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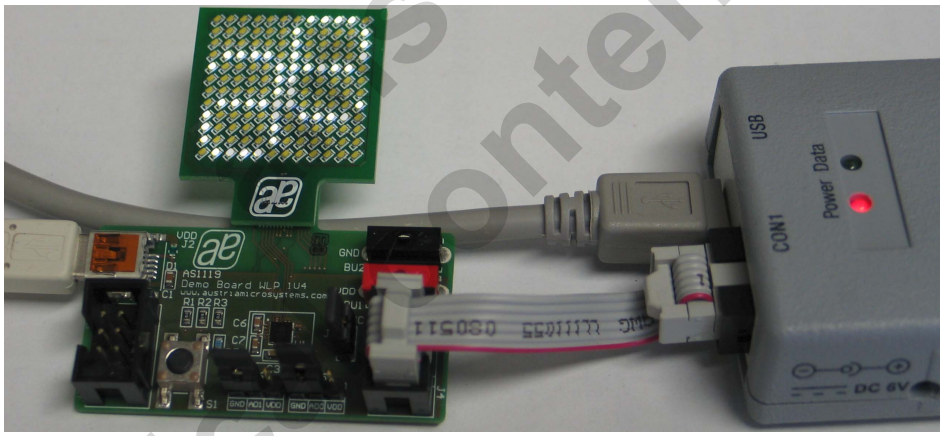
Demo Board Manual

AS1119

144 LED, I²C Interfaced, Cross-Plexing Driver with a 320mA Charge-Pump

www.austriamicrosystems.com/AS1119



General Description

Board Description

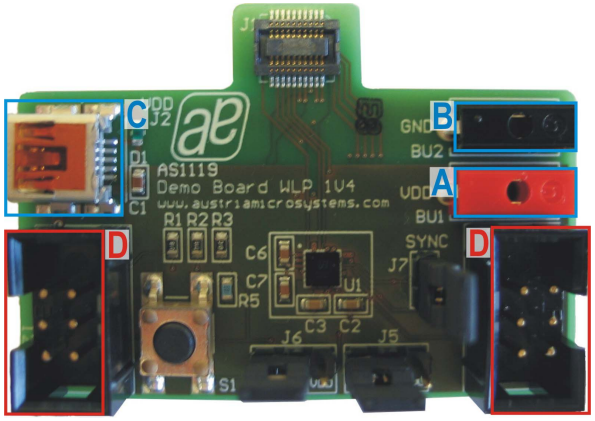


Figure 1: Board Description - Connectors

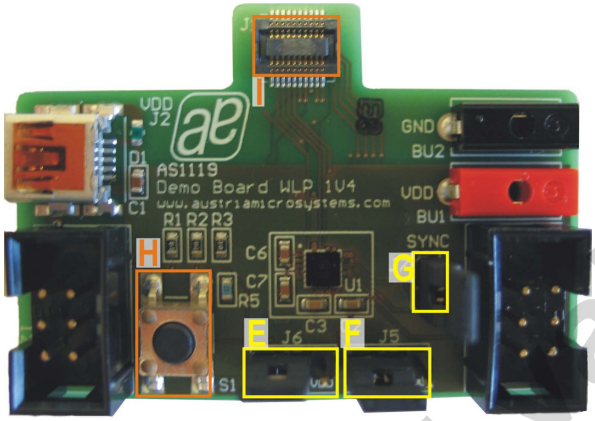


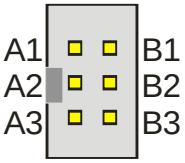
Figure 2: Board Description – Jumpers

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 AS1119 with 5V. Connect to a standard USB port. This Connector is not used for data transfer.
D	**I / O**	I²C Interface Connector	Connect *austriamicrosystems USB Interface Box*. For a detailed Connector Description see table 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



