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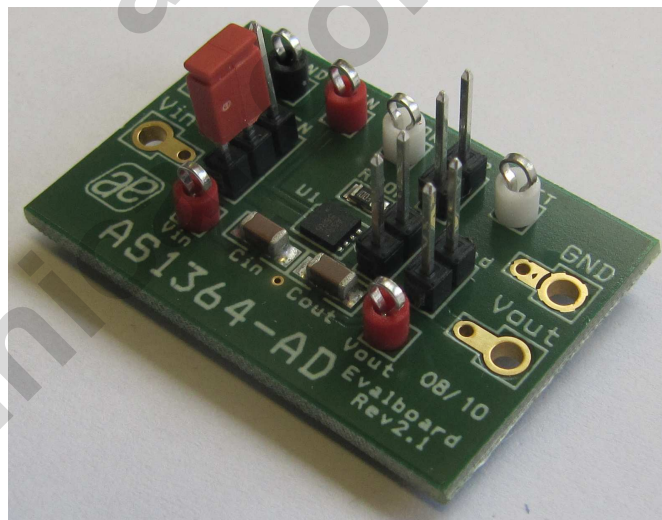
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Application Note: AN01- Demoboard

# AS1364

1A, Low-Dropout Linear Voltage Regulator



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## 1 Further Applications

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## 2 Revision status

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

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

## 3 General Description

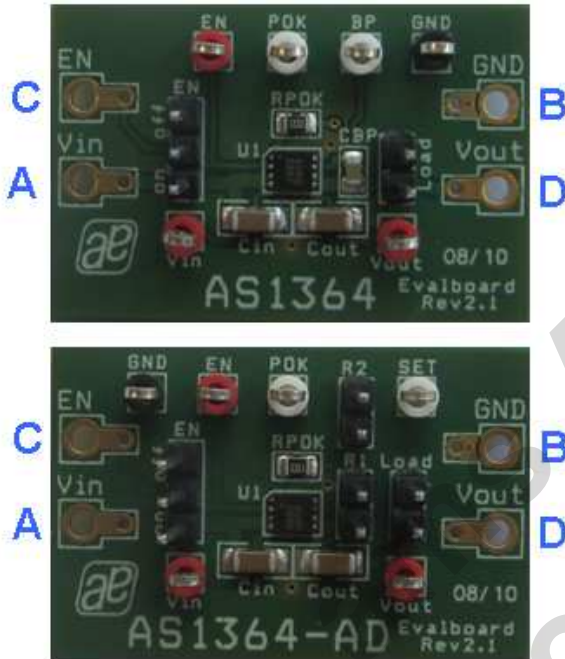


Figure 1: Board Description - Connectors

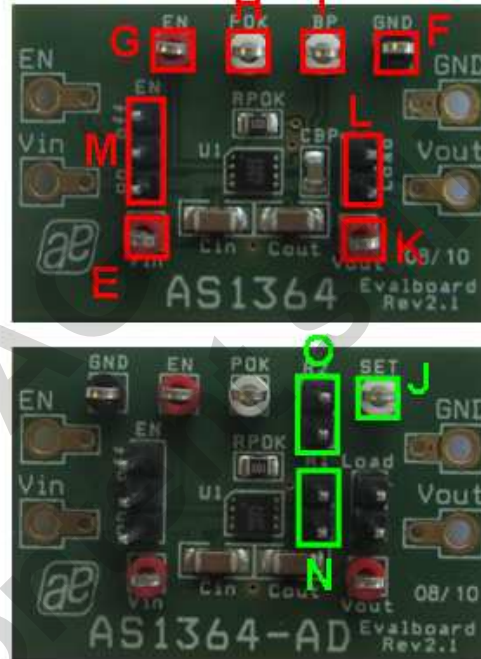





Figure 2: Board Description – Measurement Points

### Connector Description

Label	Name	Description	Info
A	<b>VIN</b>	Supply Voltage	Supply voltage range from 2.0V to 5.5V
B	<b>GND</b>	Ground	
C	<b>EN</b>	Active High Enable Input	Set the digital input "high" for normal operation. For shutdown, set "low"
D	<b>VOUT</b>	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

