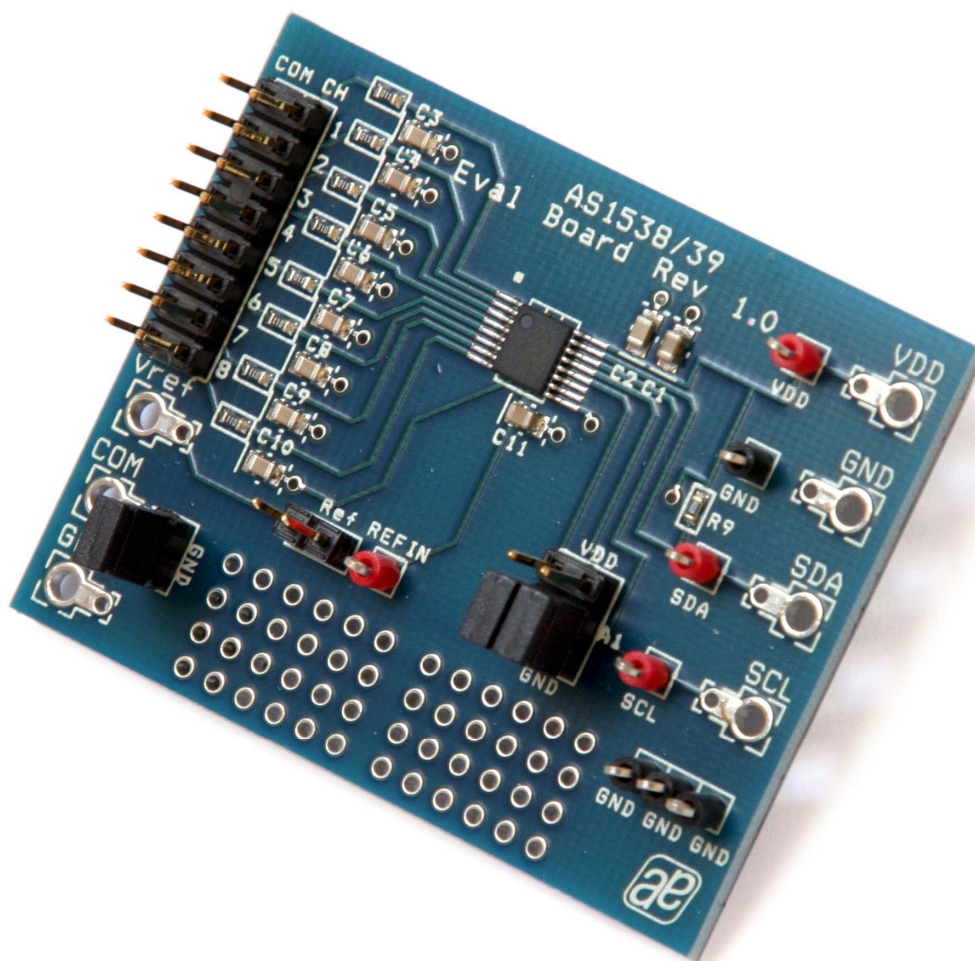


# AS1538/39

## Evaluation Board Application Note



## General Description

### Board Description

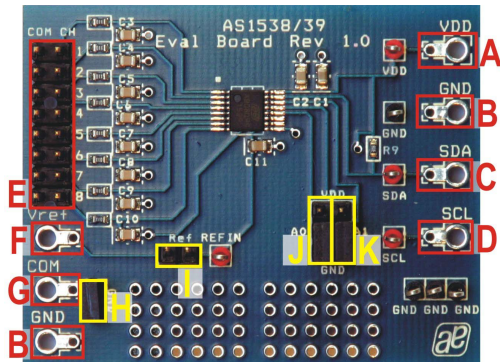


Figure 1: Board Description - Connectors

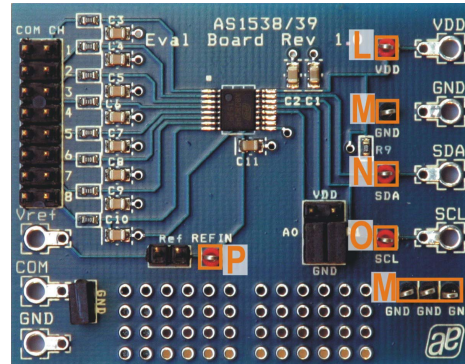










Figure 2: Board Description – Measurement Points

### Connector Description

Label	Name	Description	Info
A	VDD	Power Supply Connectors for VDD and GND.	Input voltage ranging from +2.7V to +5.25V.
B	GND		
C	SDA	Serial Data Output	
D	SCL	Serial Clock	
E	CH1 – CH8	Analog Input Channels 0 to 7	
F	VREF	Internal Reference / External Reference Input	
G	COM	Analog Input Channel Common	

### Jumper Description

Label	Name	Description	Info
H	COM	Analog Input Channel Common to GND	 Set = pin is connected to GND.  Not Set = pin is connected to "E".
I	REF	Internal Reference / External Reference Input	 Set = pin is connected to REF "F", => external Reference Input  Not Set = pin is not connected, => internal Reference.
J	A0	Slave Address Bit 0	 VDD = A0 is set to logic high.  GND = A0 is set to logic low.
K	A1	Slave Address Bit 1	 VDD = A1 is set to logic high.  GND = A1 is set to logic low.

