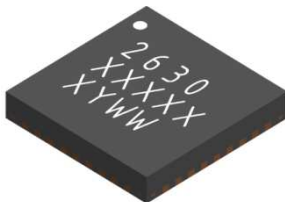


#### Description

The Enpirion EC2630QI is a high density DC-DC Intermediate Voltage Bus Converter which generates a highly efficient output voltage. EC2630QI tracks one half the input voltage and is designed to work with Enpirion's highly integrated DC to DC point-of-load converter products for a complete 12V solution. EC2630QI provides the means to condition power from a 12V input, to supply multiple lower voltage converters while enabling high efficiency and small PCB area. Due to its extremely high efficiency, it avoids the common two stage power conversion penalty and is equivalent or better than direct regulation.

This Enpirion solution significantly helps in system design and productivity by offering greatly simplified board design, layout and manufacturing requirements. In addition, a reduction in the number of vendors required for the complete power solution helps to enable an overall system cost savings. All Enpirion products are RoHS compliant and use a lead-free manufacturing environment.



**Figure 1: ~140mm<sup>2</sup> solution footprint with low package profile permitting back side PCB mounting.**

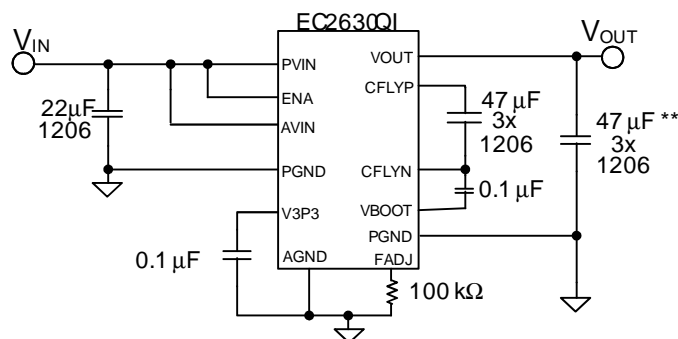
#### Features

- Complete power conditioning solution from a 12 volt power bus.
- Wide system input voltage range of 6V to 13.6V.
- High and flat efficiency, up to 97.5%.
- 4A Continuous Output Current Capability
- Adjustable operating frequency with optional external clock input.
- Master/Slave Mode for Parallel Operation
- Load-based dynamic clock scaling
- Output Enable pin, VoutOK, VinOK
- Pre-programmed soft-start time.
- Thermal shutdown, short circuit, Overload, OVLO and UVLO protection.
- RoHS compliant, MSL level 3, 260C reflow.

#### Application

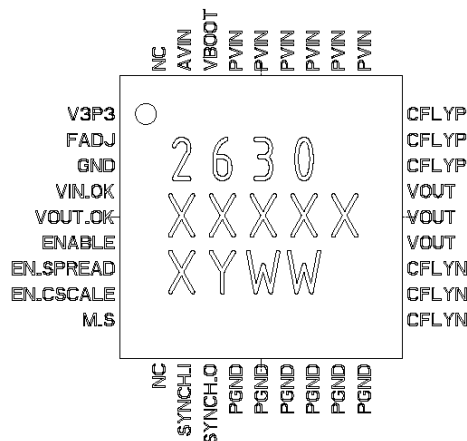
- Applications requiring down converting from a 12V bus to a well regulated output voltage with high efficiency, in a compact foot print (Note: The total system application involves two or more Enpirion products.)
- Enterprise, Industrial, Embedded, and Telecommunication applications
- Multi-rail compute & network interface applications such as PCIe and ATCA AMC cards.
- 12V Industrial and Consumer Applications such as Audio/Video Home Theater, Tuners

