



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





austriamicrosystems AG

is now

ams AG

The technical content of this austriamicrosystems application note is still valid.

Contact information:

Headquarters:

ams AG
Tobelbaderstrasse 30
8141 Unterpremstaetten, Austria
Tel: +43 (0) 3136 500 0
e-Mail: ams_sales@ams.com

Please visit our website at www.ams.com

Application Note: AN01- Demoboard

AS1364

1A, Low-Dropout Linear Voltage Regulator

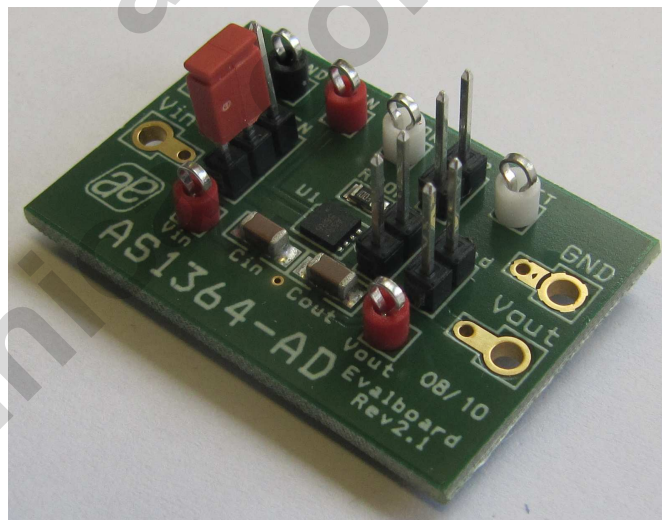


Table of Contents

1	FURTHER APPLICATIONS	3
2	REVISION STATUS	3
3	GENERAL DESCRIPTION.....	3
4	GETTING STARTED	4
5	HW- OVERVIEW:.....	4
5.1	AS1364 Demoboard jumper and device locations	4
5.2	AS1364 Demoboard 2V1 schematic	5
5.3	AS1364 Demoboard 2V1 layout	6
6	ORDERING INFORMATION	8
7	COPYRIGHT	9
8	DISCLAIMER	9

1 Further Applications

Visit our home-page: <http://www.austriamicrosystems.com>

2 Revision status

AS1364- AN01 - Demoboard
AS1364 Demoboard – Layout
AS1364 Demoboard – Schematic

Rev.: 1V0
Rev.: 2V1
Rev.: 2V1

3 General Description

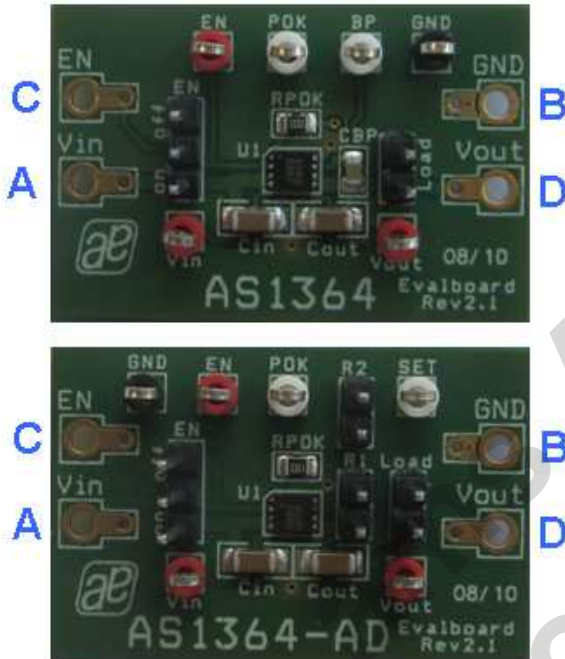


Figure 1: Board Description - Connectors

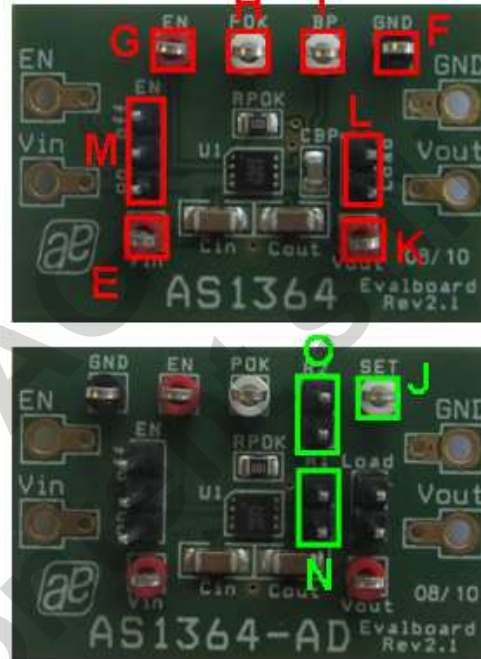





Figure 2: Board Description – Measurement Points

Connector Description

Label	Name	Description	Info
A	VIN	Supply Voltage	Supply voltage range from 2.0V to 5.5V
B	GND	Ground	
C	EN	Active High Enable Input	Set the digital input "high" for normal operation. For shutdown, set "low"
D	VOUT	Output Voltage	Output voltage range from 1.2V to 4.5V (fixed) Output voltage range from 1.2V to 5.3V (adjustable)

