

### 3.0MHz High Efficiency Low I<sub>Q</sub> Synchronous Boost

#### Features

- Wide Input Voltage Range: 2.5V to 5.5V
- Output Voltage 5.0V
- I<sub>OUT</sub> up to 1.0 A at V<sub>OUT</sub> = 5.0 V, V<sub>IN</sub> ≥ 3.0 V
- 3MHz PWM Switching Frequency
- High Efficiency and Low Quiescent Current
  - ▶ Over 95% Efficiency
  - ▶ 1μA Shutdown Current
  - ▶ 35μA Quiescent Current in Pass Through
  - ▶ 55μA Quiescent Current in PFM Operation
- ±2% DC Voltage Accuracy in PWM mode
- Undervoltage Lockout (UVLO)
- Short Circuit Protection
- Hiccup Current Limit
- Over Temperature Protection
- Selectable Pass Through Mode or True Load Disconnect During Shutdown
- Output Capacitor Pre-Charge and Soft-Start
- Pb-free 9-Bump, WLCSP 1.38mm x 1.38mm
- RoHS and Green Compliant
- -40°C to 85°C Operating Temperature Range

#### Brief Description

The KTC2110 features a high-efficiency, micropower synchronous boost for Lithium-Ion/Polymer battery applications. It offers true output disconnect to achieve a shutdown quiescent current of less than 1.0μA, extending battery life.

High efficiency over a wide output current range is achieved by selecting PWM/PFM mode automatically depending on the output load conditions.

A Pass Through mode allows to transfer the input power directly to output (not boosting) with over current protection.

The constant on-time design does not require any external compensation components, simplifying the design and providing ultra-fast transient response.

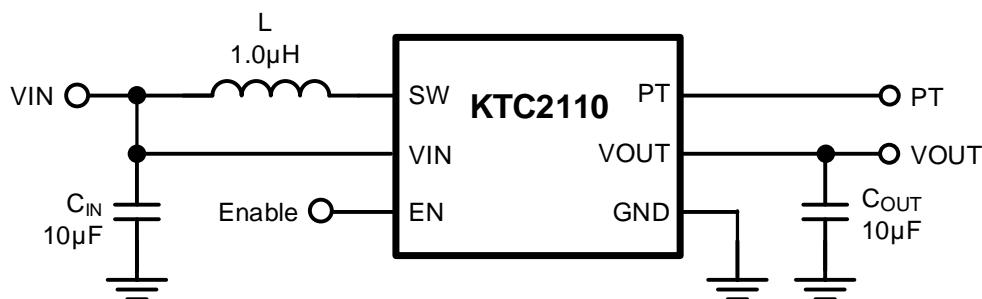
The inrush current-limiting feature minimizes the voltage droop on the battery supply when the device is turned on.

The KTC2110 is packaged in advanced, RoHS and Green compliant, 1.38mm x 1.38mm, 9-balls Wafer-Level Chip-Scale Package (WLCSP).

#### Applications

- Smartphones and Tablets
- Mobile Internet Devices
- USB OTG
- Wearables
- Portable Devices

#### Typical Application



### Ordering Information

Part Number	V <sub>OUT</sub>	Marking <sup>1</sup>	Operating Temperature	Package
KTC2110ECAA-TR	5.0V	NOXXYYZZZZ	-40°C to +85°C	WLCSP33-9

1. XX = Date Code, YY = Assembly Code, ZZZZ = Serial Number.

Kinetic Technologies cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a Kinetic Technologies product. No intellectual property or circuit patent licenses are implied. Kinetic Technologies reserves the right to change the circuitry and specifications without notice at any time.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Switching Voltage Regulators](#) category:*

*Click to view products by [Kinetic Technologies](#) manufacturer:*

Other Similar products are found below :

[FAN53610AUC33X](#) [FAN53611AUC123X](#) [FAN48610BUC33X](#) [FAN48610BUC45X](#) [FAN48617UC50X](#) [R3](#) [430464BB](#) [KE177614](#)  
[MAX809TTR](#) [NCV891234MW50R2G](#) [NCP81103MNTXG](#) [NCP81203PMNTXG](#) [NCP81208MNTXG](#) [NCP81109GMNTXG](#)  
[SCY1751FCCT1G](#) [NCP81109JMNTXG](#) [AP3409ADNTR-G1](#) [NCP81241MNTXG](#) [LTM8064IY](#) [LT8315EFE#TRPBF](#) [LTM4668AIY#PBF](#)  
[NCV1077CSTBT3G](#) [XCL207A123CR-G](#) [MPM54304GMN-0002](#) [MPM54304GMN-0004](#) [MPM54304GMN-0003](#)  
[XDPE132G5CG000XUMA1](#) [AP62300Z6-7](#) [MP8757GL-P](#) [MIC23356YFT-TR](#) [LD8116CGL](#) [HG2269M/TR](#) [OB2269](#) [XD3526](#) [U6215A](#)  
[U6215B](#) [U6620S](#) [LTC3412IFE](#) [LT1425IS](#) [MAX25203BATJA/VY+](#) [MAX77874CEWM+](#) [XC9236D08CER-G](#) [ISL95338IRTZ](#) [MP3416GJ-P](#)  
[BD9S201NUX-CE2](#) [MP5461GC-Z](#) [MPQ4415AGQB-Z](#) [MPQ4590GS-Z](#) [MAX38640BENT18+T](#) [MAX77511AEWB+](#)