

Product Document



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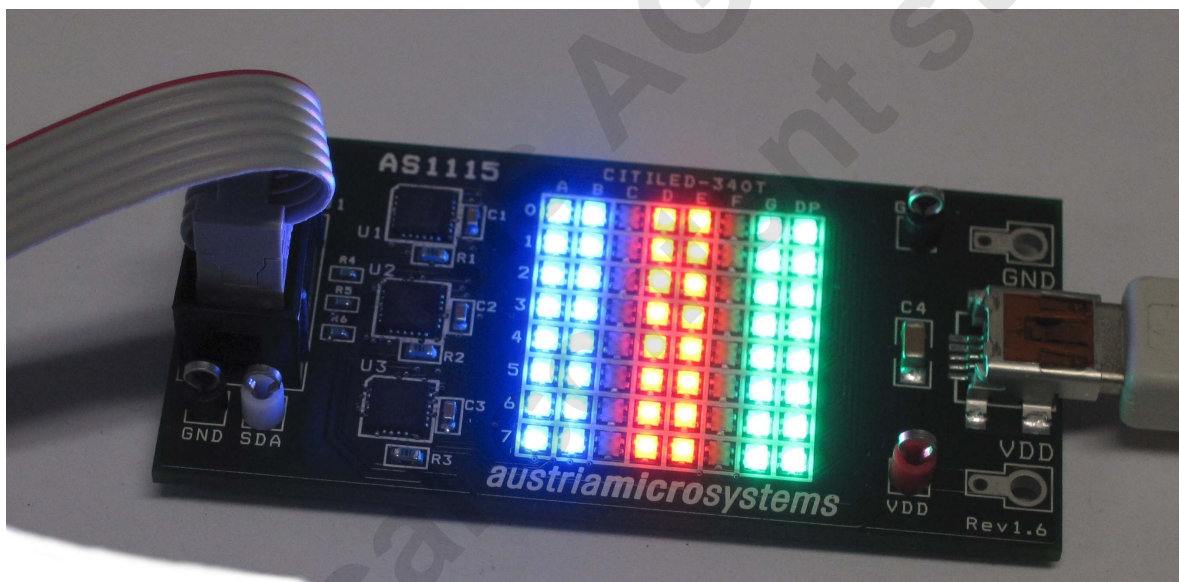
Please visit our website at www.ams.com

RGB Demo Board Manual

AS1115

64 LEDs, I²C Interfaced LED Driver with Keyscan

www.austriamicrosystems.com/AS1115



General Description

Board Description

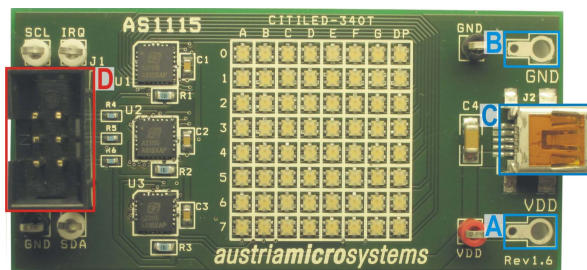


Figure 1: Board Description - Connectors

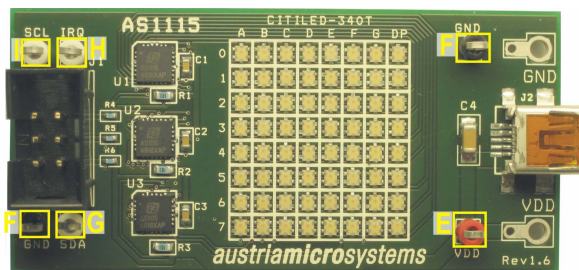


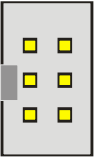
Figure 2: Board Description – Measurement Points