Measurement Point Description

Label	Name	Description	Info
E	VIN	Supply Voltage	Measurement Points
F	GND	Ground	
G	EN	Active High Enable Input	
H	POK	Open Drain POK Output	
I	BP	BP (fixed Vout version)	
J	SET	SET (adjustable Vout version)	
K	VOUT	Output Voltage	
L	Load	External load	
M	EN	Enable	 ON: The AS1364 is enabled  OFF: The AS1364 is disabled  No Jumper: Connect a valid enable signal via external connector "C".
N	R1	Resistor divider for adjustable Vout version	R1 between Vout and SET R2 between SET and GND
O	R2		

4 Getting Started

The AS1364 Demoboard is designed to work with all AS1364 fixed output voltage versions. The AS1364 fixed Vout version is available with 1.5V, 1.8V, 3.0V, 3.3V and 4.5V.

The AS1364-AD Demoboard is designed to work with the AS1364 adjustable output voltage version. The AS1364-AD adjustable Vout version has a valid Vout range from 1.2V to 5.3V. This Vout is adjustable via the resistor divider R1/R2. A value for R2 in the range of 25kΩ to 100kΩ should be sufficient. To use the factory preset Vout of 3.3V connect SET directly to GND (R1 = open; R2 = 0Ω).

5 HW- Overview:

5.1 AS1364 Demoboard jumper and device locations

Listed below are the various connectors and jumpers.

Ref.	Function	Value	Description	Manufacturer	Mfg. Order Nr.
Cin	Input Capacitor	4.7μF	1206 / X7R / 16V	diverse	
Cout	Output Capacitor	4.7μF	1206 / X7R / 16V	diverse	
CBP*	Bypass Capacitor	10nF	0805/X7R	diverse	
RPOK	POK pull-up resistor	100kΩ	0805	diverse	
U1	LDO	ASRx	8pin TDFN 3x3	Austriamicrosystems AG	AS1364-BTDT-xx

5.2 AS1364 Demoboard 2V1 schematic

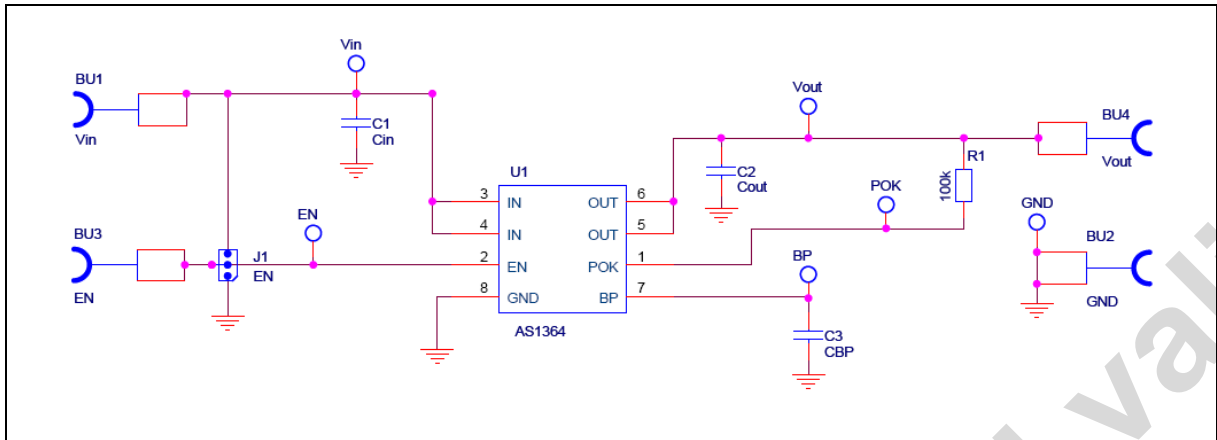


Figure 3: Schematics (fixed Vout)

