FEATURES

- Guaranteed Start-Up from Below 0.9 V.
- High Efficiency.
- Low Quiescent Current.
- Fixed or adjustable Output Voltage.
- Logic Controlled Shutdown.
- External Switch Driver available.

APPLICATIONS

- Pagers.
- Cameras.
- Wireless Microphones.
- Pocket Organizers.
- Battery Backup Suppliers.
- Portable Instruments.

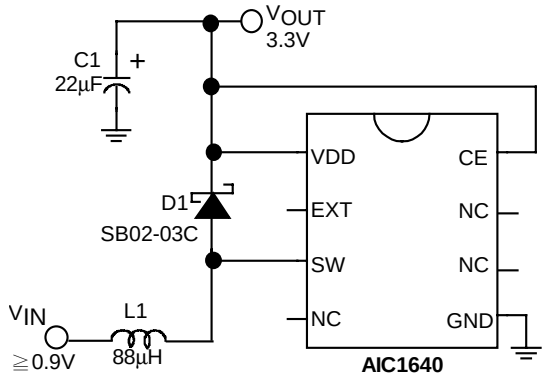
DESCRIPTION

The AIC1640 is a high efficiency step-up DC/DC converter for applications using 1 to 4 battery cells. Only three external components are required to deliver a fixed output voltage of 3V, 3.3V, or 5V.

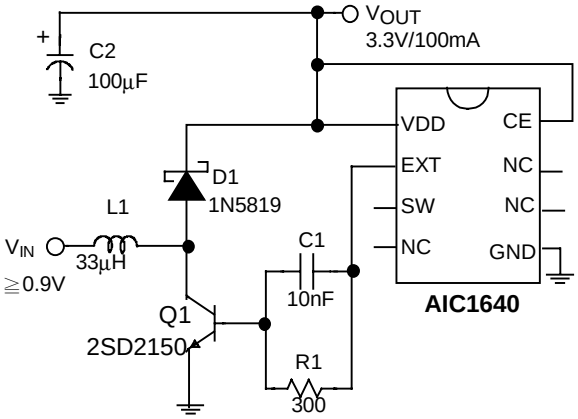
Pulse Frequency Modulation scheme brings optimized performance for applications with light output loading and low input voltage. The output ripple and noise are lower compared with the circuit operating in PSM mode. The AIC1640 starts up from below 0.9V input to boost either 3V, 3.3V, or 5V output with 1mA load.

Some useful features include external driver for higher power level applications, shutdown mode for saving the life of battery, and adjustable output version. The PFM control circuit operates in 100KHz (max.) switching rate, resulting in smaller passive component size, which makes the AIC1640 an ideal choice of DC/DC converter for space conscious applications.

TYPICAL APPLICATION CIRCUIT



3.3V Output Step-Up DC/DC Converter

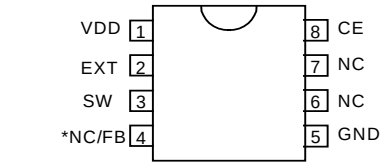


3.3V/100mA Step-Up DC/DC Converter

ORDERING INFORMATION

AIC1640-XXXX

- PACKAGE TYPE
  N: PLASTIC DIP
  S: SMALL OUTLINE
- TEMPERATURE RANGE
  C=0°C～+70°C
- OUTPUT VOLTAGE
  DEFAULT: ADJUSTABLE
  30: 3.0V
  33: 3.3V
  50: 5.0V

ORDER NUMBER	PIN CONFIGURATION
AIC1640-XXCN (PLASTIC DIP)	TOP VIEW  *Fixed Output Voltage: NC Adjustable Output Voltage:FB
AIC1640-XXCS (PLASTIC SO)	