Connector Description

Label	Name	Description	Info
A	VDD	Supply Voltage	Supply voltage ranging from 2.7V to 5.5V
B	GND	Ground	
C	USB	Mini USB 5-pin Connector	Supplies the AS1115 with 5V. Connect to a standard USB port.
D	I / O	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 “D” Description

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

Measurement Point Description

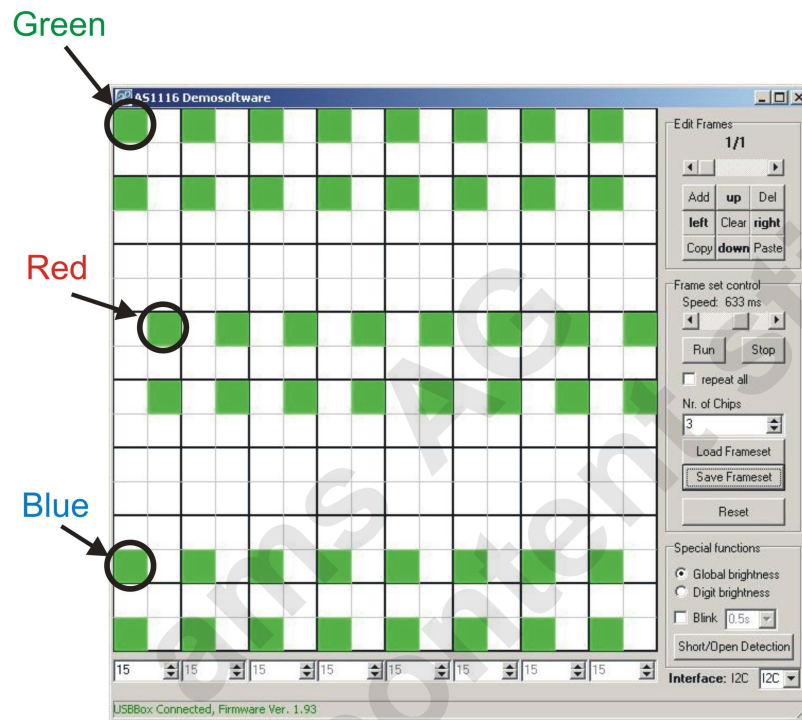
Label	Name	Description	Info
E	VDD	Supply Voltage	Measurement Points
F	GND	Ground	
G	SDA	Serial Data I / O	
H	IRQ	Interrupt Request Output	
I	SCL	Serial Clock Input	

Software

To use the AS1115 RGB Demoboard a controller is required. The controller can be connected to the demoboard via the I/O Connector "D".

If no controller is available the austriamicrosystems USB box in combination with the AS1115 RGB 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>.

To get the AS1115 RGB Demoboard running set the Interface to I²C and the Nr. of Chips to 3. The black drawn boxes represent the single RGB-LEDs and the gray small boxes represent one color of the RGB-LEDs. Click them to turn the LED on.



Operational sequence

This demo board comes with two 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.austriamicrosystems.com.
2. First connect the power supply via connector "C" to a powered USB port and then power up the I/O - Interface "D". 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 "D" to a μ 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 and layout

