ams

User Guide

UG000483

AS8579-TS_EK_DB

User Manual (HW/SW)

DemoKit Capacitive Sensor

v1-01 • 2020-May-26

Content Guide

1   Introduction

This manual explains how to use the AS8579-TS_EK_DB hardware in combination with the included software GUI. Both (HW & SW) are designed to test and evaluate the features of AS8579 capacitive sensor. The AS8579 is a sensor, which measures the capacitive value by separately measuring the 10-bit Information (accumulated to 14-bit) of I and Q. This 14-bit information provides the capacitance of the application. The I and Q data can be read over an SPI interface.

1.1   Ordering Information

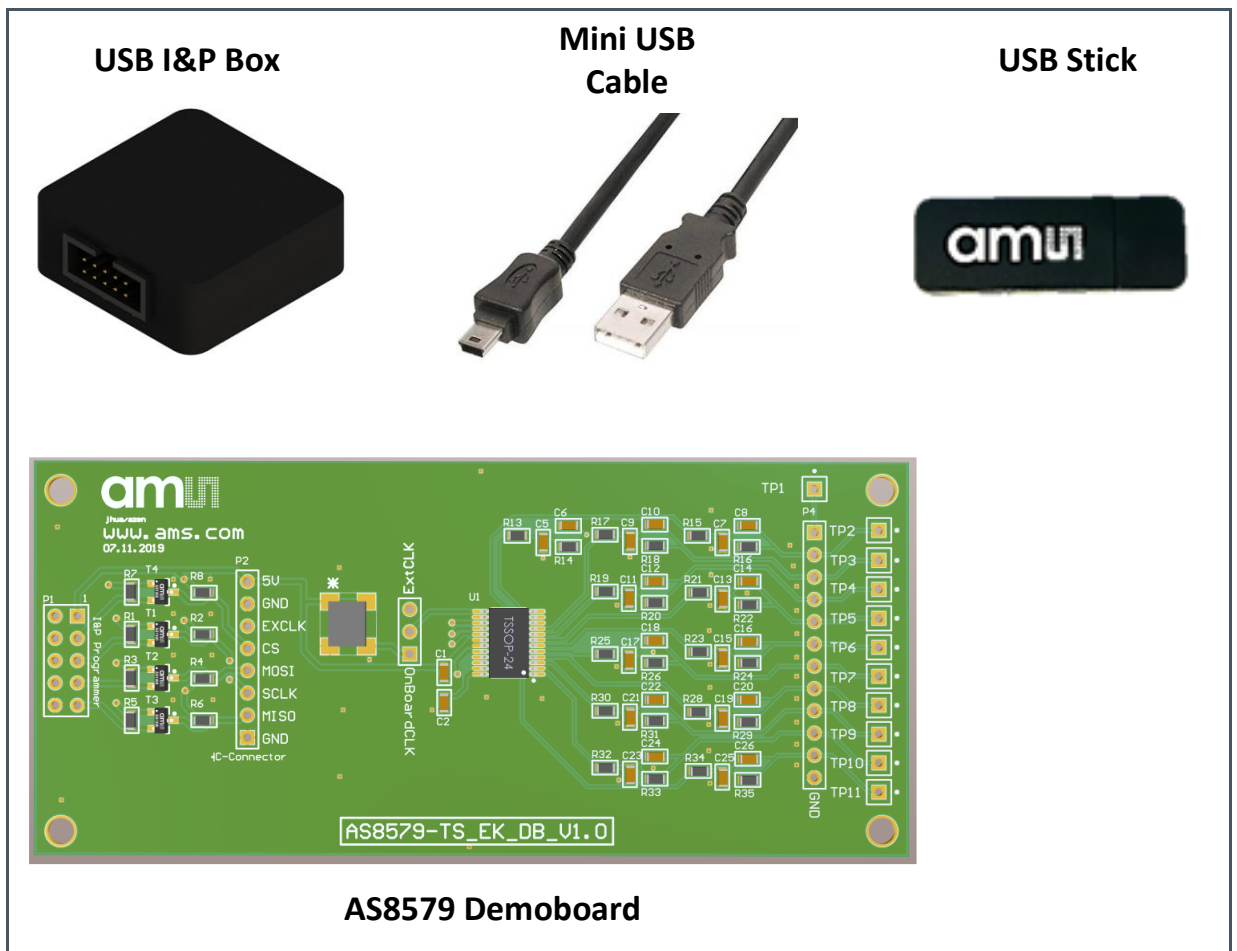| Ordering Code	Description
AS8579-TS_EK_DB	AS8579 Demokit

2   First Steps

2.1   Demo Box Content

The AS8579-TS_EK_DB contains the following material:

- Mini USB Cable
- USB Stick (with Manual and Software)
- USB I&P Box
- AS8579 Demoboard (Hardware)

