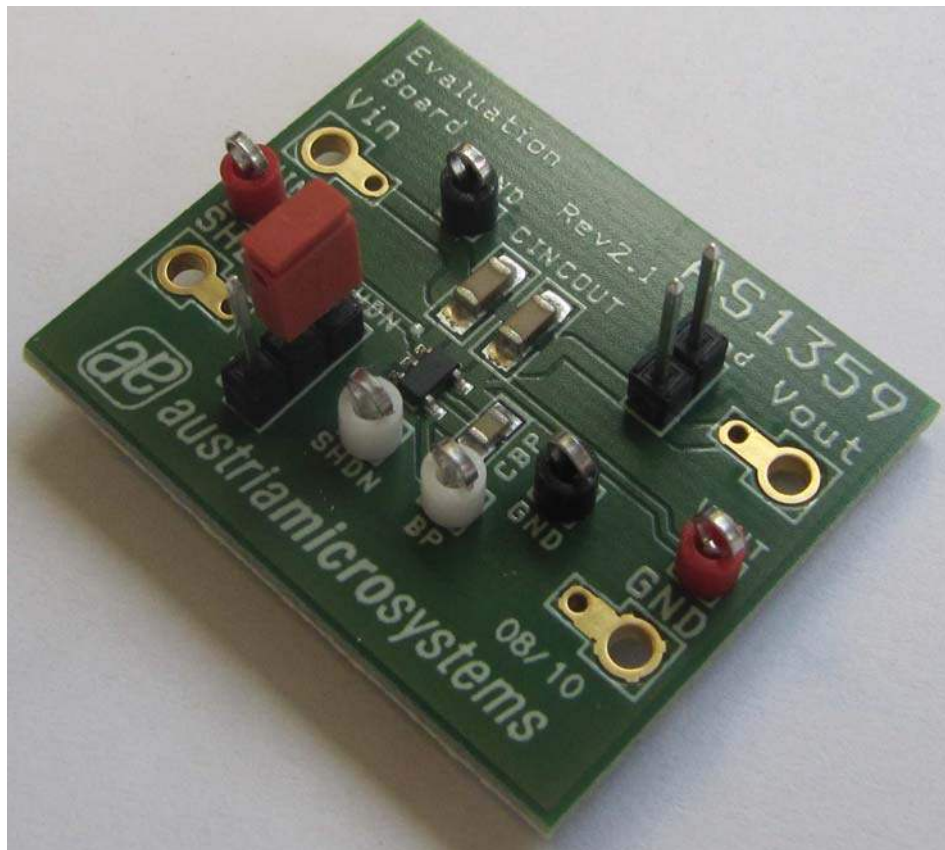


## Demo Board Manual

# AS1359

## 300mA, Ultra-Low-Noise, High-PSRR Low Dropout Regulators

[www.austriamicrosystems.com/LDO/AS1359](http://www.austriamicrosystems.com/LDO/AS1359)



## General Description

### Board Description



Figure 1: Board Description - Connectors

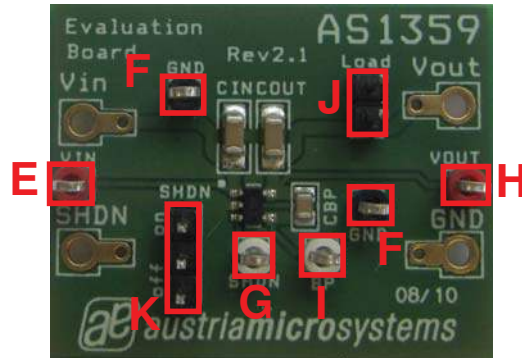


Figure 2: Board Description – Measurement Points

### Connector Description

| Label | Name | Description    | Info                                     |
|-------|------|----------------|--|
| A     | VIN  | Supply Voltage | Supply voltage ranging from 2.0V to 5.5V |
| B     | GND  | Ground         |  |
| C     | SHDN | Shutdown       | Pull this pin low to disable the LDO     |
| D     | VOUT | Output Voltage | Output voltage ranging from 1.5V to 4.5V |

### Measurement Point Description

| Label | Name | Description       | Info  |
|-------|------|-------------------|---|
| E     | VIN  | Supply Voltage    | Measurement Points  |
| F     | GND  | Ground            |   |
| G     | SHDN | External Inductor |   |
| H     | VOUT | Output Voltage    |   |
| I     | BP   | Bypass            |   |
| J     | Load |                   | Jumper for resistive load   |
| K     | SHDN | Shutdown          | <input type="checkbox"/> ON: The AS1359 is enabled<br><input type="checkbox"/> OFF: The AS1359 is disabled<br><input type="checkbox"/> No Jumper: Connect a valid enable signal via external connector "C". |

## Getting Started

The AS1359 Demoboard is designed to work with the AS1359 fixed output voltage version. The Demoboard can also be used with the AS1358. The difference between AS1358 and AS1359 is the output current.

