

6/20/2011

Exar Releases Family of USB 3.0 Power Distribution Switches

Single and Dual channel 1A Switches Provide USB 3.0 Performance and Highly Accurate (8%) Programmabl

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## XRP7657

2A, 25V Non Synchronous PWM Step Down Regulator

### Features

- 2A Constant Output Current
- 4.75V to 25V Wide Input Voltage
- PWM Voltage Mode Control
  - 420kHz Constant Operations
  - Up to 94% Efficiency
- Adjustable Output Voltage
  - 0.8V to 21V Range
  - 2% Accuracy
- Soft-Start and Enable Function
- Built-in Thermal, Over Current and Output Short Circuit Protection
- RoHS Compliant, "Green"/Halogen Free 8-Pin SOIC Package

### Applications






- Distributed Power Architectures
- Point of Load Converters
- Audio-Video Equipments
- Medical & Industrial Equipments

### Description

The XRP7657 is a non synchronous voltage mode PWM step down (buck) regulator capable of a constant output current up to 2Amps. A wide 4.75V to 25V input voltage range allows for single supply operations from industry standard 5V, 12V and 24V power rails.

With a 420kHz constant operating frequency and integrated high side switch, the XRP7657 reduces the overall component count and solution footprint. In addition to a 2% output setpoint accuracy, this device provides high efficiency, low ripple and excellent line and load regulation. An enable function and soft start feature allow for controlled power up sequencing implementation. Built-in over current, output short-circuit and over temperature protection insure safe operations under abnormal operating conditions.

The XRP7657 is offered in a RoHS compliant, "green"/halogen free 8-pin SOIC package.

Part Number	Pkg Code	RoHS	Min Temp. (°C)	Max Temp. (°C)	Status	Buy Now	Order Samples
XRP7657EDTR-F	<a href="#">NSOIC8</a>		-40	85	Active		
XRP7657EV8	<a href="#">Board</a>		-40	85	Active		

### Part Status Legend

**Active** - the part is released for sale, standard product.

**EOL (End of Life)** - the part is no longer being manufactured, there may or may not be inventory still in stock.

**CF (Contact Factory)** - the part is still active but customers should check with the factory for availability. Longer lead-times may apply.

**PRE (Pre-introduction)** - the part has not been introduced or the part number is an early version available for sample only.

**OBS (Obsolete)** - the part is no longer being manufactured and may not be ordered.

**NRND (Not Recommended for New Designs)** - the part is not recommended for new designs.

### ► Specifications

Iout(mA)	2000
Vin MIN. (V)	4.75
Vin MAX. (V)	25
IQ (μA)	1300
Freq (kHz)	420
Efficiency(%)	94

### ► Documents


[Block Diagram](#)

#### • Datasheets

[Datasheet](#)

Version 2.0.0

February 2011

323.61 KB

#### • Manuals

[Evaluation Board Manual](#)

Version 1.0.0

September 2009

492.07 KB

### ► Related News

- [10/12/2009 - Exar Expands its PowerBlox™ Line of High Voltage, High Current Step Down Converters](#)