

## Single Color Demo Board Manual

# AS1115

## 64 LEDs, I<sup>2</sup>C Interfaced LED Driver with Keyscan

[www.austriamicrosystems.com/AS1115](http://www.austriamicrosystems.com/AS1115)



## General Description

### Board Description

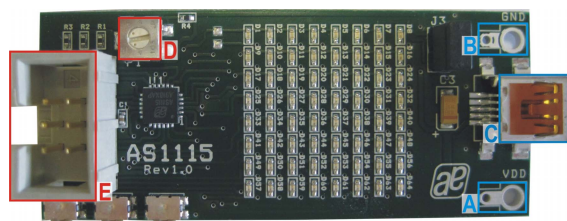


Figure 1: Board Description - Connectors

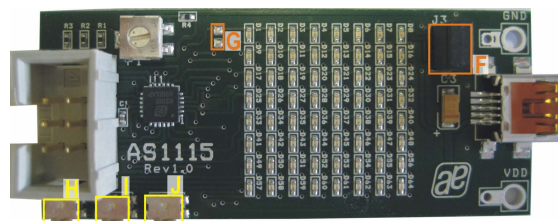


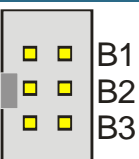
Figure 2: Board Description – Switches

### Connector Description

Label	Name	Description	Info
A	<b>VDD</b>	Supply Voltage	Supply voltage ranging from 2.7V to 5.5V
B	<b>GND</b>	Ground	
C	<b>USB</b>	Mini USB 5-pin Connector	Supplies the AS1115 with 5V. Connect to a standard USB port.
D		Potentiometer	LED current can be adjusted with this potentiometer. Rotating clockwise will increase current.
E	<b>I/O</b>	Interface Connector	see Interface Connector Description below

**Note:** Use only the Connectors VDD “A” and GND “B” or USB Connector “C”. Never use both supply possibilities at the same time!

### I/O - Interface Connector “E” Description

	Label	Name	AS1115
	A1	<b>KeyA</b>	Pin 8
	A2	<b>NC</b>	
	A3	<b>GND</b>	Pin 3
	B1	<b>IRQ</b>	Pin 21
	B2	<b>SCL</b>	Pin 11
	B3	<b>SDA</b>	Pin 22

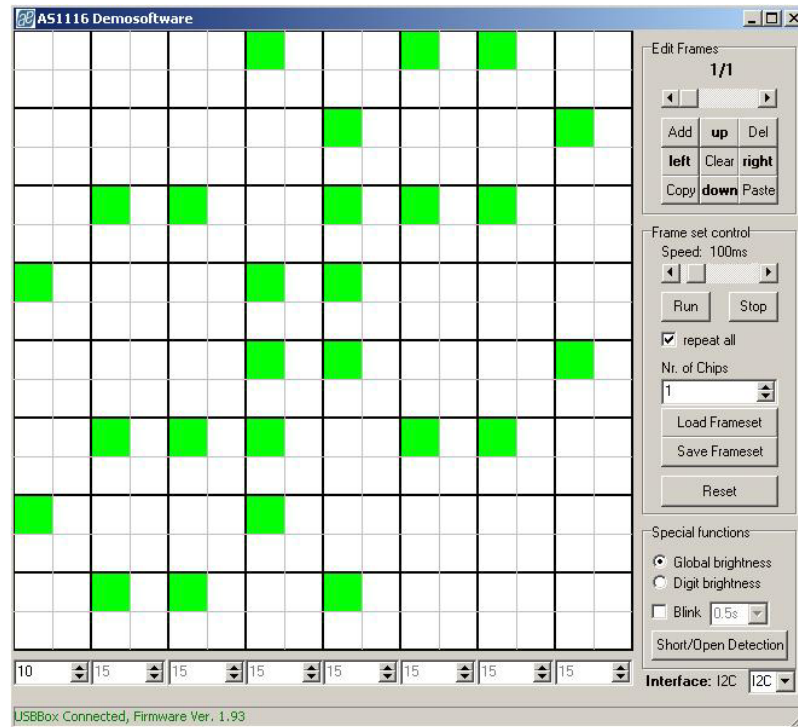
### Switches Description

Label	Name	Description	Info
F	<b>J3</b>	Open Jumper	Simulates an open of LED D8
G		Short Pins	Simulates an short of LED D1
H	<b>S1</b>	Switches on KeyB	
I	<b>S2</b>		
J	<b>S3</b>		

## Software

To use the AS1115 single-color Demoboard a controller is required. The controller can be connected to the demoboard via the I/O Connector “E”.

