

Evaluation Board for QPI Series Active EMI Filters

The QPI-x-EVAL1 [“x” refers to the specific QPI model] is an easy to use evaluation board for testing the QPI family of active EMI filters. The board can be used in different EMI configurations (*Figures 1 and 2*), with many of the standard DC to DC converters available. Consult the converter’s manufacturer’s recommendation for proper EMI re-circulation. The evaluation board includes a mounted QPI filter, input and output capacitors, and terminals blocks for easy electrical connection.

When using the QPI-x-EVAL1 evaluation board, close attention must be paid to wiring and grounding. Wires should be kept as short as possible and positioned to minimize radiated noise pick up around the QPI filter. Refer to Picor’s QPI-AN1 application note for proper EMI measurement set up.

Filter performance in the application is highly dependent on several factors and cannot be extrapolated from insertion loss curves alone. Final noise performance is a complex function of filter elements, equipment grounding and noise source impedances, which vary in magnitude and phase over the frequency spectrum of interest.

Designers should be aware that to select and quantify an EMI filter for conducted noise, they must test the filter in their product under the set up and conditions specified in the applicable EMI standards. Measurements should be made in consultation with in-house compliance testing or an independent EMI test facility.

Check www.picorpower.com for data sheets, application notes and additional product information.

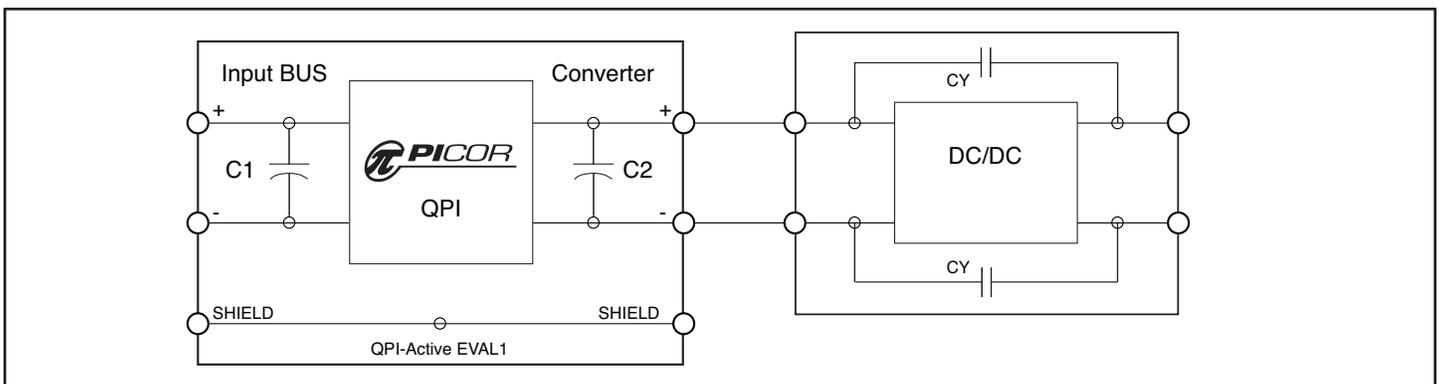


Figure 1 - Typical for “Open-frame” EMI topology

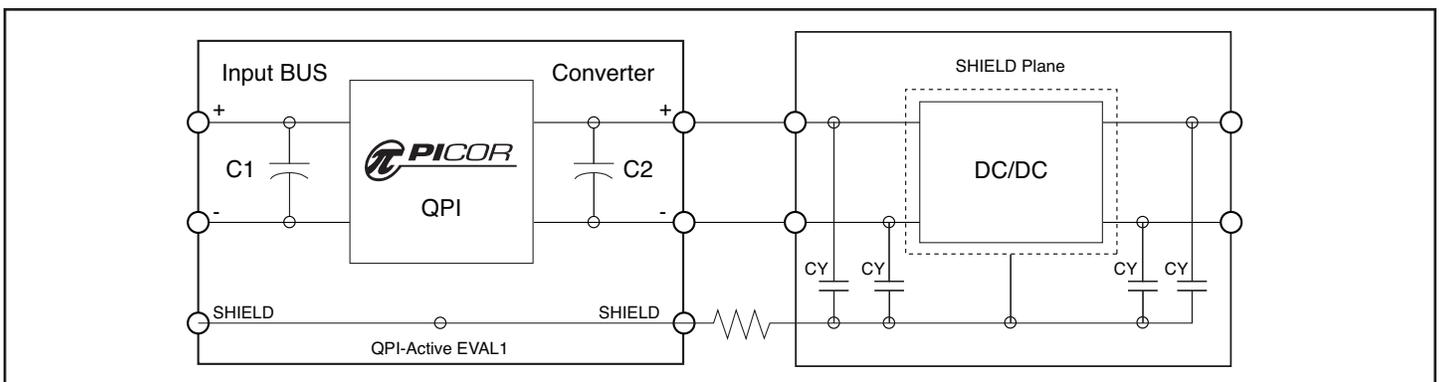


Figure 2 - Typical for “Base-plate” EMI topology

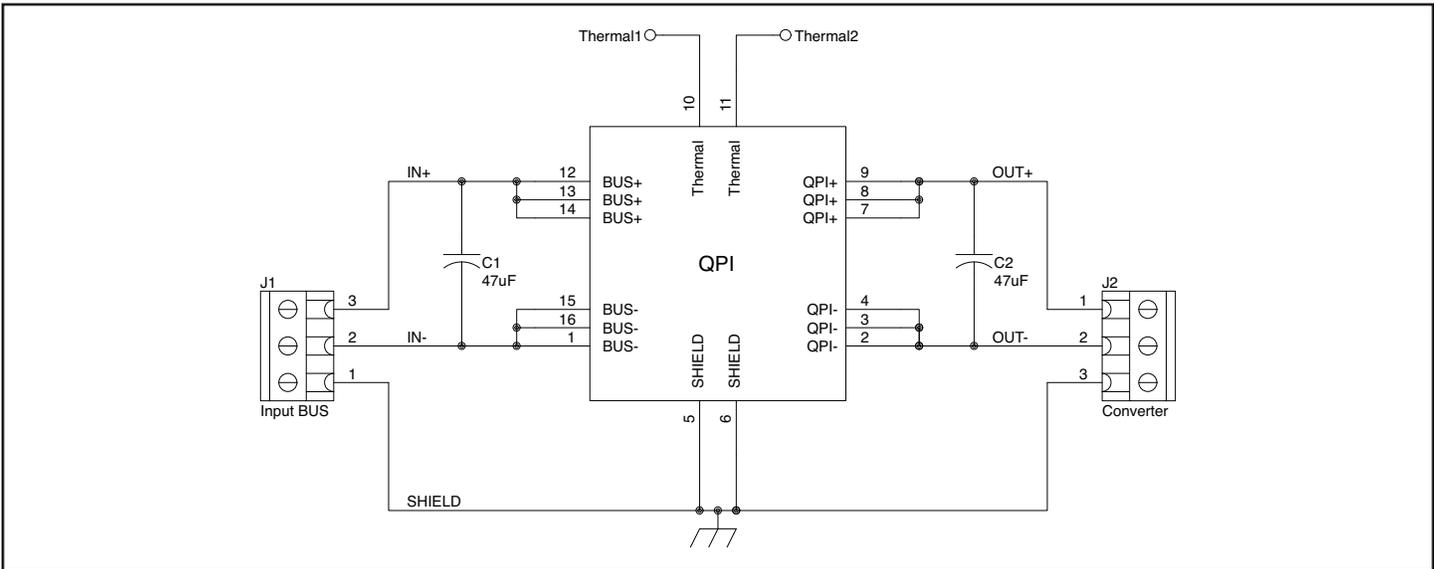


Figure 3 - QPI-X EVAL1 schematic.