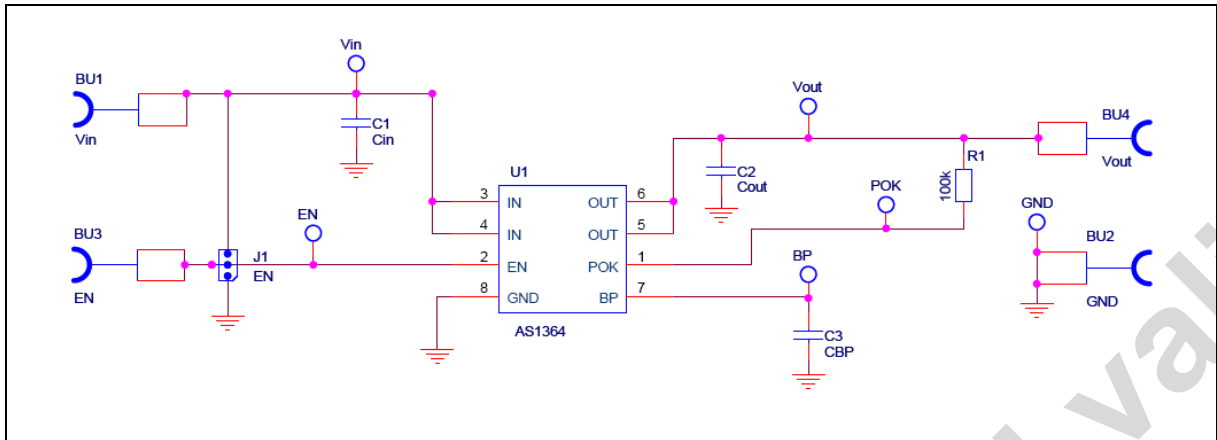


Figure 3: Schematics (fixed Vout)

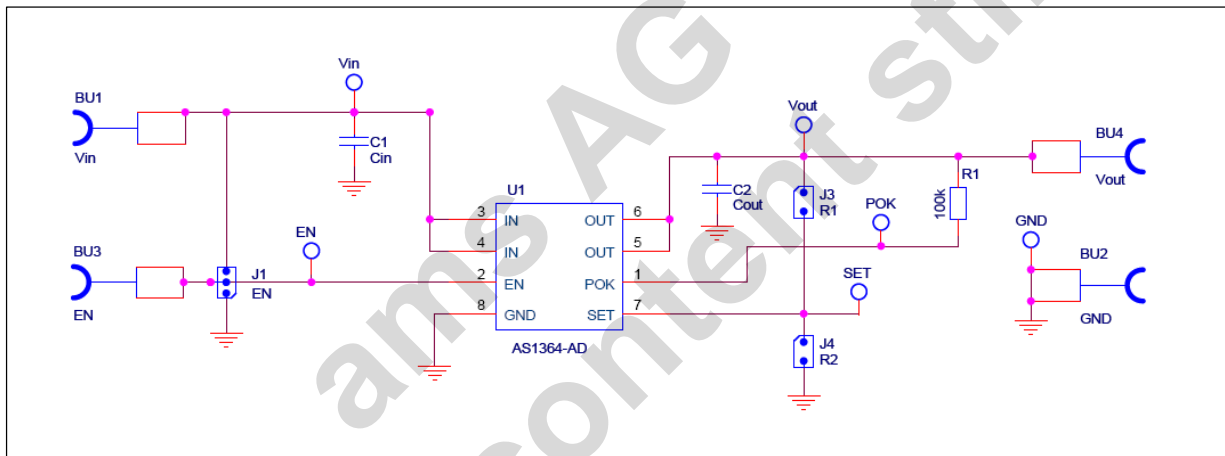
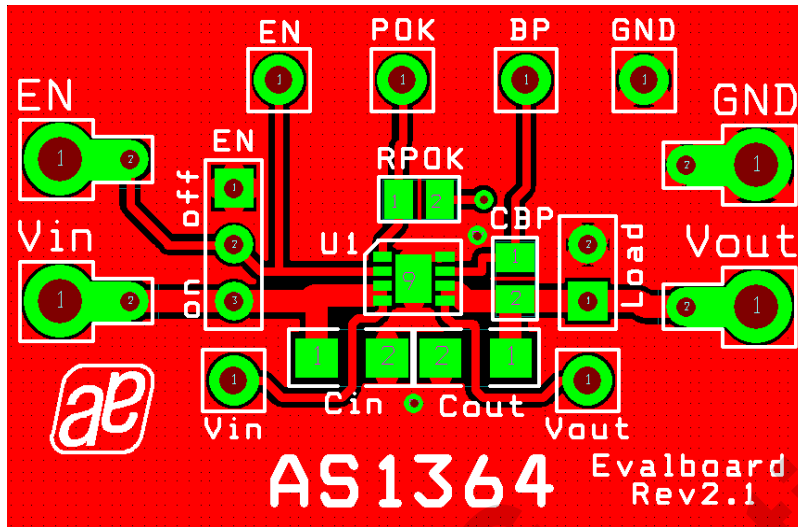
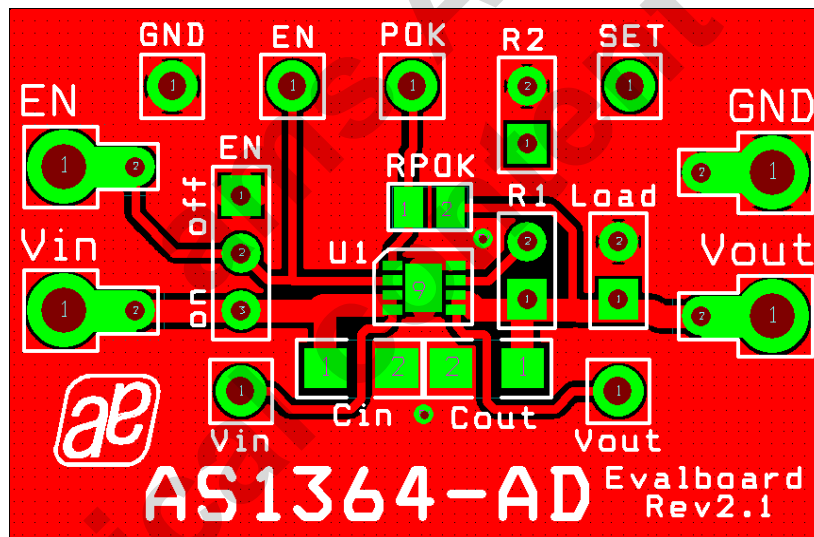


