

Product Overview

FAN1080M6X: Offline Primary-Side-Regulation (PSR) Quasi-Resonant Valley Switch Controller

For complete documentation, see the data sheet.

FAN1080 is offline Primary-Side-Regulation (PSR) PWM controller with Quasi-Resonant (QR) mode controller to achieved constant-voltage (CV) and constant-current (CC) control for Travel Adaptor (TA) requirement and provide cost-effective, simplified circuit for energy-efficient power supplies.

FAN1080 is designed to have good energy efficiency technology that offers options to users to meet different power consumption targets using different startup components.

FAN1080 can be used in Travel Adapter design by stand-alone or co-work with secondary-side SR controller FAN6250/FAN6292C. While pairing with FAN6292C, FAN1080 can be used to design a high density Type-C travel adapter in compact system BOM.

Features

- Constant-Current (CC) and Constant-Voltage(CV) with Primary-Side Regulation Eliminates Secondary-Side Feedback Component
- Valley Switch Operation
- Dynamic Response Enhancement (DRE) Function for excellent dynamic response without the need of OPTO
- Having all needed protections, OVP, UVP, CSP (Current Short Protection)
- Capture secondary side Shut-Down signal from the proprietary channel between FAN1080 and FAN6250/6292C to perform real system protection
- Low Standby Power Consumption for Energy Star's 5-Star level (<30 mW with HV FET; <75mW with HV Resistor)
- Capable of <30mW Standby Power Consumption while using HV FET

Benefits

- Eliminate Opto but still has good CV/CC control
- Higher efficiency
- Excellent dynamic response performance without the need of OPTO
- Safe system
- Full system protection
- <30mW standby power feasible
- Flexible standby power design targets for <30mW using HV FET or <75mW using HV Resistor

Applications

- Travel Adapter
- AC-DC Adapter Requires CV/CC Control
- Adapter of Smart Home Device with Battery

End Products

- Smart Phone Charger
- Tablet Charger
- Smart Home Device Charger
- Digital Camera Charger

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	f _{sw} Typ (kHz)	Stand-by Mode	UVLO (V)	Short Circuit Protection	Latch	Soft Start	V _{CC} Max (V)	Drive Cap. (mA)	Package Type
FAN1080M6X	0.4533	Pb-free Halide free	Active											SOT-23-6

For more information please contact your local sales support at www.onsemi.com.

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