Figure 1:
Box Content

USB I&P Box   **Mini USB Cable**   **USB Stick**

AS8579 Demoboard

2.2 How to Start

Please use the following instructions to get the Demoboard and software running:

1. Open AS8579-TS_EK_DB user manual and read instructions carefully (from USB Stick)

2. Run AS5xxx_EvalSW_USB-I&P-Box_v1-6-0.exe on your PC to install the software (from USB Stick)

3. Connect USB I&P Box with AS8579 Demoboard

4. Check if Jumper is set to ONBoardCLK (see Figure 3: Jumper Setting OnBoardCLK)

5. Connect the desired SEN lines of AS8579 Demoboard (use header or test pins) to your measurement circuit

6. Connect USB I&P Box with PC via Micro USB cable

7. Run USB I&P Box software on your PC and select AS8579 from dropdown menu

8. Select the right SEN line and start testing and evaluating.
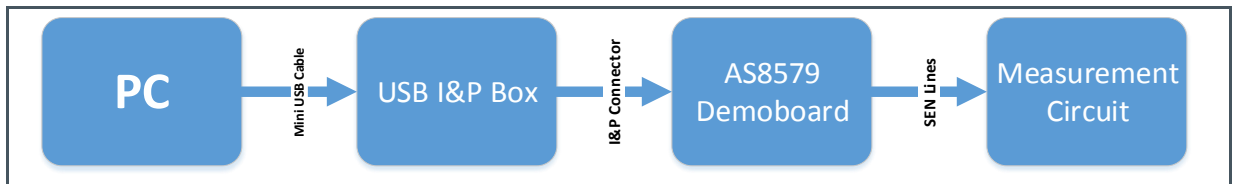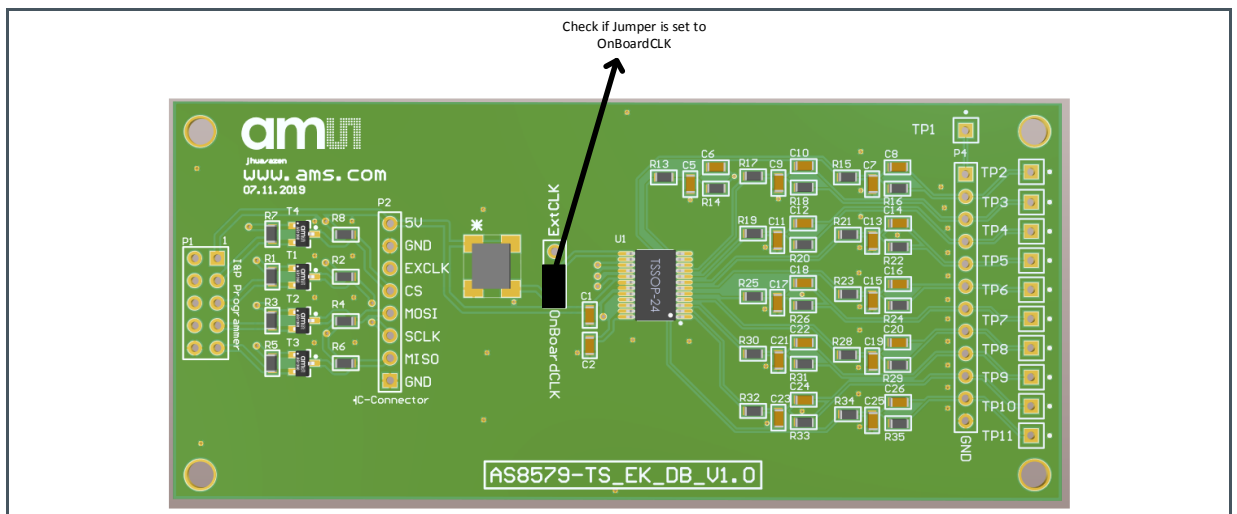
Figure 2:
Connection Diagram
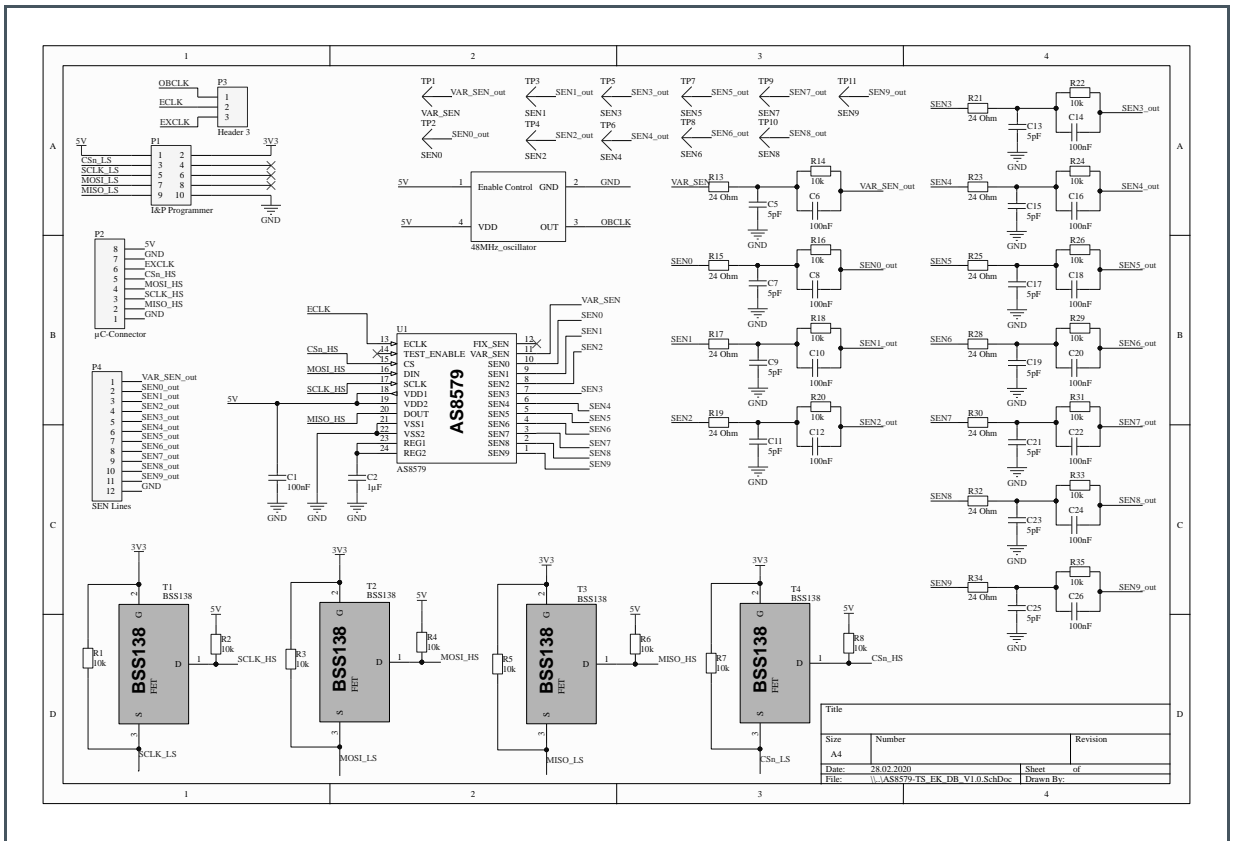

