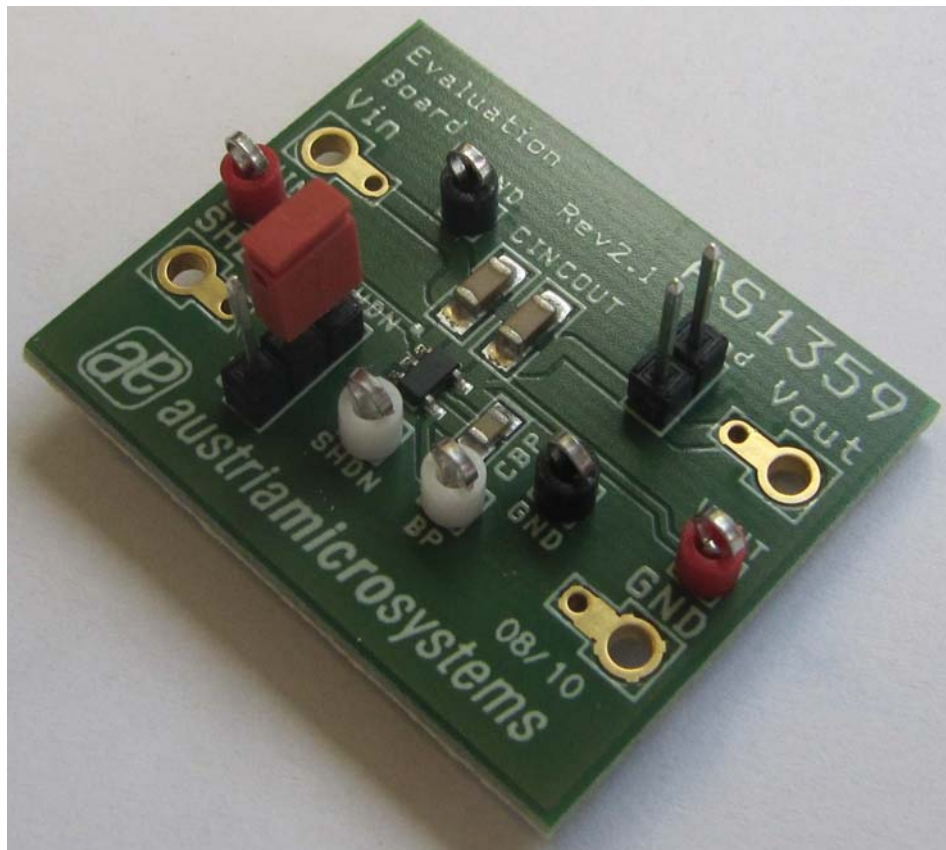


Demo Board Manual

AS1359

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

www.austriamicrosystems.com/LDO/AS1359



General Description

Board Description

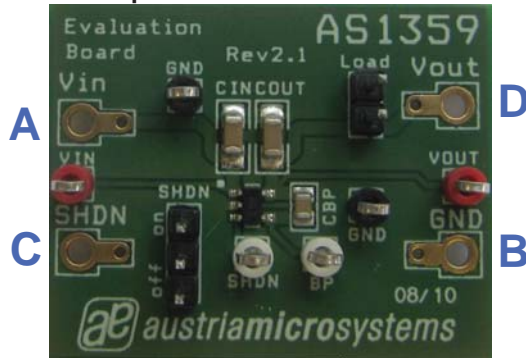


Figure 1: Board Description - Connectors

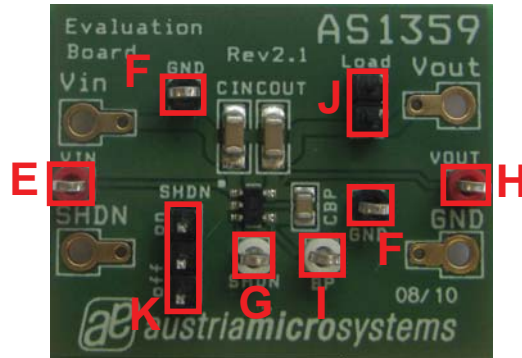


Figure 2: Board Description – Measurement Points

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 <input type="checkbox"/> OFF: The AS1359 is disabled <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 μ F | 1206 / X7R / 16V | diverse | |
| COUT | Output Capacitor | 1 μ 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

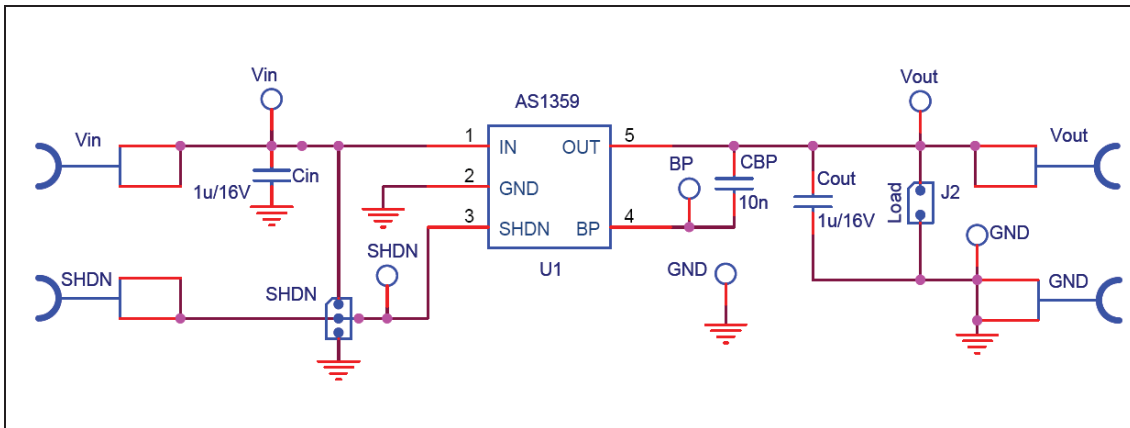


Figure 3: Schematics

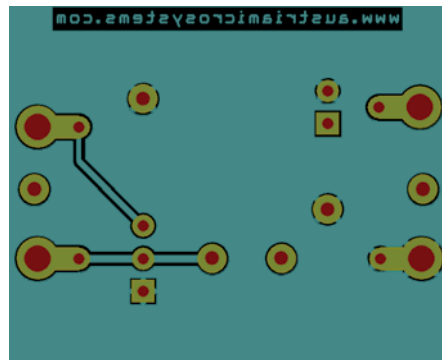
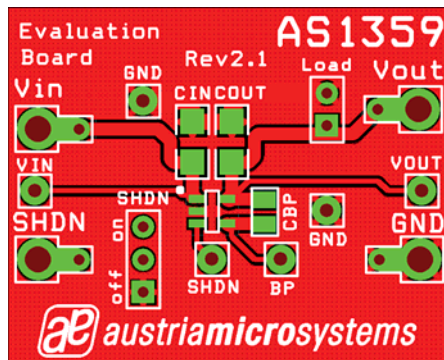


Figure 4: Top + Bottom Layer

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