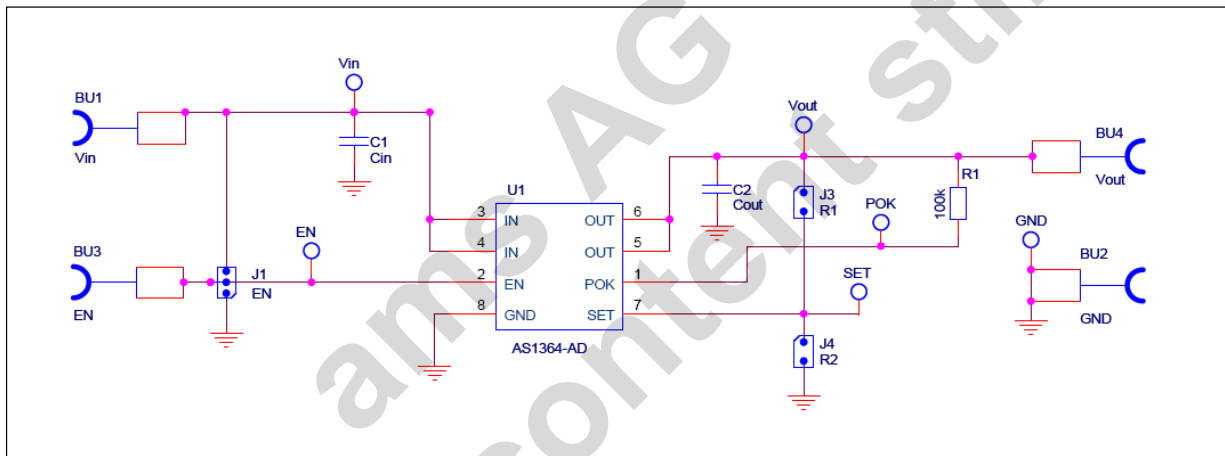
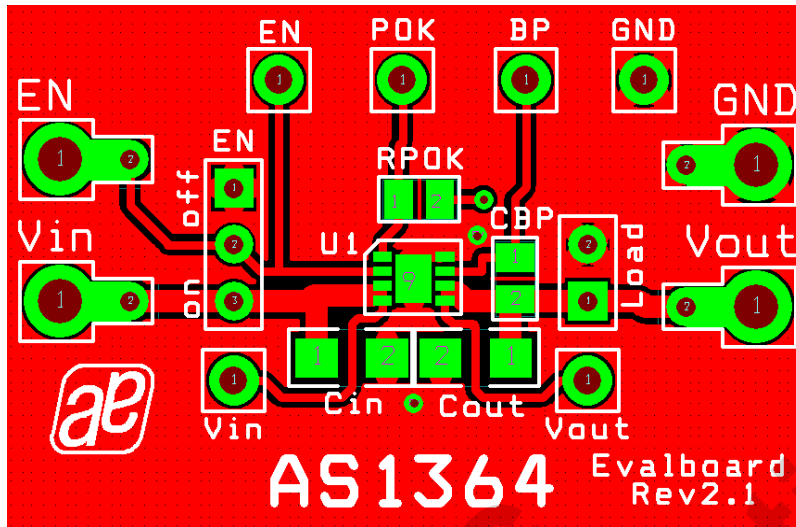
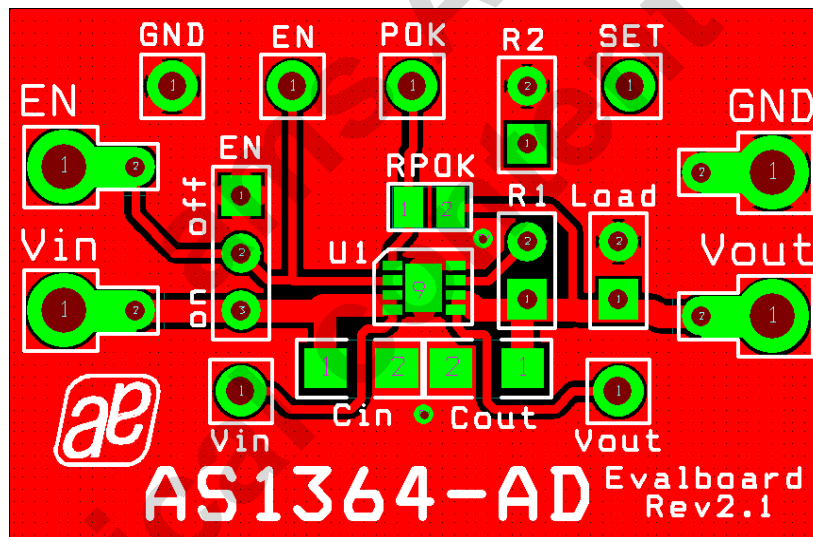