## Application Schematic

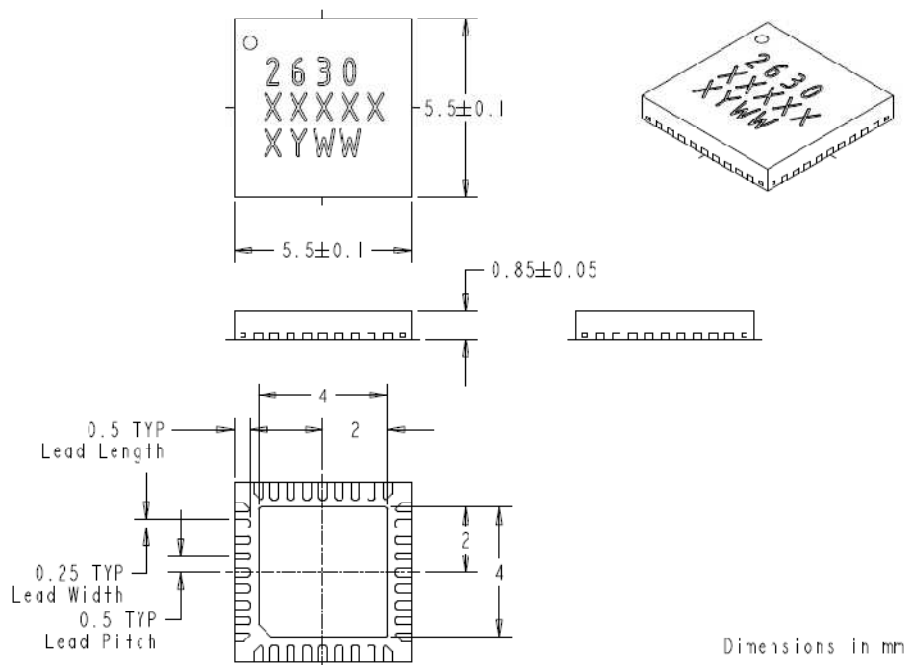


\*\* 1-2 of Cout can be eliminated due to downstream input bypass capacitance (e.g. PoL converters).

## Pin Assignments (Top View)



## Package Dimensions



## Contact Information

Enpirion, Inc.  
 53 Frontage Road - Suite 210  
 Hampton, NJ 08827 USA  
 Phone: 1.908.894.6000  
 Fax: 1.908.894.6090

Enpirion reserves the right to make changes in circuit design and/or specifications at any time without notice. Information furnished by Enpirion is believed to be accurate and reliable. Enpirion assumes no responsibility for its use or for infringement of patents or other third party rights, which may result from its use. Enpirion products are not authorized for use in nuclear control systems, as critical components in life support systems or equipment used in hazardous environment without the express written authority from Enpirion.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Power Management IC Development Tools](#) category:*

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

Other Similar products are found below :

[EVAL-ADM1168LQEBZ](#) [EVB-EP5348UI](#) [MIC23451-AAAYFL EV](#) [MIC5281YMME EV](#) [DA9063-EVAL](#) [ADP122-3.3-EVALZ](#) [ADP130-0.8-EVALZ](#) [ADP130-1.2-EVALZ](#) [ADP130-1.5-EVALZ](#) [ADP130-1.8-EVALZ](#) [ADP1714-3.3-EVALZ](#) [ADP1716-2.5-EVALZ](#) [ADP1740-1.5-EVALZ](#) [ADP1752-1.5-EVALZ](#) [ADP1828LC-EVALZ](#) [ADP1870-0.3-EVALZ](#) [ADP1871-0.6-EVALZ](#) [ADP1873-0.6-EVALZ](#) [ADP1874-0.3-EVALZ](#) [ADP1882-1.0-EVALZ](#) [ADP199CB-EVALZ](#) [ADP2102-1.25-EVALZ](#) [ADP2102-1.875EVALZ](#) [ADP2102-1.8-EVALZ](#) [ADP2102-2-EVALZ](#) [ADP2102-3-EVALZ](#) [ADP2102-4-EVALZ](#) [ADP2106-1.8-EVALZ](#) [ADP2147CB-110EVALZ](#) [AS3606-DB](#) [BQ24010EVM](#) [BQ24075TEVM](#) [BQ24155EVM](#) [BQ24157EVM-697](#) [BQ24160EVM-742](#) [BQ24296MEVM-655](#) [BQ25010EVM](#) [BQ3055EVM](#) [NCV891330PD50GEVB](#) [ISLUSBI2CKIT1Z](#) [LM2744EVAL](#) [LM2854EVAL](#) [LM3658SD-AEV/NOPB](#) [LM3658SDEV/NOPB](#) [LM3691TL-1.8EV/NOPB](#) [LM4510SDEV/NOPB](#) [LM5033SD-EVAL](#) [LP38512TS-1.8EV](#) [EVAL-ADM1186-1MBZ](#) [EVAL-ADM1186-2MBZ](#)