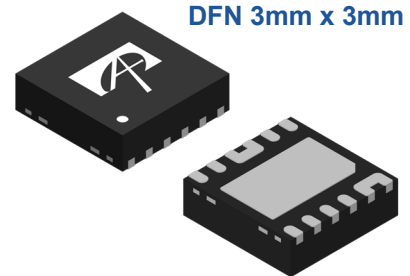




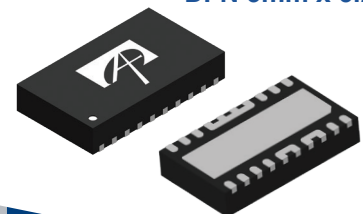
ALPHA & OMEGA
SEMICONDUCTOR

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
- Features Limited Power Source (LPS) for Multiport Operation



DFN 3mm x 3mm

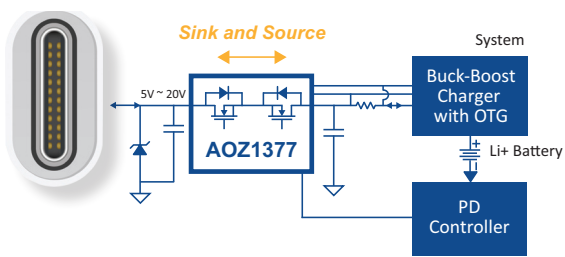


DFN 3mm x 5.2mm

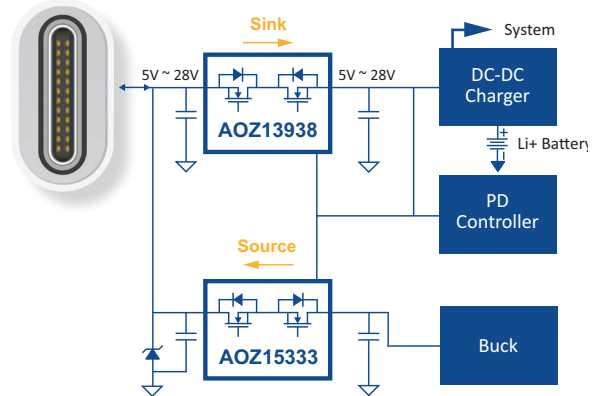
Power ICs



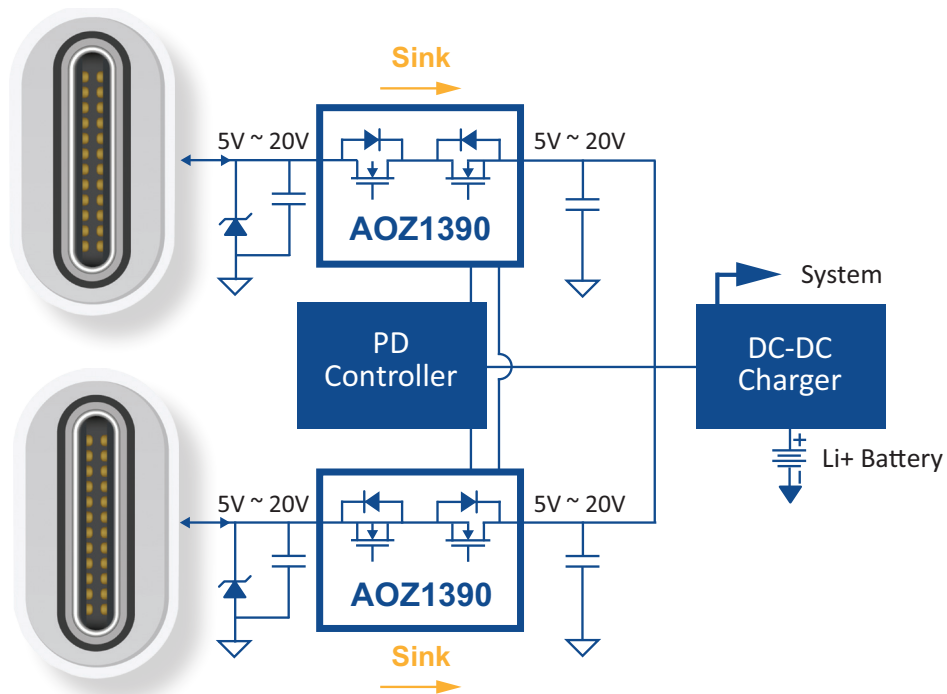
Applications



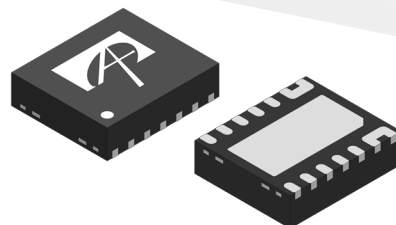
AOZ1377 Implementation in Single-Port OTG USB