AS1358:  $I_{OUT} = 150\text{mA}$

AS1359:  $I_{OUT} = 300\text{mA}$

### Bill of Materials

| Ref. | Function         | Value     | Description       | Manufacturer           | Mfg. Order Nr. |
|------|------------------|-----------|-------------------|------------------------|----------------|
| CIN  | Input Capacitor  | 1 $\mu$ F | 1206 / X7R / 16V  | diverse                |                |
| COUT | Output Capacitor | 1 $\mu$ F | 1206 / X7R / 16V  | diverse                |                |
| CBP  | Bypass Capacitor | 10nF      | 0805 / X7R / 6.3V | diverse                |                |
| U1   | LDO              | ASxx      | TSOT23 5-pin      | Austriamicrosystems AG | AS1359-BTTT-xx |

## Layout of Demo Board

### Board schematics and layout

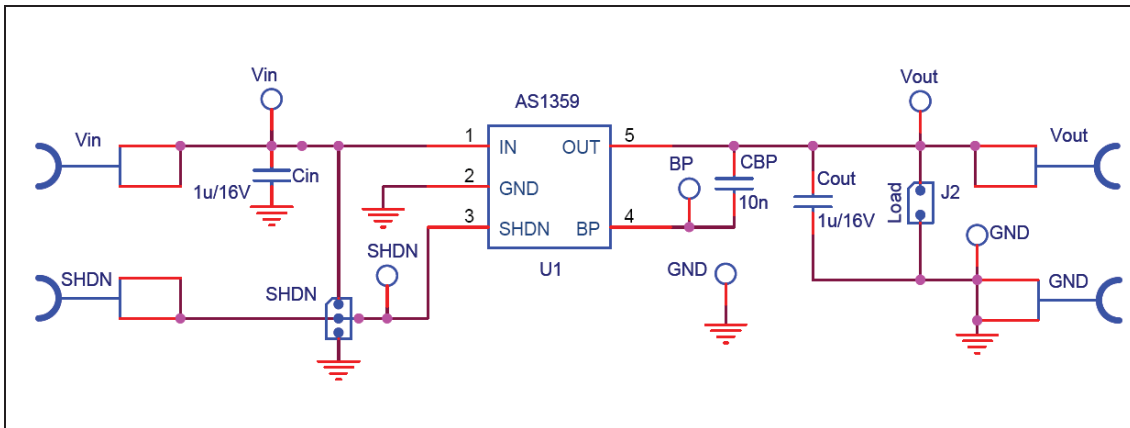


Figure 3: Schematics

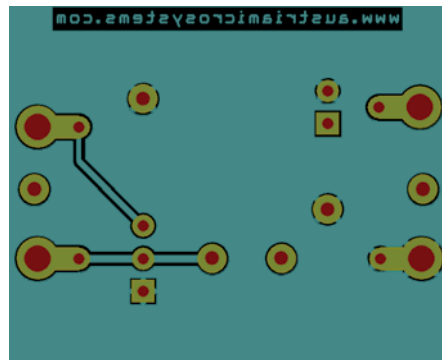
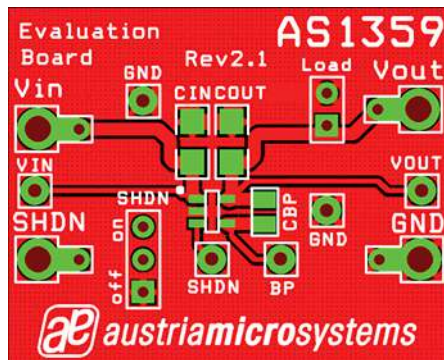


Figure 4: Top + Bottom Layer

## Copyright

Copyright © 1997-2010, austriamicrosystems AG, Tobelbaderstraße 30, 8141 Unterpremstätten - Graz, Austria - Europe. Trademarks Registered ®. All rights reserved. The material herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner.

All products and companies mentioned are trademarks or registered trademarks of their respective companies.

## Disclaimer

Devices sold by austriamicrosystems AG are covered by the warranty and patent indemnification provisions appearing in its Term of Sale. austriamicrosystems AG makes no warranty, express, statutory, implied, or by description regarding the information set forth herein or regarding the freedom of the described devices from patent infringement. Austriamicrosystems AG reserves the right to change specifications and prices at any time and without notice. Therefore, prior to designing this product into a system, it is necessary to check with austriamicrosystems AG for current information.

This product is intended for use in normal commercial applications. Applications requiring extended temperature range, unusual environmental requirements, or high reliability applications, such as military, medical life-support or life-sustaining equipment are specifically not recommended without additional processing by austriamicrosystems AG for each application. For shipments of less than 100 parts the manufacturing flow might show deviations from the standard production flow, such as test flow or test location.

The information furnished here by austriamicrosystems AG is believed to be correct and accurate. However, austriamicrosystems AG shall not be liable to recipient or any third party for any damages, including but not limited to personal injury, property damage, loss of profits, loss of use, interruption of business or indirect, special, incidental or consequential damages, of any kind, in connection with or arising out of the furnishing, performance or use of the technical data herein. No obligation or liability to recipient or any third party shall arise or flow out of austriamicrosystems AG rendering of technical or other services.



## Contact Information

### Headquarters

austriamicrosystems AG  
Tobelbaderstraße 30  
A-8141 Unterpremstätten - Graz, Austria  
T. +43 (0) 3136 500 0  
F. +43 (0) 3136 5692

For Sales Offices, Distributors and Representatives, please visit:  
<http://www.austriamicrosystems.com/contact>