IQS7222C USER GUIDE

IQ Switch® - ProxFusion® Series
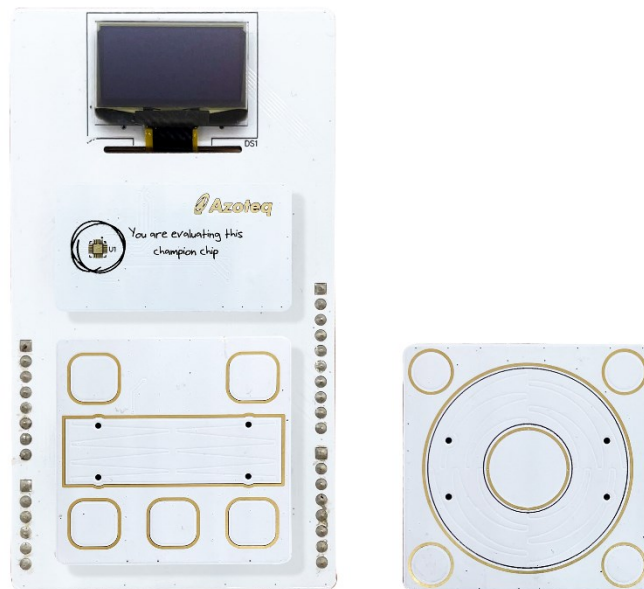
*CT210A is only included
in the EV04 kit*

Copyright © Azoteq (Pty) Ltd 2021.
All Rights Reserved.

IQS7222C User Guide
Revision 2.0

Page 1 of 11
August 2021

Table of Contents

1 Introduction

This user guide describes the operation of the IQS7222C Evaluation Kit. The EV-Kit consists of 5 parts: stamp board, connector board, base board, Buttoned Slider board and Buttoned Wheel board. To visualise raw data from the EV-Kit, the stamp board can be interfaced to any personal computer with USB support, and IQS7222C software Graphical User Interface (GUI). The purpose of the IQS7222C EV-Kit is to help application and development engineers in evaluating the IQS7222C slider and wheel capabilities. These capabilities will be shown using 2 button board designs. A picture of the evaluation kit is shown below.


Figure 1-1: Base board (left), stamp (centre top), Buttoned Slider (centre middle), Buttoned Wheel (centre bottom) and connector board (right)

2   Setting up for the IQS7222C EV Kit

To interface the IQS7222C Evaluation Kit to a PC we advise using the CT210A (CT210A is sold with EV04 kit, but sold separately from EV02 kit). This EV Kit can be setup with the following steps:

> Connect the CT210A to the PC with a USB cable (use USB data cable only)
> Plug the ribbon cable into the CT210A
> Connect the connector board to the ribbon cable
> Connect the 6 way cable into connector board on one end and on the stamp board at the other
> Plugin stamp board onto base board
> Plugin Buttoned Slider or Buttoned Wheel board onto base board
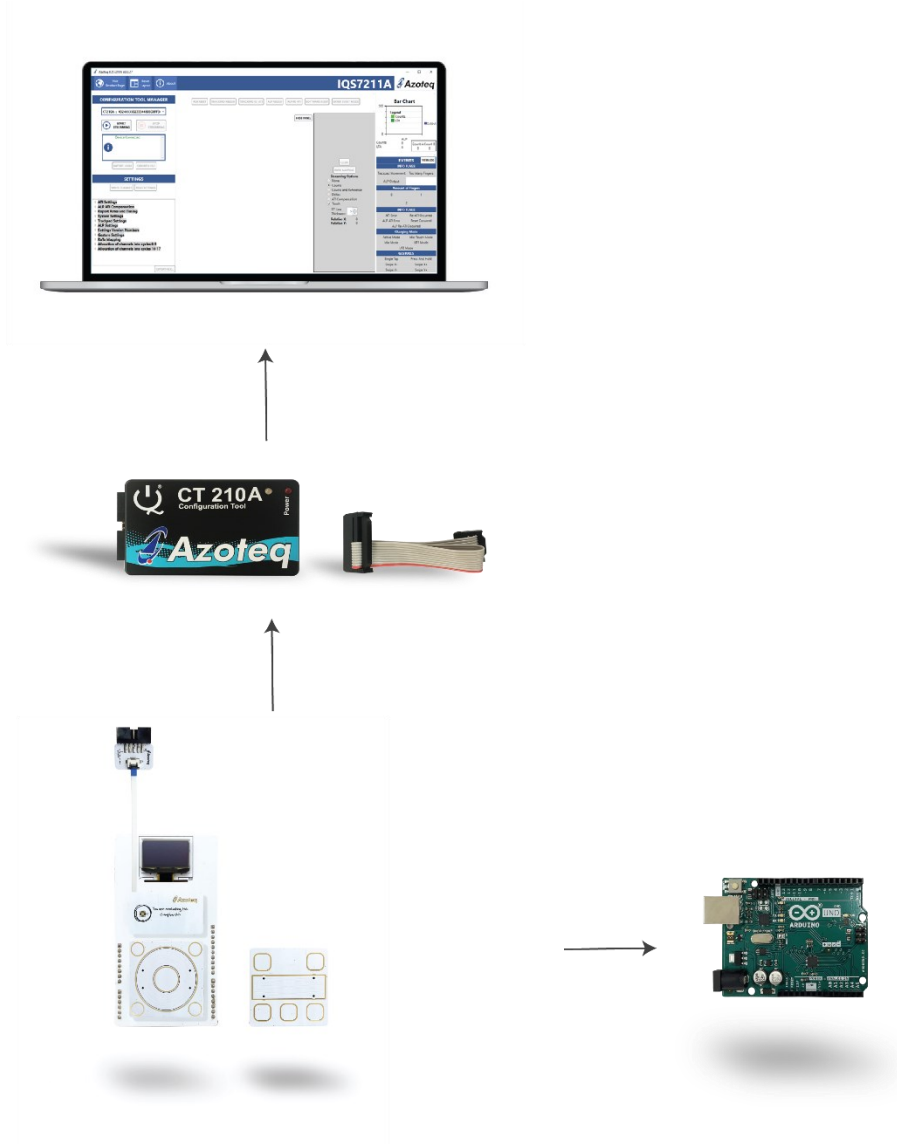
Run the IQS7222C GUI (latest version available from the Azoteq.com website)

3 Stamp Board and IQS7222C IC

The IQS7222C IC is located on the stamp board.
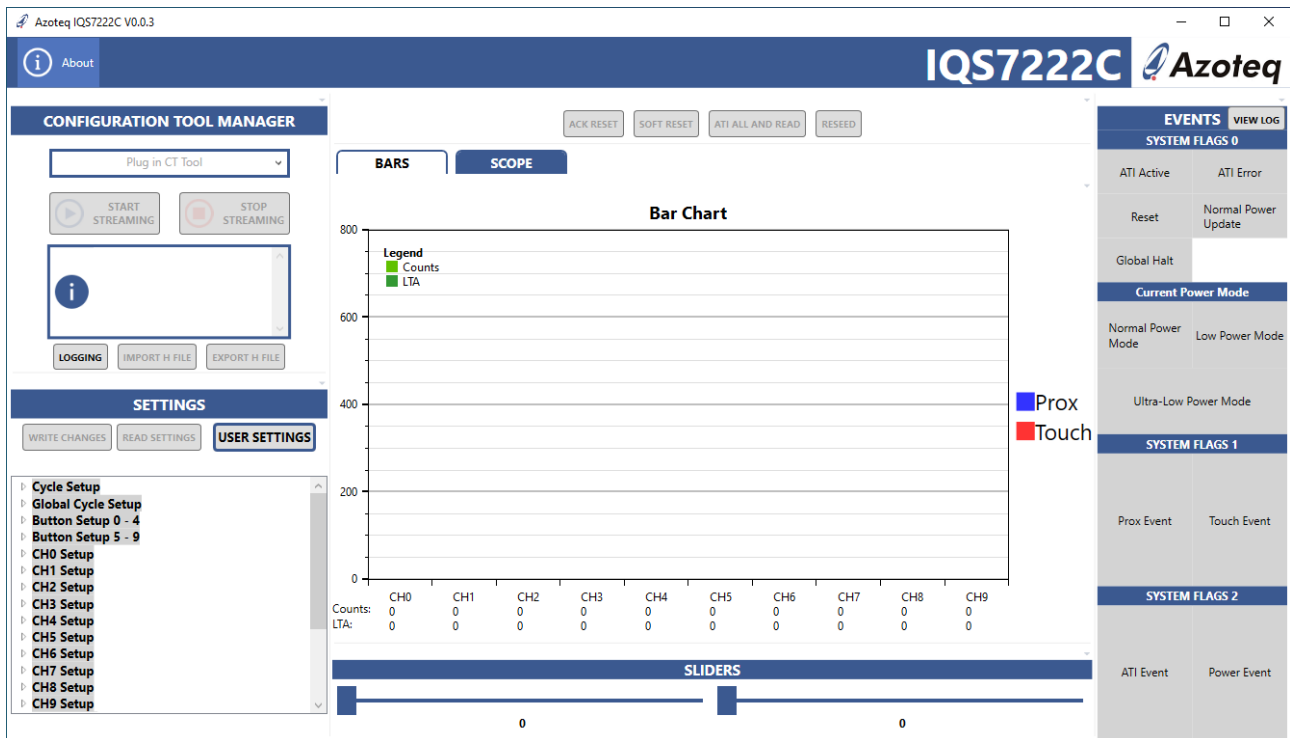
Run the IQS7222C GUI.

