

AS13985

Evaluation Board Application Note



General Description

Board Description

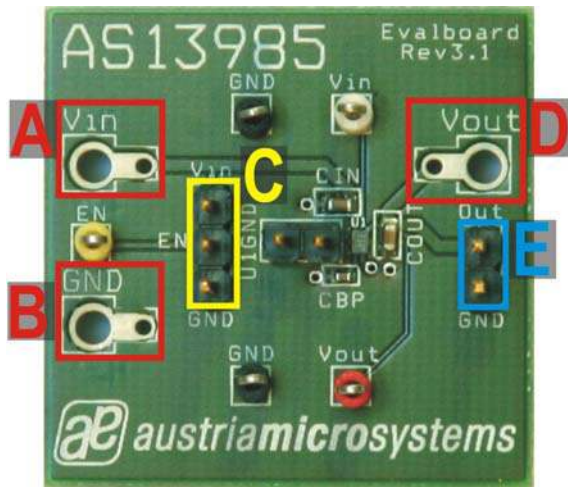


Figure 1: Board Description - Connector

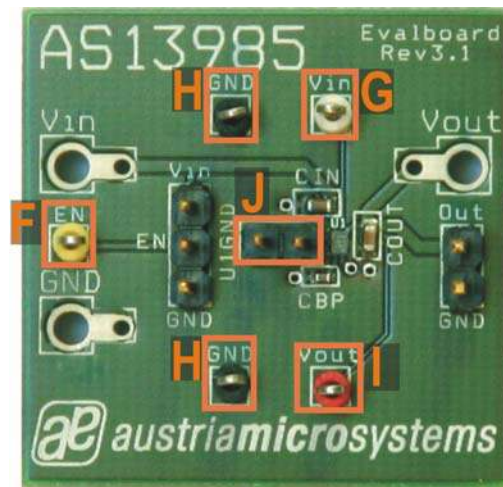


Figure 2: Board Description – Measurement Points

Connector Description

Label	Jumper	Description	Info
A	Vin	Power Supply Connectors for Vin and Ground.	+2.5V to +5.5V
B	GND		
C	Vin / GND	EN Enable Jumper	<input type="checkbox"/> 1/ON = The AS13985 is on. <input type="checkbox"/> 0/OFF = The AS13985 is off and the current into Vin is $\leq 1\mu\text{A}$ (typ).
D	Vout	Power Output Connector	Regulated Output Voltage
E	Out, GND	Power Output and Ground Connector	Additional Connectors to apply a load

Measurement Points

Label	Jumper	Description	Info
F	EN	Enable Pin Connector ¹	Measurement Points
G	Vin	Power Supply Connectors for Vin and Ground.	
H	GND		
I	Vout	Power Output Connector	
J	U1GND	I_q Quiescent Current Connector ²	

Operational sequence

1. If not present get the [datasheet for the AS13985](http://www.austriamicrosystems.com) from www.austriamicrosystems.com. Drive the IC on the evaluation board only with the recommended settings and values as described in the datasheet.
2. Connect a +2.5V to +5.5V power supply (Vin “A” and GND “B”).
3. Perform measurements at the measurement points.

Have fun using the Evaluation Board. If there are questions do not hesitate to contact us. See contact information at the end of the application note.

¹ If the EN measurement point F is used as a connector, be sure that the EN jumper C is completely removed. Otherwise the supply source could be damaged through a short circuit.

² For normal operation jumper J has to be always set. For the measurement of the quiescent current remove the jumper and connect an analyzer here.

Layout of demoboard

Board schematics and layout

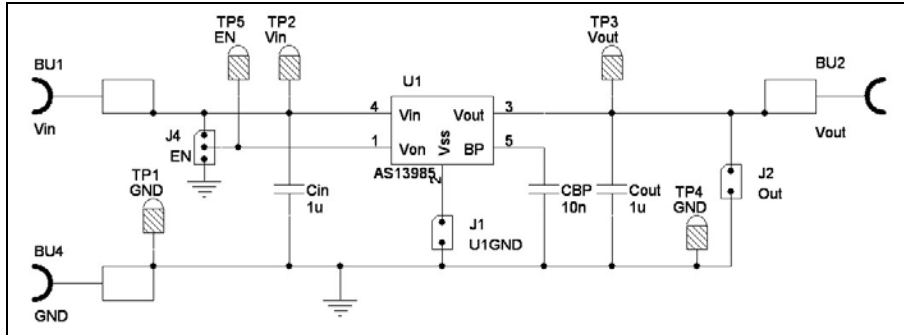


Figure 3: Schematic

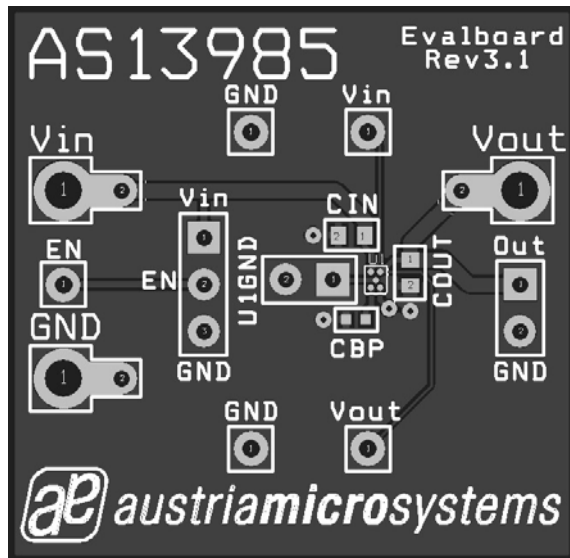


Figure 4: Top View

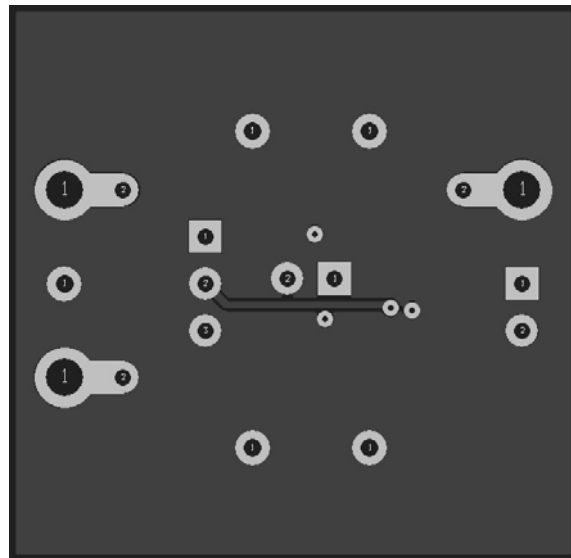


Figure 5: Bottom View

Assembly List

Label	Info	Type	Manufacturer
Cin, Cout	1 μ F, 0603, X7R	GRM188R71C105	Murata
Cbyp	10nF, 0402, X7R	GRM155R71H103	

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