

## Description

The IT7321DF is a dual high efficiency synchronous step-down DC-DC converter, optimized for battery powered portable applications. It can supply 1A of load current at input voltage ranging from 2.5V to 6.0V and enter the power saving mode operation at light load current to maintain high efficiency over the entire load current range. The IT7321DF operates at a fixed switching frequency of 1.5MHz, allowing the use of small surface mount inductors and capacitor. The devices are ideal for portable applications powered by a single Li-Ion battery cell or by 3-cell NiMH / NiCd batteries. With an output voltage range from 6.0V down to 0.6V, it also can support low voltage DSPs and processors in PDAs, pocket PCs, as well as notebooks and sub notebook computers.

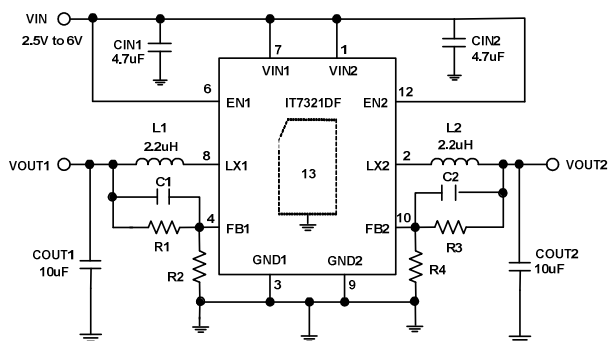
## Features

- High Efficiency up to 95%
- 2.5V to 6.0V Input Voltage Range
- 1A Output Current on Each Channel
- 1.5MHz Constant Frequency Operation
- Current Mode Operation
- Internal Soft-start
- Over-temperature Protection
- 100% Duty Cycle for Lowest Dropout
- 0.1μA Shutdown Current
- DFN 12L 3x3 Small Package
- RoHS Compliant (100% Green Available)

## Applications

- PDA, PMP, Pocket PC, and Smartphone
- PDA and Smartphone
- USB Powered Modems
- Microprocessor and DSP Core Supply
- Wireless and DSL Card
- Portable Device

## Typical Applications



Note: Fix Voltage Version: R2 & R4=NC, R1 & R3=0R

**Figure 1. Typical Application Circuit**

