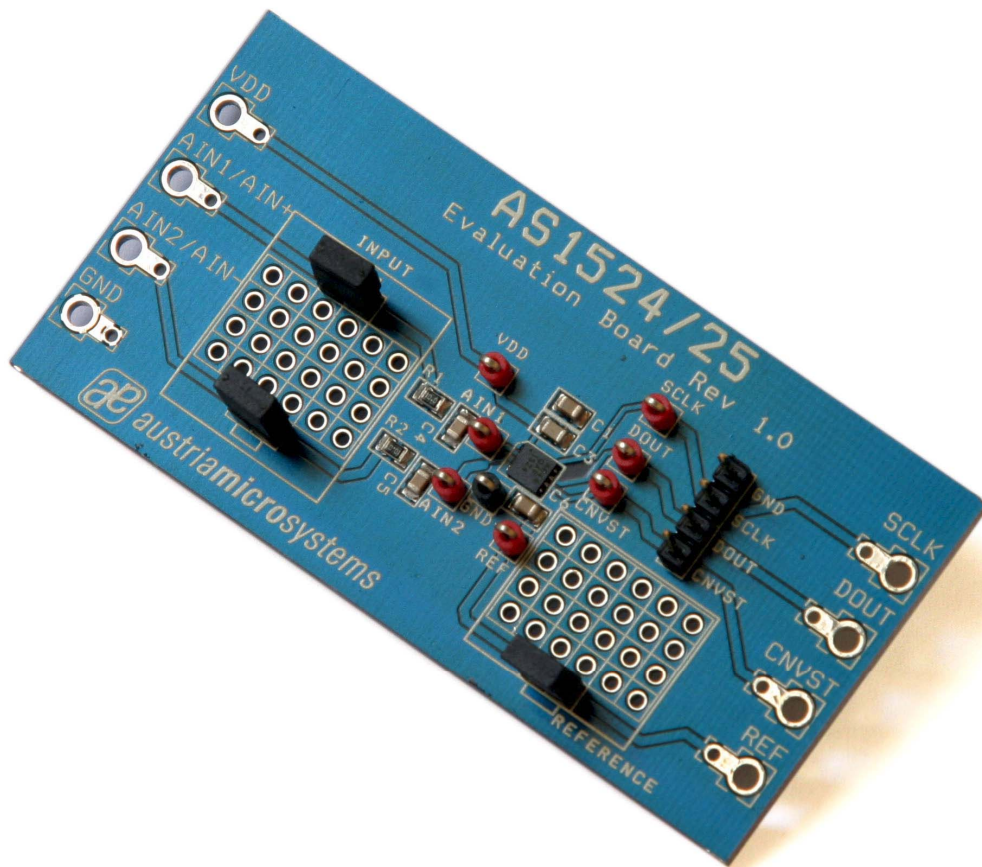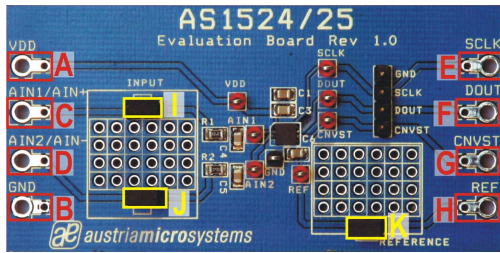# AS1524/25

Evaluation Board Application Note

General Description

Board Description

Figure 1: Board Description - Connectors
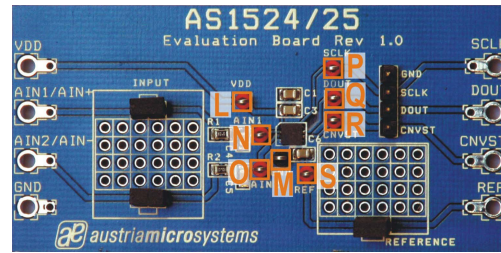

Figure 2: Board Description – Measurement Points

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	**AIN1 / AIN+**	Analog Input Channel 1 (AS1525)	
		Positive Analog Input (AS1524)	
D	**AIN2 / AIN-**	Analog Input Channel 2 (AS1525)	
		Negative Analog Input (AS1524)	
E	**SCLK**	Serial Clock Input Connector	Clocks out data at DOUT with the MSB first.
F	**DOUT**	Serial Data Output Connector	
G	**CNVST**	Conversation Start	A rising edge powers up the device and puts the track/hold circuitry in track mode. At the falling edge, the device enters hold mode and begins a conversation.
H	**REF**	External Reference Input Connector	Sets the analog voltage range.