Figure 3-1: IQS7222C GUI at start-up

In order to demonstrate the capabilities of the IQS7222C, we suggest evaluating with the supplied button boards. After this evaluation, the user may want to develop their own button boards.

Copyright © Azoteq (Pty) Ltd 2021.
All Rights Reserved.

IQS7222C User Guide
Revision 2.0

Page 5 of 11
August 2021

4 Buttoned Slider Board

Plug this board into the base board at the PLUGIN marked area.

Now perform the following actions in the GUI.

> Click the "Start Streaming" button
> Click "Import H file"
> Browse to "IQS7222C_Buttoned_Slider.h" and select "Open"
> Click on the "ACK RESET" button
> Click on the "ATI ALL AND READ" button

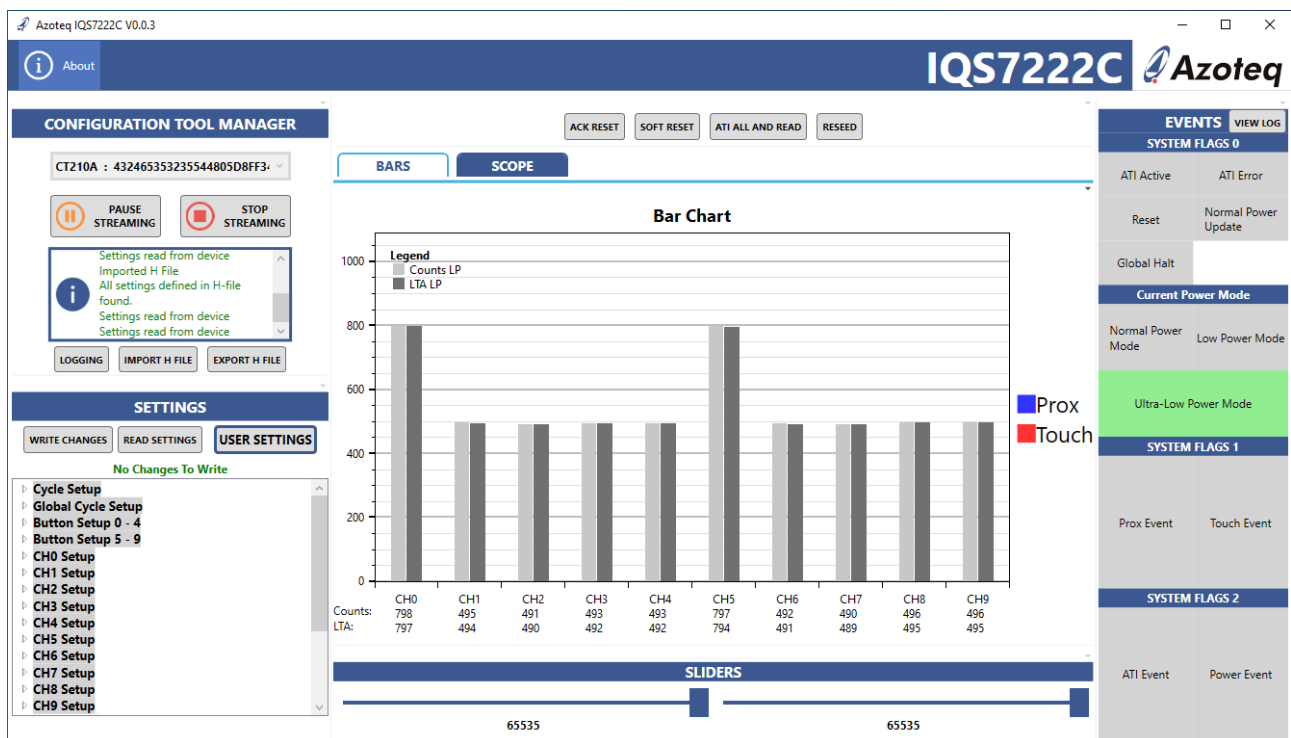The GUI will load the configuration settings for the Buttoned Slider board. Sample screenshot below.