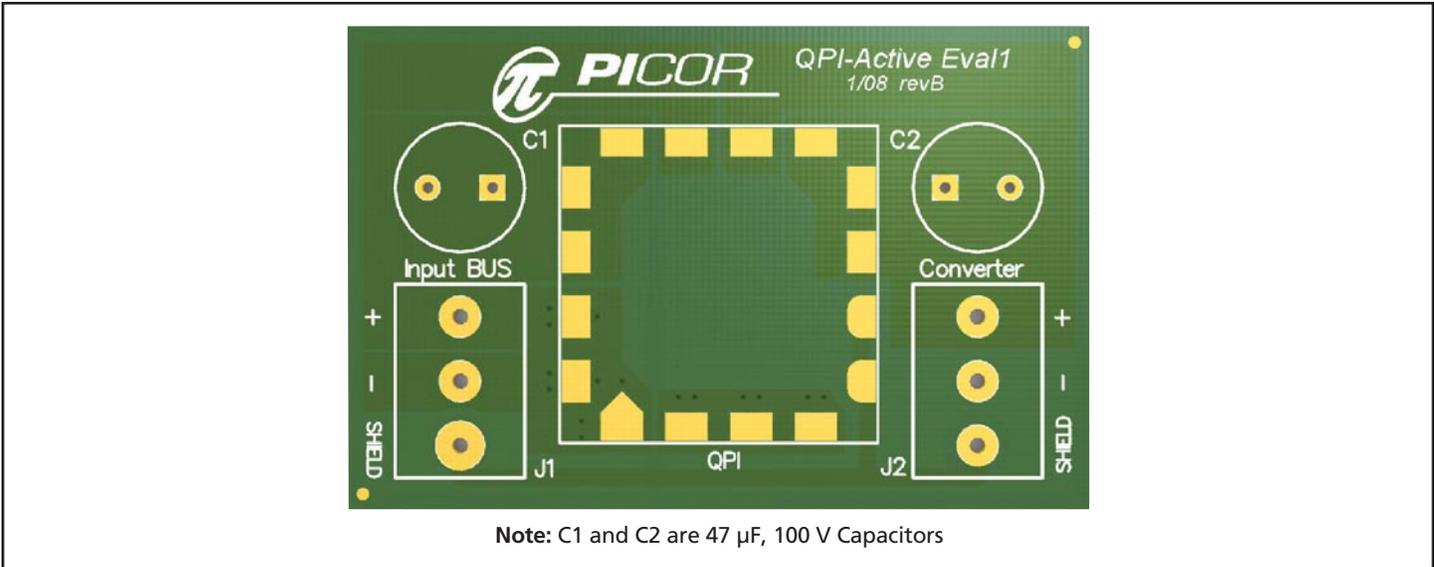


Figure 4 - QPI-X EVAL board showing location of components and connectors.

Ordering Information

Part Number	Description	Part Number	Description
QPI-3-EVAL1	Evaluation board for QPI-3LZ	QPI-5-EVAL1	Evaluation board for QPI-5LZ
QPI-4-EVAL1	Evaluation board for QPI-4LZ	QPI-6-EVAL1	Evaluation board for QPI-6LZ

Vicor's comprehensive line of power solutions includes high-density AC-DC & DC-DC modules and accessory components, fully configurable AC-DC & DC-DC power supplies, and complete custom power systems.

Information furnished by Vicor is believed to be accurate and reliable. However, no responsibility is assumed by Vicor for its use. No license is granted by implication or otherwise under any patent or patent rights of Vicor. Vicor components are not designed to be used in applications, such as life support systems, wherein a failure or malfunction could result in injury or death. All sales are subject to Vicor's Terms and Conditions of Sale, which are available upon request.

Specifications are subject to change without notice.



Vicor Corporation
 25 Frontage Road, Andover, MA, USA 01810
 Tel: 800-735-6200 Fax: 978-475-6715

Email
 Vicor Express: vicorexp@vicr.com
 Technical Support: apps@vicr.com