Jumper Description

Label	Name	Description	Info	
I	**INPUT**	Analog Input Channel 1 (AS1525)	▢▢	Set = pin is connected to AIN1/AIN+ **"C"**.
		Positive Analog Input (AS1524)	▪▪	Not Set = pin is floating.
J	**INPUT**	Analog Input Channel 2 (AS1525)	▢▢	Set = pin is connected to AIN2/AIN- **"D"**.
		Negative Analog Input (AS1524)	▪▪	Not Set = pin is floating.
K	REFERENCE	External Reference Input	▢▢	Set = pin is connected to REF **"H"**.
			▪▪	Not Set = pin is floating.

Measurement Points Description

Label	Name	Description	Info
L	**VDD**	Power Supply VDD and GND.	
M	**GND**		
N	**AIN1 / AIN+**	Analog Input Channel 1 (AS1525)	
		Positive Analog Input (AS1524)	
O	**AIN2 / AIN-**	Analog Input Channel 2 (AS1525)	Measurement Points
		Negative Analog Input (AS1524)	
P	**SCLK**	Serial Clock Input	
Q	**DOUT**	Serial Data Output	
R	**CNVST**	Conversation Start	
S	**REF**	External Reference Input	

Operational sequence

This Evaluation Board comes with the AS1524/25.

1. If not present get the datasheet for the AS1524/25 from 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
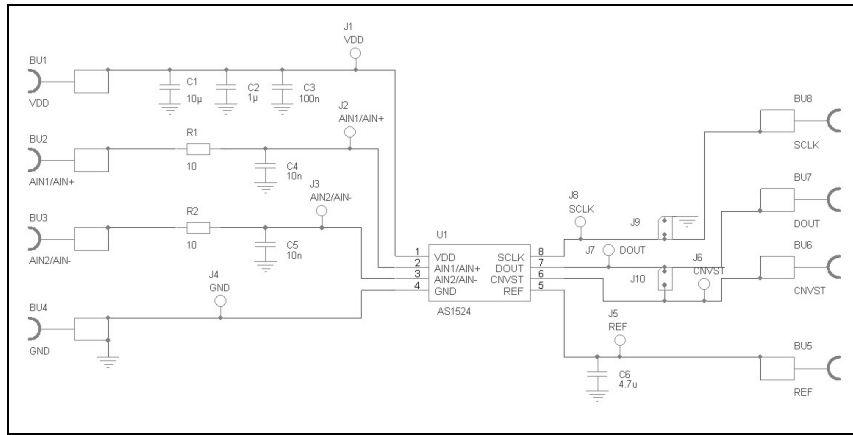
Figure 3: Schematic
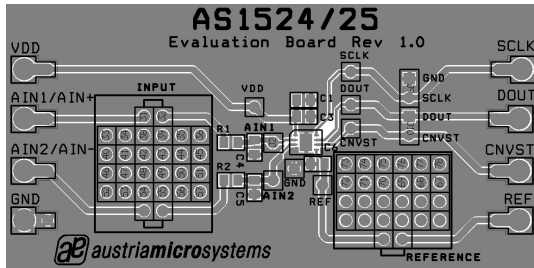
Figure 4: Top view
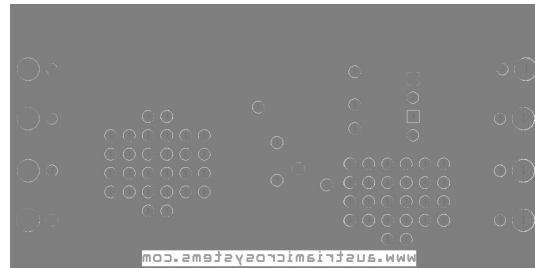
Figure 5: Bottom view

Assembly List

Label	Info	Type	Manufacturer
C1	10µF, 6.3V, 0805, X5R	GRM40X5R106K6.3H520	Murata
C3	100nF, 50V, 0805, X7R	GRM21BR71H104KA01L	
C4, C5	10nF, 50V, 0805, C0G	GRM2195C1H103JA01	
C6	4.7µF, 16V, 0805, X5R	GRM21BR61C475KA88	
R1, R2	10Ω		

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austriamicrosystems

Contact Information

Headquarters
austriamicrosystems AG
A-8141 Schloss Premstätten, 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-us