

## GENERAL DESCRIPTION

The TCS8039 is a Highly integrated power management IC designed to minimize power consumption in consumer and multimedia applications. It is targeted at Tablet, Mobile Internet Devices, Personal Navigation Devices, Digital Photo Frame, Portable DVD Player, Entertaining and Education Machine. Providing a complete system power management solution, the TCS8039 integrates 3-ch synchronous buck converter. The converters are optimized for high efficiency (greater than 92%) and feature integrated low impedance FETs.

## APPLICATIONS

Digital Set-top Box (STB)  
Flat-Panel Television and Monitors  
Portable Media Player (PMP)

## TYPICAL APPILICATION

## FEATURES

2.7V to 5.5V Input Voltage Range  
Output Voltage as Low as 0.6V  
100% Duty Cycle in Dropout Operation  
High-Efficiency Synchronous-Mode Operation  
Input Voltage UVP&OVP  
Thermal Fault Protection  
Internal Soft-Start  
Fixed 1MHz Switching Frequency  
Over-Current Protection and Hiccup  
Available in a 20-pin 3mm X 3mm QFN Package

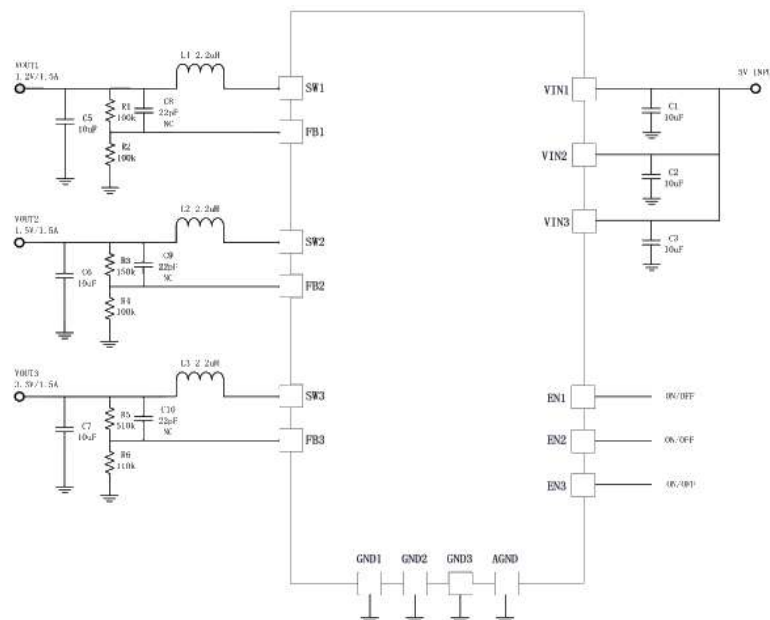


Figure 1. Basic Application Circuit