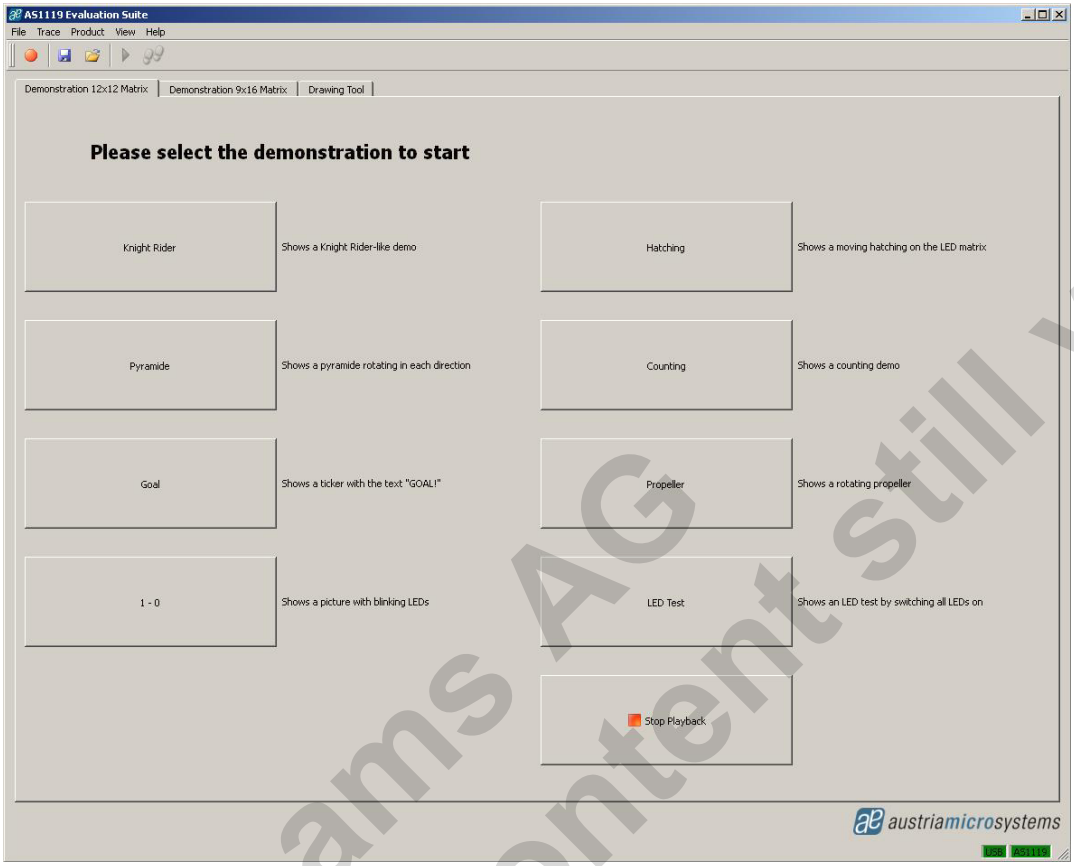
Label	Name	AS1119
A1	**SYNC_IN / SYNC_OUT**	Pin B6
A2	**NC**	
A3	**GND**	
B1	**IRQ**	Pin E6
B2	**SCL**	Pin D6
B3	**SDA**	Pin C6

Jumper Description

Label	Name	Description
E	**J6**	AD1
F	**J5**	AD0
G	**SYNC**	Sync Function. If two or more boards are connected together remove this jumper on the board which is connected to the USB box.
H	**S1**	Reset Button
I	**J1**	Connector to LED boards. For a detailed layout description of the LED boards see Application note: *APN_AS1119_Cross-Plexing_v1_00*

Quickstart Software

Before starting the software make sure that the USB Power supply and the USB box are connected to the demoboard. After start-up the software is configured (per default) to work with the 12x12 Matrix.
On the first tab 'Demonstration 12x12 Matrix' there are one-click-demos. Just click the demonstration you want to display and it will be shown on the 12x12 Matrix right away. To stop the demonstration, click the Stop Playback button.



For one-click-demos on the 9x16 Matrix, go to the second tab. There some demonstrations for the 9x16 matrix can be found.
To draw your one movie or frame to display go to the third tab 'Drawing Tool'.

Operational sequence

This demo board comes with the AS1119.

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 AS1119 from www.austriamicrtosystem.com.
2. First connect the power supply via connector **"C"** to a powered USB port and than power up the I/O - Interface **"D"**. To power down the system disconnect first the I/O Interface and than the power supply of the demoboard.
3. Connect the I/O - Interface **"D"** to a µC or via the *austriamicrosystems USB Interface Box* to a PC. For interfacing please see the corresponding datasheet of the AS1119.

