

# High Efficiency 1MHz, 2A Step-up DC/DC Converter

#### **GENERAL DESCRIPTION**

The PT1322 is a highly efficiency, current mode control step-up DC/DC converter with an integrated 120m $\Omega$  R<sub>DS(ON)</sub> N-channel MOSFET. The fixed 1MHz switching frequency and internal compensation circuitry reduce external component count and save the PCB space. The built-in internal soft-start circuitry minimizes the inrush current at start-up. The PT1322 is available in SOT23-6 package.

## **FEATURES**

- Input Voltage Operating Range: 2.7 V to 5.5 V
- 1MHz Constant Frequency Operation
- Minimum on time: 100ns typical
- Minimum off time: 100ns typical
- Maximum output voltage: 6V
- Low  $R_{DS(ON)}$ : 120m $\Omega$
- SOT23-6 Package

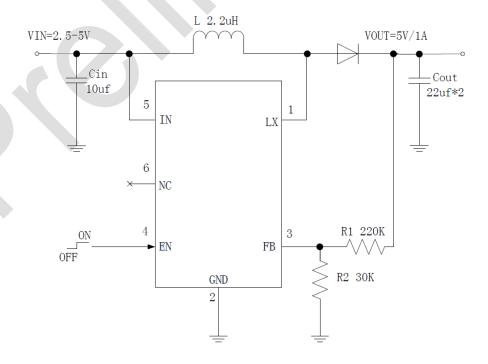
# **APPLICATIONS**

- Cell Phone and Smart Phone
- PDA, PMP, MP3
- Digital Still Cameras

#### ORDERING INFORMATION

PACKAGE	TEMPERATURE RANGE	ORDERING PART NUMBER	TRANSPORT MEDIA	MARKING
SOT23-6	-40 °C ~ +85 °C	PT1322E23F	Tape and Reel 3000 units	1322

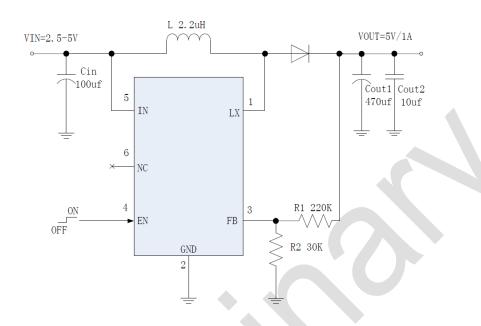
# **TYPICAL APPLICATION CIRCUIT 1**



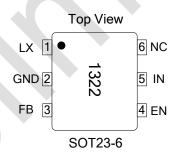


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#### **TYPICAL APPLICATION CIRCUIT 2**



## **PIN ASSIGNMENT**



# **PIN DESCRIPTIONS**

PIN NUM	PIN NAME	DESCRIPTIONS	
1	LX	Inductor node. Connect an inductor between IN pin and LX pin.	
2	GND	Chip Ground.	
		Feedback pin. Connect a resistor R1 between V <sub>OUT</sub> and FB, and a	
3	FB	resistor R2 between FB and GND to program the output voltage: $V_{\text{OUT}}$	
		= 0.6V*(R1/R2+1).	
4	EN	Chip Enable. Active High. Do not leave it floating.	
5	IN	Power Input.	
6	NC	No Connection.	