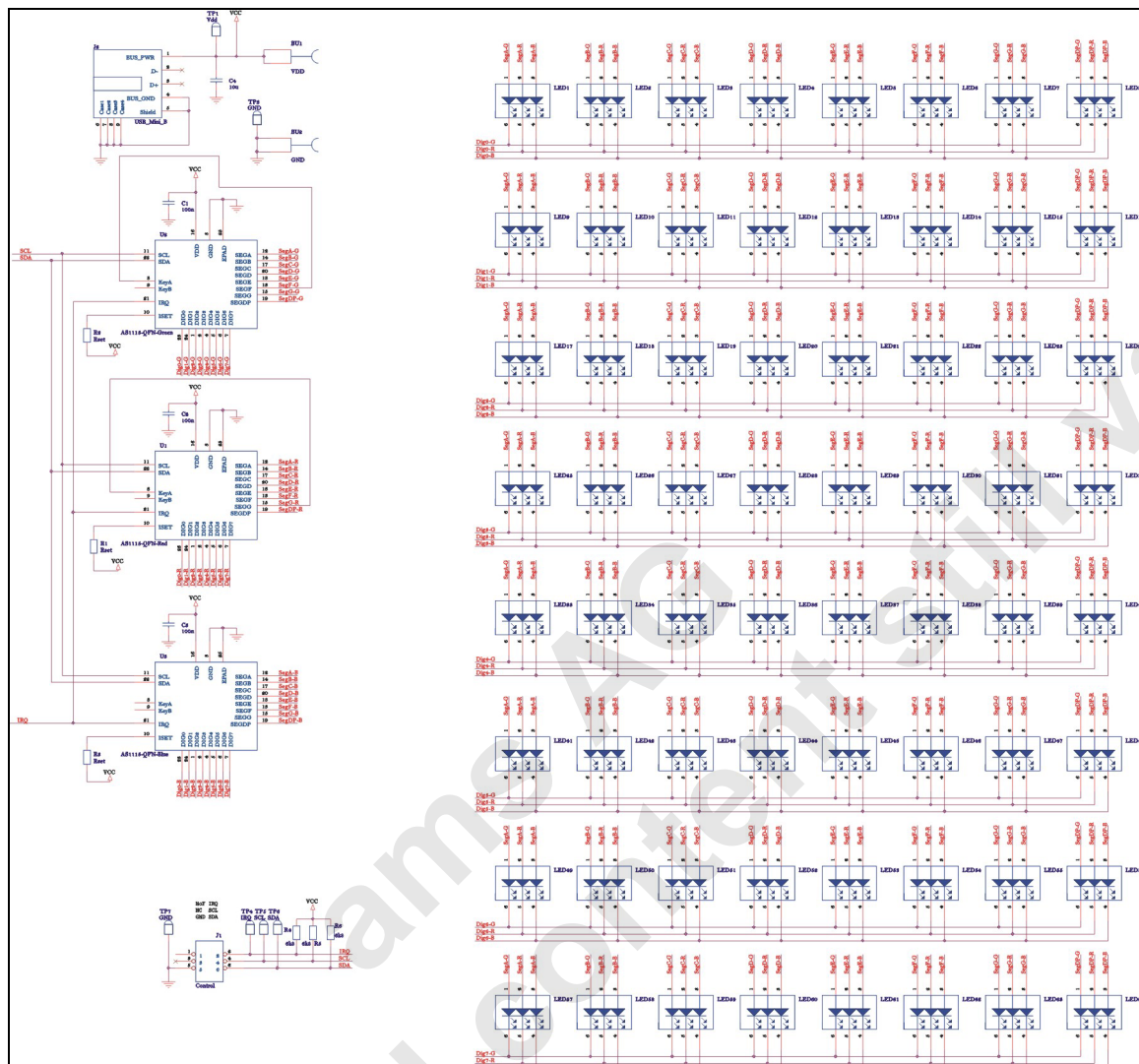


Figure 3: Schematics

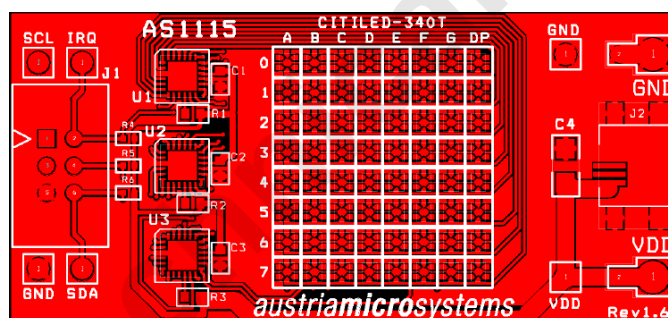


Figure 4: Top Layer

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