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

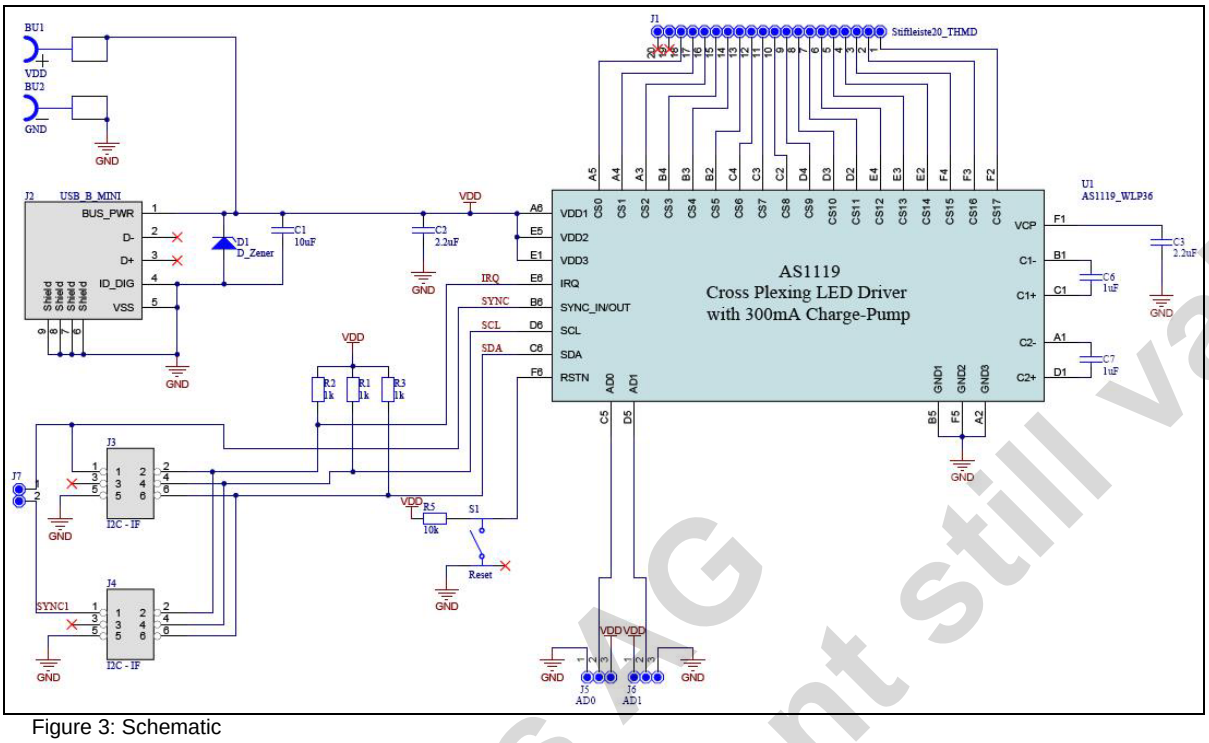


Figure 3: Schematic

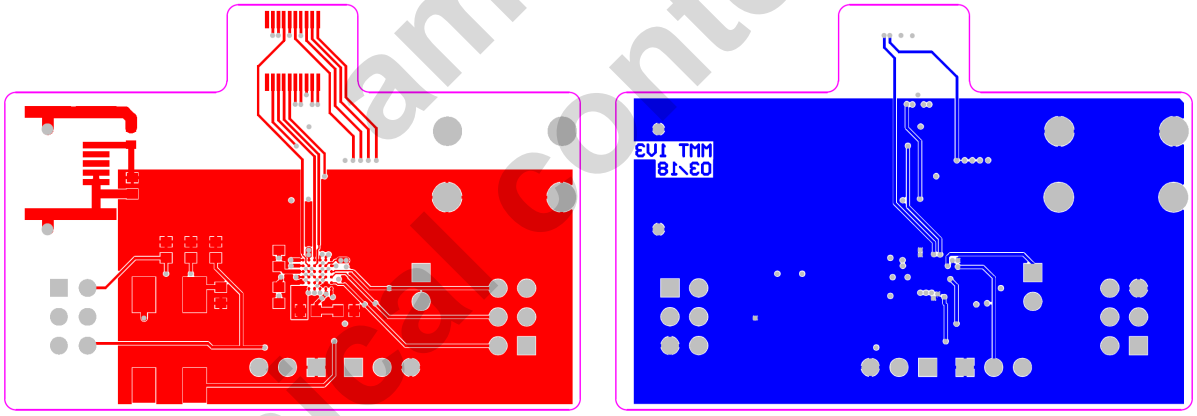


Figure 4: Top and Bottom Layer

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