

# XRP6658



## Efficiency Across The Board

The XRP6658 is a synchronous current mode PWM step down (buck) converter capable of delivering up to 1 Amp of current and optimized for portable battery-operated operations.

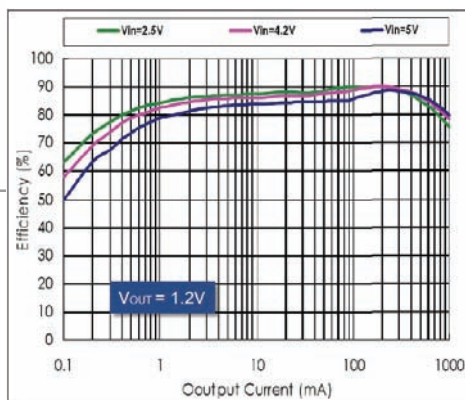
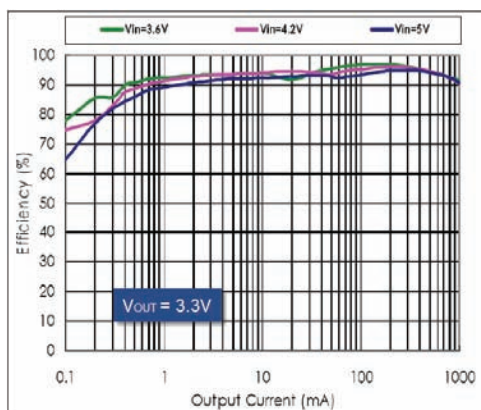
Based on a current mode 1.5MHz constant frequency PWM control scheme, the XRP6658 reduces the overall component count and solution footprint as well as providing a low output voltage ripple and excellent line and load regulation. It also implements a PFM mode to improve light load efficiency as well as a 100% duty cycle LDO mode. Output voltage is adjustable as low as 0.6V with a better than 3% accuracy while a low quiescent current supports the most stringent battery operations conditions.

Built-in over temperature and under voltage lock-out protections insure safe operations under abnormal operating conditions.

The XRP6658 is offered in a RoHS compliant, "green"/halogen free 5-pin SOT23 package.

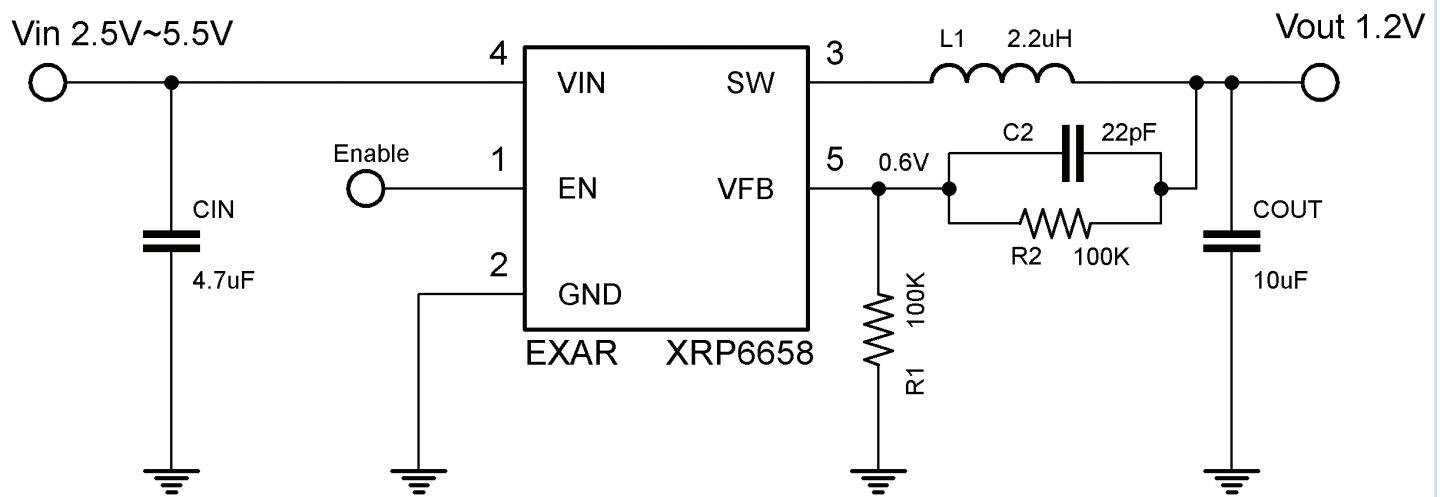
### FEATURES

- Guaranteed 1A Output Current
- Input Voltage: 2.5V to 5.5V
- 1.5MHz PWM Current Mode Control
- PFM Mode Operations at Light Load
- 100% Duty Cycle LDO Mode Operations
- As Low as 0.6V Adjustable Output Voltage
- Internal Compensation Network
- 15 $\mu$ A Quiescent Current
- Over Temperature & UVLO Protections
- Halogen Free 5-Pin SOT23 Package



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### BLOCK DIAGRAM



### TYPICAL APPLICATIONS

- Portable Equipments
- Battery Operated Equipments
- Audio-Video Equipments
- Networking & Telecom Equipments

### ORDERING INFORMATION

Part Number	Package	Operating Temperature Range	Comments
XRP6658ISTR-F	SOT23-5	$-40^{\circ}\text{C} \leq T_A \leq +85^{\circ}\text{C}$	Tape & Reel 3K/Reel
XRP6658EVB	XRP6658 Evaluation Board		