AOZ13938 Offers Ideal Diode TRCB AOZ15333 Offer Fast Role Swap Support



AOZ1390 offers Limited Power Source(LPS) for Safety in Multi USB-C Port Applications



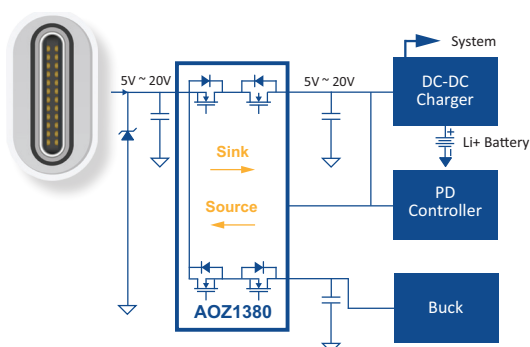
AOZ1390DI-01/-02

Features and Advantages

AOZ1377 Features

- 23V/7A USB-C Smart Protection Switch
- 19mΩ typical on resistance
- Protection Features:

High-SOA Sink or source switch,
True Reverse Current Blocking,
Programmable Current Limit,
Input Over-Voltage Protection,
Under-Voltage Lockout,
Short-Circuit Protection,
Thermal Shutdown

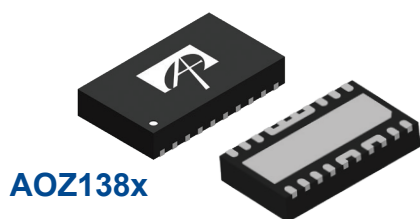


AOZ138x Family Offers Combo Sink and Source Switch in Single Package

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

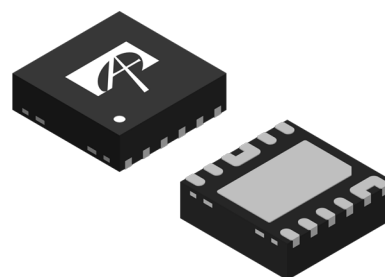


AOZ138x

AOZ13938 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



**28V EPR protection switches
AOZ13938/AOZ15333**

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

Product Selection

Part Number	Ops V_{IN} (V)	Abs Max VOUT (V)	RDSON	Current Flow	Current Limit	TRCB	Package
AOZ1327DI-01 AOZ1327DI-02	3.4 to 22	28	20	Sink	No	VOUT > VIN	DFN3x3-12L
AOZ1324DI-01 AOZ1324DI-02	3.4 to 22	28	32	Sink	No	VOUT > VIN	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	VOUT > VIN	DFN3x3-12L
AOZ1356LI-01 AOZ1356LI-02	3.4 to 5.5	28	34	Source	Adjustable	VOUT > VIN	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	VOUT > VIN	DFN3x3-12L
AOZ13938DI	3.3 to 32	39	20	Sink	No	Ideal Diode	DFN3x3-12L
AOZ1377DI-01 AOZ1377DI-02	3.4 to 23	28	34	Source	Adjustable	VOUT > VIN	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)	VCHG > VBUS VBUS > V5V	DFN3x5.2-20L
AOZ1381DI-01	3.4 to 23	28 on VBUS	34 (Sink) / 39 (Source)	Sink and Source	Adjustable (Source)	VCHG > VBUS VBUS > 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 VBUS > V5V	DFN3x5.2-20L
AOZ13287DI-02	3.4 to 23	28	9	Sink	No	Ideal Diode	DFN3.2x5.5-17L
AOZ1390DI-02	3.3 to 23	30	18	Sink	No	Ideal Diode	DFN3x5.3-14L



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