# Product Document





UG000483

# AS8579-TS\_EK\_DB

**User Manual (HW/SW)** 

DemoKit Capacitive Sensor

v1-01 • 2020-May-26



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## 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



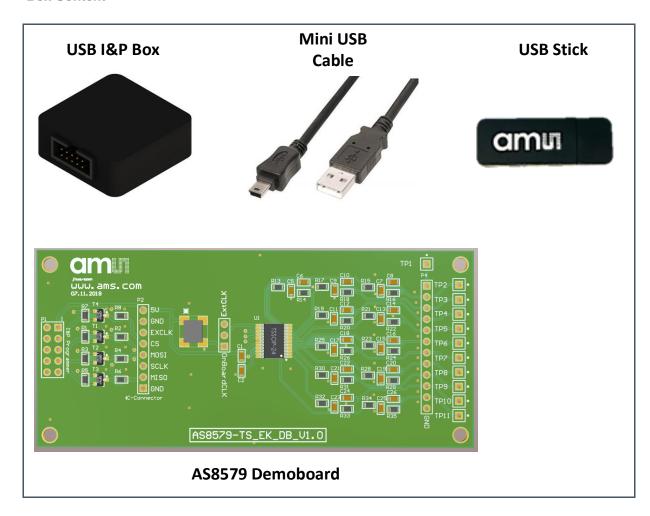
# 2 First Steps

#### 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





#### 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)
- 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

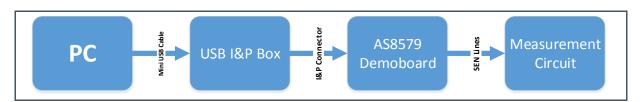
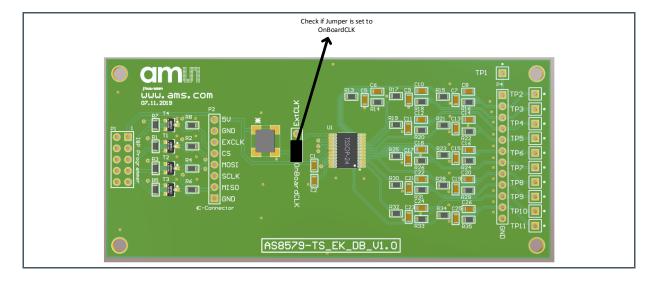


Figure 3: Jumper Setting OnBoardCLK

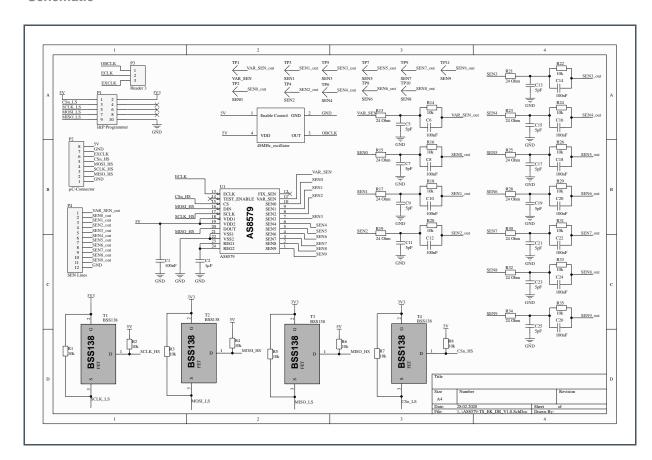




# 3 Hardware

### 3.1 Schematic

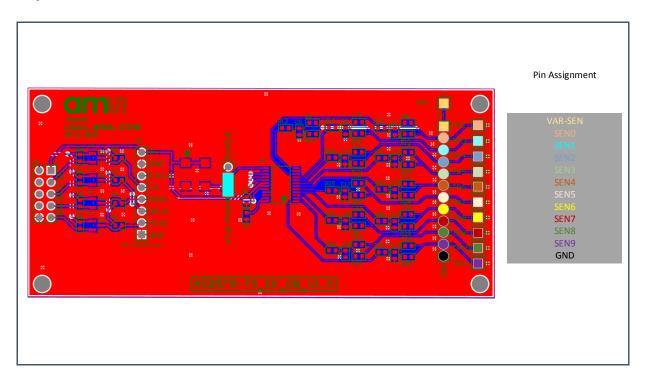
Figure 4: Schematic





## 3.2 Layout

Figure 5: Layout

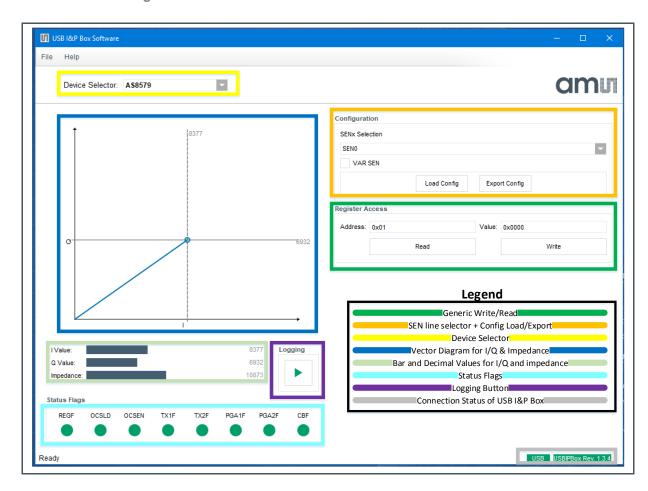




# 4 Software

## 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.



# 6 Legal Information

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