Figure 3:
Jumper Setting OnBoardCLK

3 Hardware

3.1 Schematic

Figure 4:
Schematic

3.2   Layout

Figure 5:
Layout
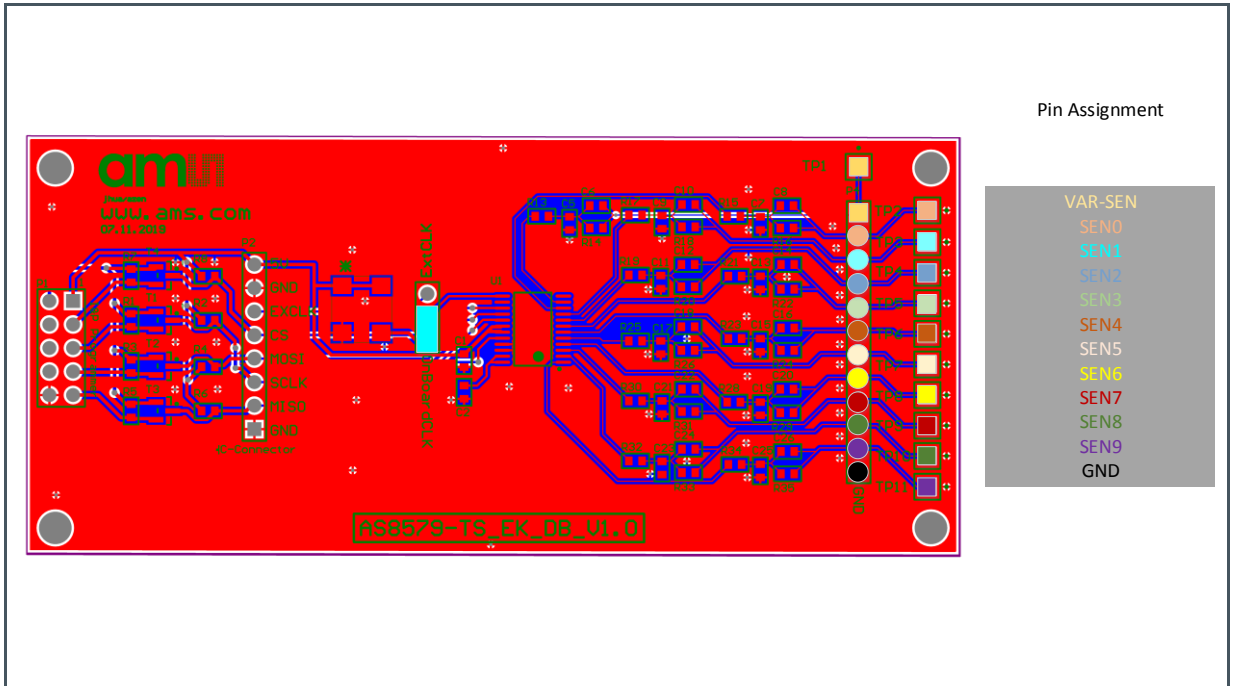
4 Software

4.1 GUI Overview and Description

Figure 6:
GUI Overview + Legend
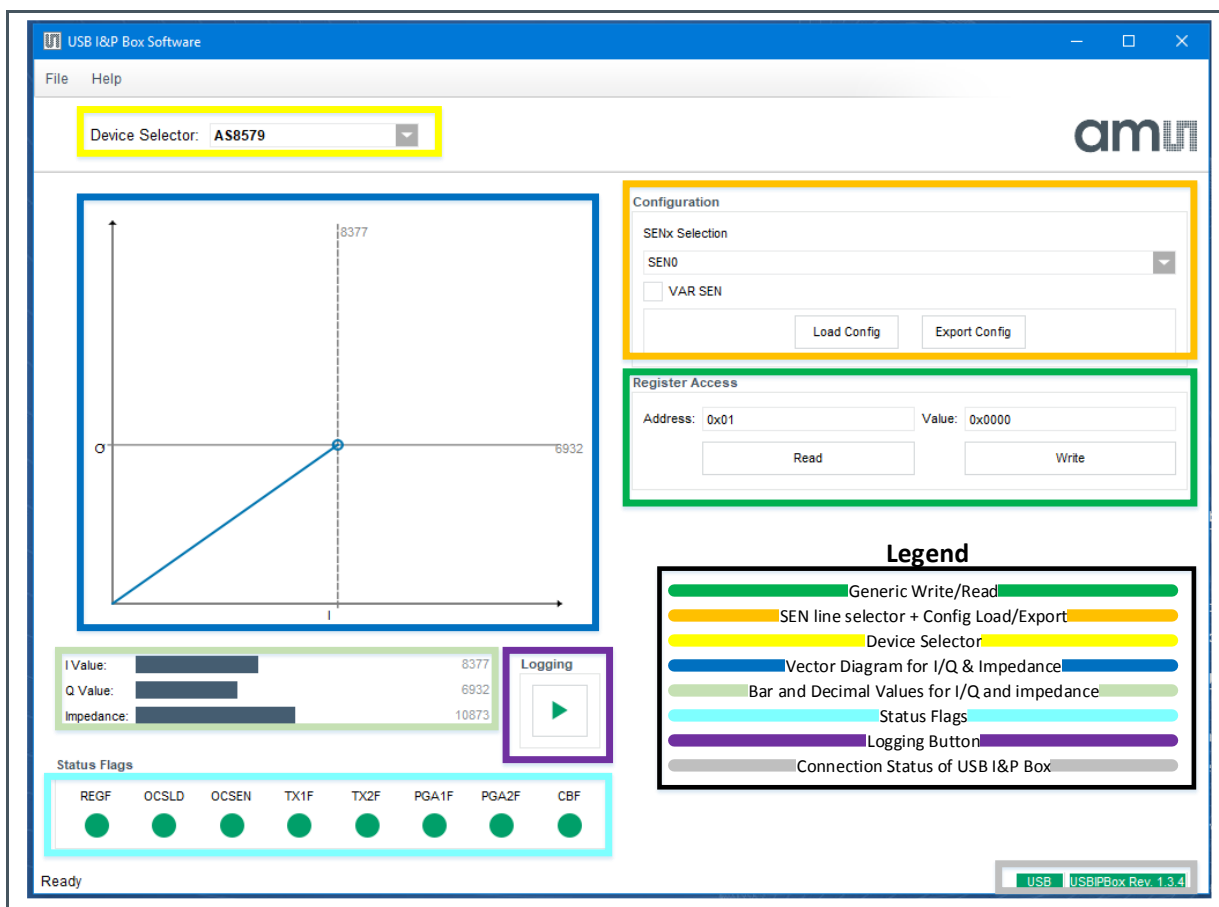
5 Revision Information

Changes from previous version to current revision v1-01	Page
Initial version	

- Page and figure numbers for the previous version may differ from page and figure numbers in the current revision.
- Correction of typographical errors is not explicitly mentioned.

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