## Measurement Points Description

Label	Name	Description	Info
L	<b>VDD</b>	Power Supply VDD and GND.	Measurement Points
M	<b>GND</b>		
N	<b>SDA</b>	Serial Data Output	
O	<b>SCL</b>	Serial Clock	
P	<b>REF</b>	Internal Reference / External Reference Input	

## Operational sequence

This Evaluation Board comes with the AS1538/39.

1. If not present get the [datasheet for the AS1538/39](#) from [www.austriamicrosystems.com](http://www.austriamicrosystems.com). Drive the IC on the Evaluation Board only with the recommended settings and values as described in the datasheet.
2. Connect a +2.7V to +5.25V power supply (VDD “**A**” and GND “**B**”).
3. Perform measurements at the measurement points.

Have fun using the Evaluation Board. If there are questions do not hesitate to contact us. See contact information at the end of the application note.

# Layout of Evaluation Board

## Board schematics and layout

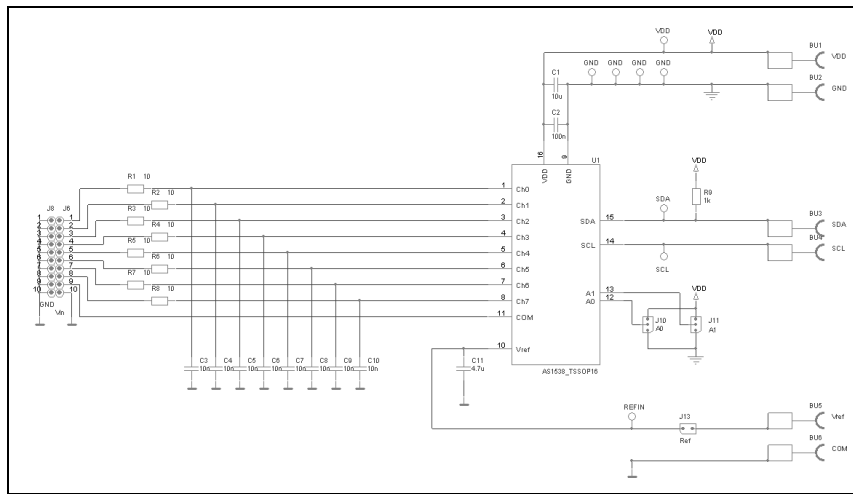


Figure 3: Schematic

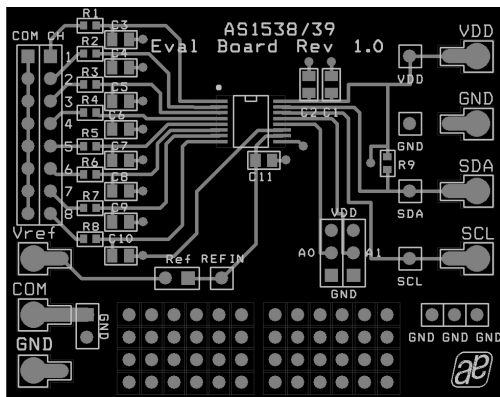


Figure 4: Top view

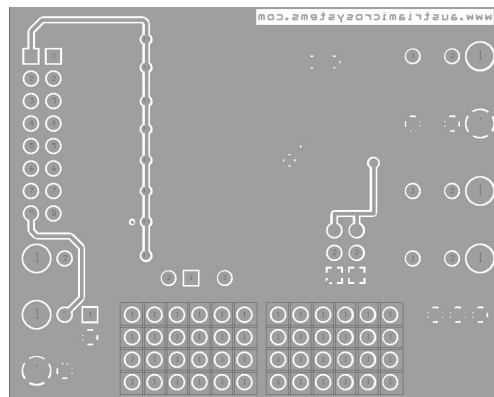


Figure 5: Bottom view

## Assembly List

Label	Info	Type	Manufacturer
C1	10µF, 6.3V, 0805, X5R	GRM40X5R106K6.3H520	Murata
C2	100nF, 50V, 0805, X7R	GRM21BR71H104KA01L	
C3 – C10	10nF, 50V, 0805, C0G	GRM2195C1H103JA01	
C11	4.7µF, 16V, 0805, X5R	GRM21BR61C475KA88	
R1 – R8	10Ω		
R9, R10	2kΩ		

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