Figure 4: Schematics (adjustable Vout)

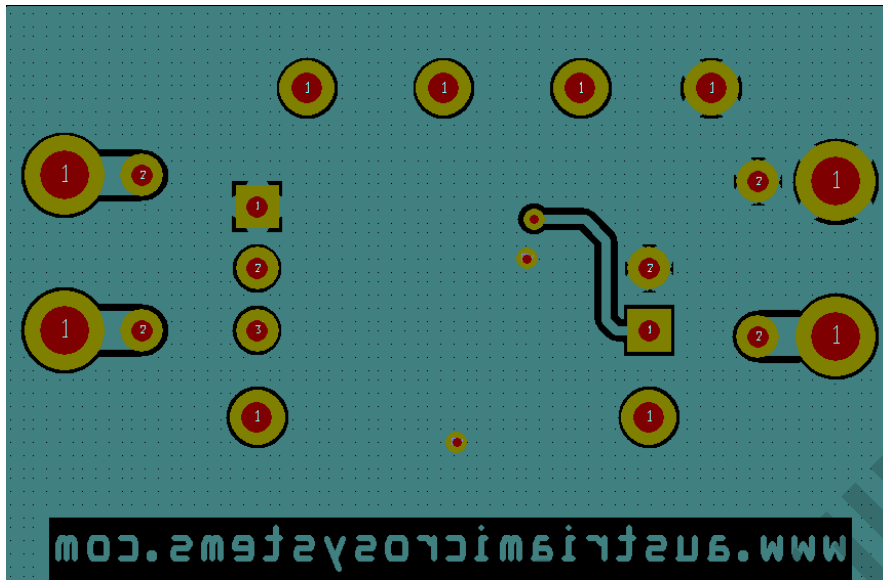
5.3 AS1364 Demoboard 2V1 layout



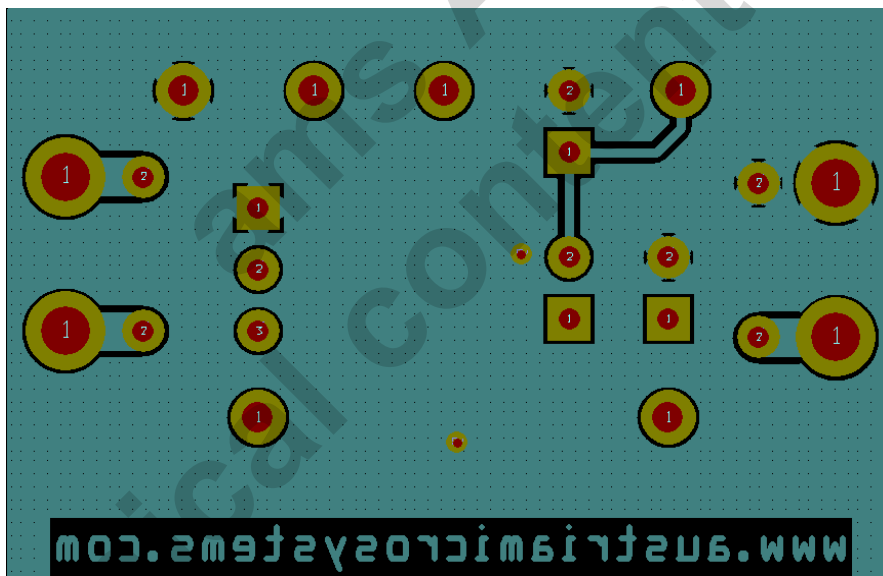
Layout (top view) (fixed Vout)



Layout (top view) (adjustable Vout)



Layout (bottom view) (fixed Vout)



Layout (bottom view) (adjustable Vout)

6 Ordering Information

Evalboard	AS1364 version	SAP number
AS1364-BSTT-AD EB Rev2.1	Vout = adj	990600324
AS1364-BSTT-15 EB Rev2.1	Vout = 1.5V	990600325
AS1364-BSTT-18 EB Rev2.1	Vout = 1.8V	990600326
AS1364-BSTT-30 EB Rev2.1	Vout = 3.0V	990600327
AS1364-BSTT-33 EB Rev2.1	Vout = 3.3V	990600328
AS1364-BSTT-45 EB Rev2.1	Vout = 4.5V	990600329

7 Copyright

Copyright © 1997-2011, austriamicrosystems AG, Schloss Premstaetten, 8141 Unterpremstaetten, 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.

8 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 lifesustaining 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
Tobelbader Strasse 30
Schloss Premstaetten
A-8141 Unterpremstaetten, 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>