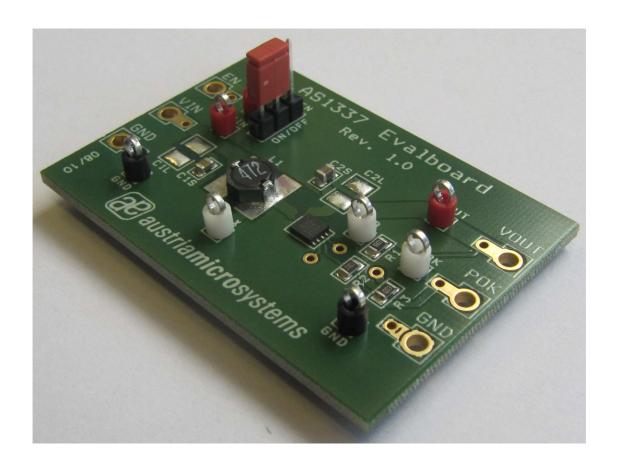
#### **Demo Board Manual**

### **AS1337**

## 200mA, DC-DC Step-Up Converter with Buck Mode

www.austriamicrosystems.com/DC-DC\_Step-Up/AS1337



#### **General Description**

#### **Board Description**



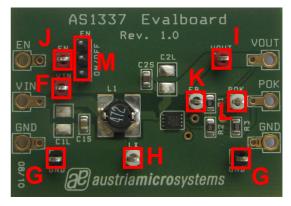


Figure 1: Board Description - Connectors

Figure 2: Board Description - Measurement Points

#### **Connector Description**

Label	Name	Description	Info
Α	VIN	Supply Voltage	Supply voltage ranging from 0.65V to 4.5V
В	GND	Ground	Supply voltage ranging from 0.65 v to 4.5 v
С	EN	Enable Input	Set the digital input "high" for normal operation.
			For shutdown, set "low"
D	VOUT	Output Voltage	Output voltage ranging from 2.5V to 5.0V
Е	POK	POK	high, when VOUT is within regulation

#### **Measurement Point Description**

Label	Name	Description	Info
F	VIN	Supply Voltage	
G	GND	Ground	
Н	LX	External Inductor	
I	VOUT	Output Voltage	Measurement Points
J	EN	Enable Input	
K	FB	Feedback	
L	POK	POK	
			ON: The AS1337 is enabled
М	EN	Enable	OFF: The AS1337 is disabled
			No Jumper: Connect a valid enable signal via external connector "C".

#### **Getting Started**

The AS1337 Demoboard is designed to work with the AS1337A "Battery connected in shutdown" version. With the resistor divider R1/R2 it is possible to adjust the VOUT.

On this Demoboard the following resistor values are mounted: R1 = 560k and R2 = 330k  $\rightarrow$  VOUT = 3.3V



#### **Bill of Materials**

Ref.	Function	Value	Description	Manufacturer	Mfg. Order Nr.
C1s	Input Capacitor	10μF	0805 / X5R / 6.3V	Murata	GRM219R60J106KE19
C2s	Output Capacitor	22µF	0805 / X5R / 6.3V	Murata	GRM21BR60J226ME39
L1	Coil	4.7µH	50mΩ / 1.82A / 6.8x6.0x2.4mm	Coilcraft	MOS6020-472ML
R1	Resistor (VOUT)	560k	0805/ ±1%	Multicomp	MC 0.1W 0805 1% 560K
R2	Resistor (VOUT)	330k	0805/ ±1%	Multicomp	MC 0.1W 0805 1% 330K
R3	R <sub>POK</sub>	100k	0805/ ±1%	Multicomp	MC 0.1W 0805 1% 100K
U1	DC/DC Converter	ASSE	TQFN 3x3mm 8-pin	Austriamicrosystems AG	AS1337A-BTDT

#### **Layout of Demo Board**

#### **Board schematics and layout**

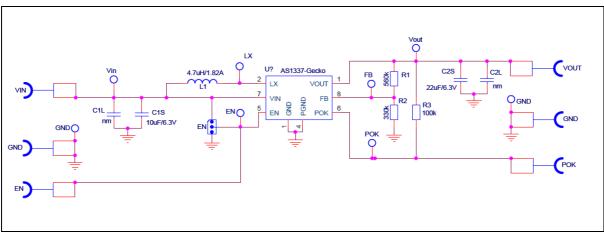


Figure 3: Schematics

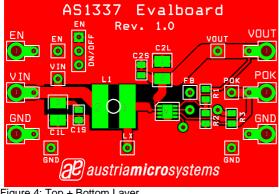
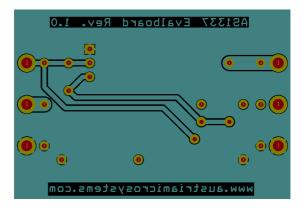


Figure 4: Top + Bottom Layer





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