If no controller is available the austriamicrosystems USB box in combination with the AS1115 single-color Demoboard software can be used as well. This USB box is needed to set-up the connection between the demoboard and the USB interface of a PC. The USB box can be ordered via <http://www.austriamicrosystems.com>.



## Operational sequence

This demo board comes with one AS1115.

1. Drive the IC on the demo board only with the recommended settings and values as described in the [datasheet](#). If not present get the datasheet for the AS1115 from [www.austriamicrosystem.com](http://www.austriamicrosystem.com).
2. First connect the power supply via connector “C” to a powered USB port and then power up the I/O - Interface “E”. To power down the system disconnect first the I/O Interface and then the power supply of the demoboard.
3. Connect the I/O - Interface “E” to a  $\mu$ C or via the *austriamicrosystems USB Interface Box* to a PC. For interfacing please see the corresponding datasheet of the AS1115.

If there are questions do not hesitate to contact us. See contact information at the end of this manual.

# Layout of Demo Board

## Board schematics

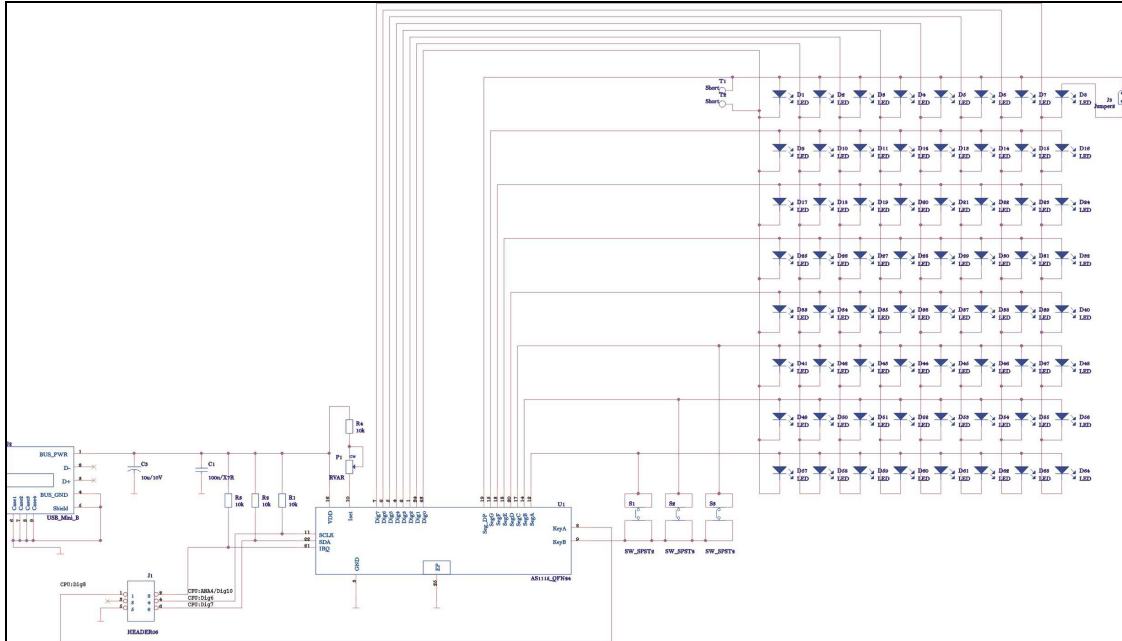


Figure 3: Schematics

## Board layout

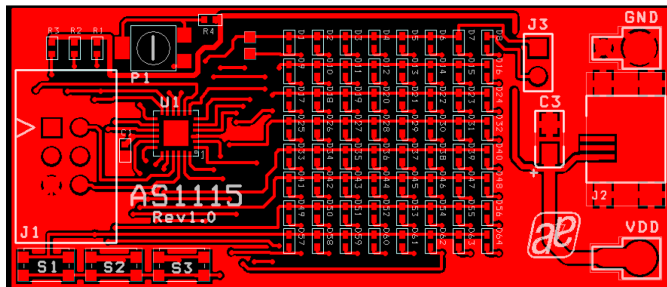


Figure 4: Top Layer

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## Contact Information

### Headquarters

austriamicrosystems AG  
Tobelbaderstraße 30  
A-8141 Unterpremstätten - Graz, Austria  
T. +43 (0) 3136 500 0  
F. +43 (0) 3136 5692

For Sales Offices, Distributors and Representatives, please visit:  
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