Figure 4: Schematics (adjustable Vout)

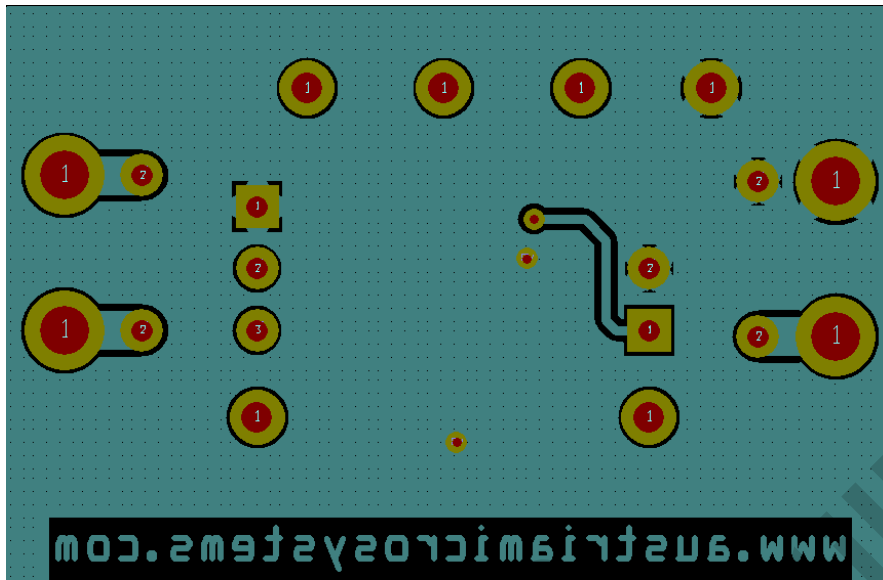
### 5.3 AS1364 Demoboard 2V1 layout



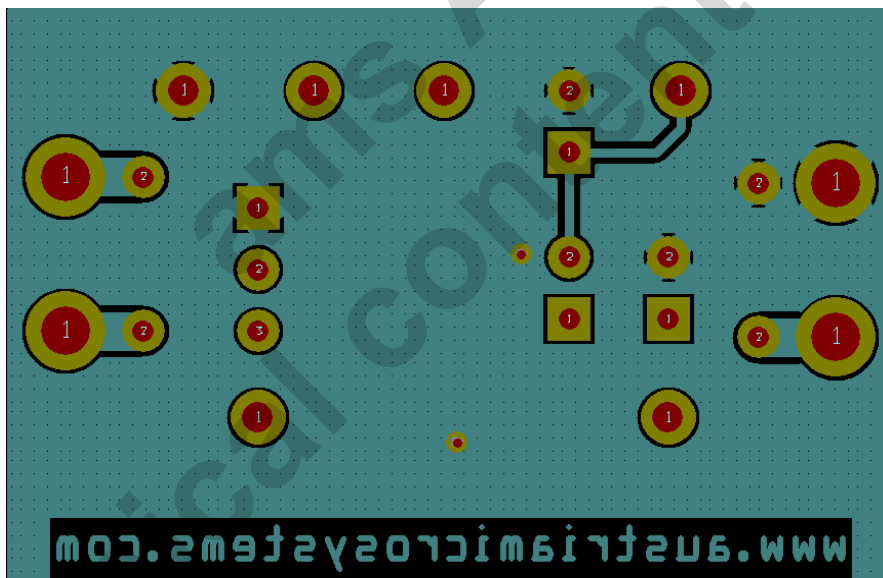
Layout (top view) (fixed Vout)



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

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