**Single Color Demo Board Manual** 

## **AS1115**

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

www.austriamicrosystems.com/AS1115





## **General Description**

## **Board Description**





Figure 1: Board Description - Connectors

Figure 2: Board Description - Switches

### **Connector Description**

Label	Name	Description	Info	
Α	VDD	Supply Voltage	Supply voltage ranging from 2.7V to 5.5V	
В	GND	Ground		
С	USB	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.	
Е	1/0	Interface Connector see Interface Connector Description by		

**Note:** Use only the Connectors VDD "**A**" and GND "**B**" <u>or</u> USB Connector "**C**". Never use both supply possibilities at the same time!

## I/O - Interface Connector "E" Description

				Label	Name	AS1115
	۸1 🗖	_	B1 B2 B3	A1	KeyA	Pin 8
A1				A2	NC	
	==	_		A3	GND	Pin 3
A2				B1	IRQ	Pin 21
A3				B2	SCL	Pin 11
l l			l	B3	SDA	Pin 22

## **Switches Description**

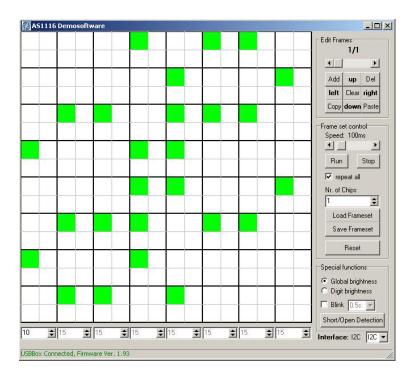
Label	Name	Description	Info
F	J3	Open Jumper	Simulates an open of LED D8
G		Short Pins	Simulates an short of LED D1
Н	S1		
1	S2	Switches on KeyB	
J	S3		



#### **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.

- 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.austriamicrtosystem.com.
- First connect the power supply via connector "C" to a powered USB port and than power up the I/O Interface "E". To power down the system disconnect first the I/O Interface and than the power supply of
  the demoboard.
- Connect the I/O Interface "E" to a μC 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**

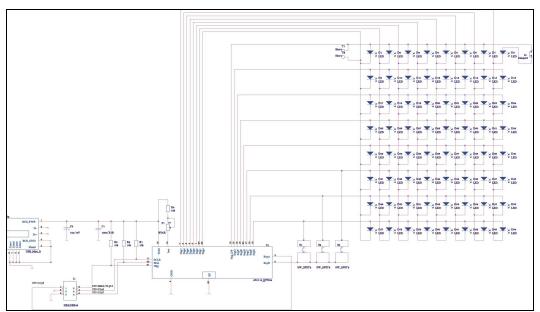


Figure 3: Schematics

## **Board layout**

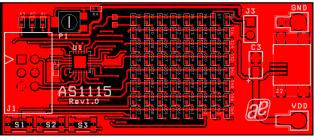


Figure 4: Top Layer



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