Figure 4-2: IQS7222C GUI loaded with Buttoned Slider settings

The IQS7222C and Buttoned Slider Board can now be evaluated and observing what happens in the GUI.

Copyright © Azoteq (Pty) Ltd 2021.
All Rights Reserved.

IQS7222C User Guide
Revision 2.0

Page 7 of 11
August 2021

5   Buttoned Wheel Board

Remove the current plug-in board and plug-in the Buttoned Wheel board.

Figure 5-1: Buttoned Wheel board connected to base board

Copyright © Azoteq (Pty) Ltd 2021.
All Rights Reserved.

IQS7222C User Guide
Revision 2.0

Page 8 of 11
August 2021

Now perform the following actions in the GUI.

> Click the "Start Streaming" button
> Click "Import H file"
> Browse to "IQS7222C_Buttoned_Wheel.h" and select "Open"
> Click on "ACK RESET" button
> Click on "ATI ALL AND READ" button

The GUI will load the configuration settings for the Buttoned Wheel board. Sample screenshot below.
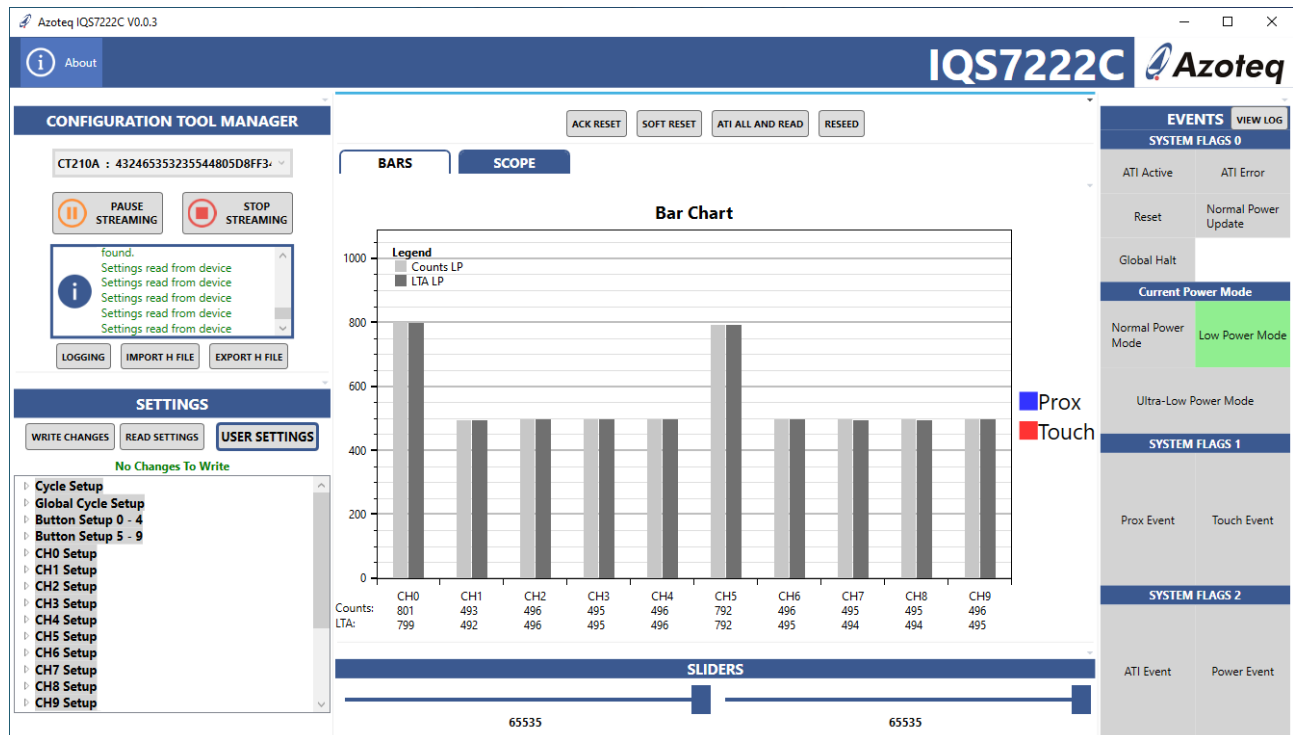
Figure 5-2 IQS7222C GUI loaded with Buttoned Wheel settings

The IQS7222C and Buttoned Wheel board can now be evaluated.

Copyright © Azoteq (Pty) Ltd 2021.
All Rights Reserved.

IQS7222C User Guide
Revision 2.0

Page 9 of 11
August 2021

6   Reference Designs

For further technical detail the datasheet should be consulted and can be found at the Azoteq website. Some reference designs for this EV-Kit are shown below.
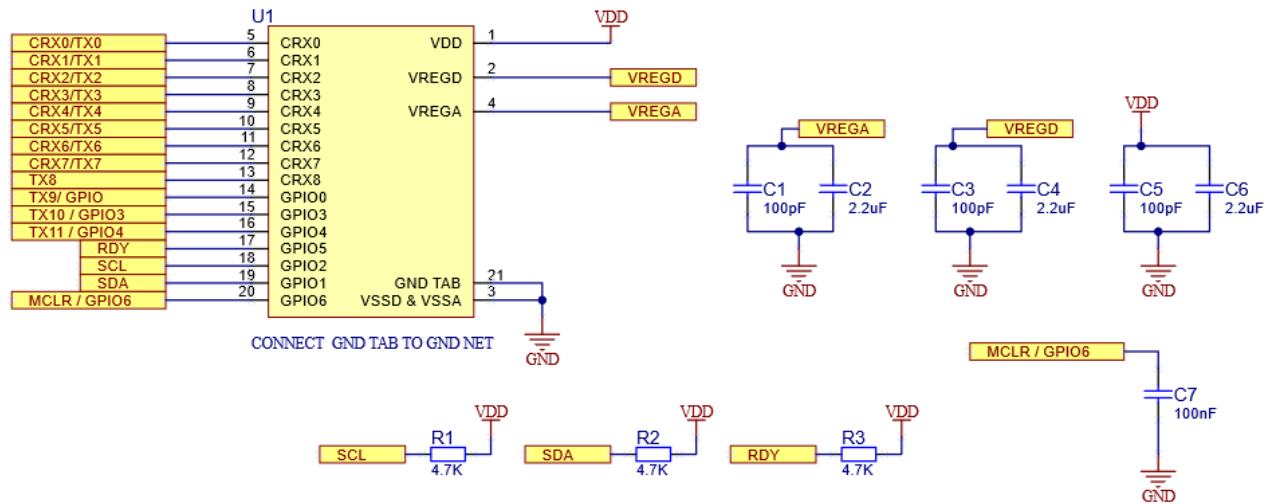
Figure 6-1 IQS7222C Stamp layout

Copyright © Azoteq (Pty) Ltd 2021.
All Rights Reserved.

IQS7222C User Guide
Revision 2.0

Page 10 of 11
August 2021

	USA	Asia	South Africa
Physical Address	11940 Jollyville Suite 120-S Austin TX 78750 USA	Room 501A, Block A, T-Share International Centre, Taoyuan Road, Nanshan District, Shenzhen, Guangdong, PRC	1 Bergsig Avenue Paarl 7646 South Africa
Postal Address	11940 Jollyville Suite 120-S Austin TX 78750 USA	Room 501A, Block A, T-Share International Centre, Taoyuan Road, Nanshan District, Shenzhen, Guangdong, PRC	PO Box 3534 Paarl 7620 South Africa
Tel	+1 512 538 1995	+86 755 8303 5294 ext 808	+27 21 863 0033
Email	info@azoteq.com	info@azoteq.com	info@azoteq.com

Visit www.azoteq.com

for a list of distributors and worldwide representation.

Patents as listed on www.azoteq.com/patents-trademarks/ may relate to the device or usage of the device.

Azoteq®, Crystal Driver®, IQ Switch®, ProxSense®, ProxFusion®, LightSense™, SwipeSwitch™, and the ⓠ logo are trademarks of Azoteq.

info@azoteq.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Azoteq](#):
  [IQS7222CEV02-S](#) [IQS7222CEV04-S](#)