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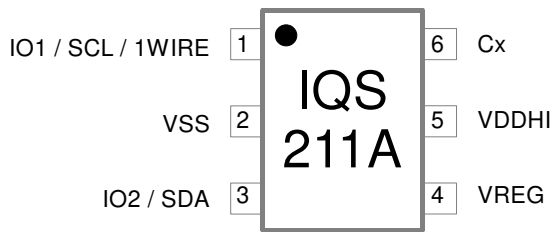


## IQS211AEV02 Quick start guide

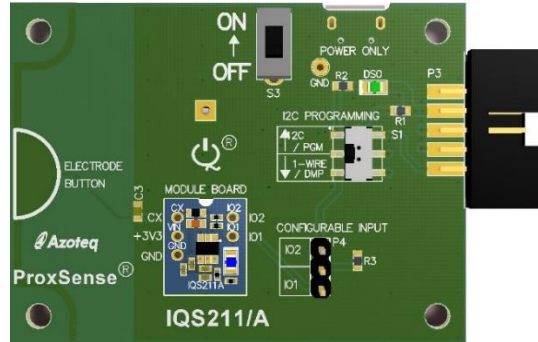
Single Channel Capacitive Proximity/Touch Controller with movement detection

The IQS211A ProxSense® IC is a self-capacitance controller designed for applications where an awake/activate on proximity/touch function is required. The IQS211A offers ultra-low power options and uses movement detection for applications that require long term handling during proximity/touch. The device can be configured via OTP (One Time Programmable) bits.

### 1 Reference design and pin layout



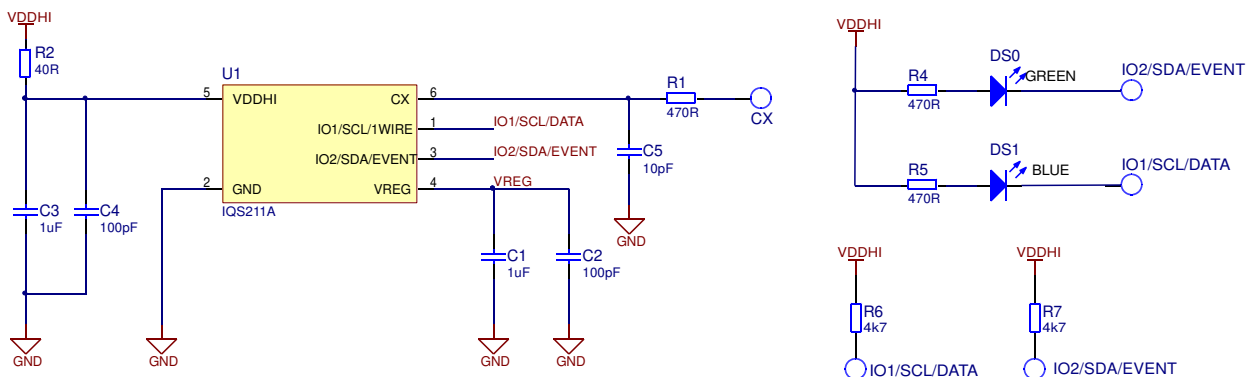
**Figure 1.1 Pin Layout**



**Figure 1.2 IQS211AEV02**

**Table 1.1 Pin-out description**

IQS211A in TSOT23-6			
Pin	Name	Type	Function
1	IO1 / SCL / 1WIRE	Digital Input / Output	Multifunction <b>IO1 / SCL / 1WIRE</b> (I <sup>2</sup> C Debug Clock signal / 1WIRE communication line)
2	VSS	Signal GND	
3	IO2 / SDA	Digital Input / Output	Multifunction <b>IO2 / SDA</b> (I <sup>2</sup> C Debug Data output)
4	VREG	Regulator output	Requires external capacitor
5	VDDHI	Supply Input	Supply:1.8V – 3.3V
6	Cx	Sense electrode	Connect to conductive area intended for sensor



**Figure 1.3 IQS211A Reference design**

### 2 Ultra-low power configuration

For IQS211A 08000000 TSR devices (OTP Bank4: bit3 = 1 for VREG damping) the IQS211AEV02 main board can be configured to connect IO2 to R3 = 680Ω grounding resistor. This resistance is mandatory for the ultra-low power operational mode.



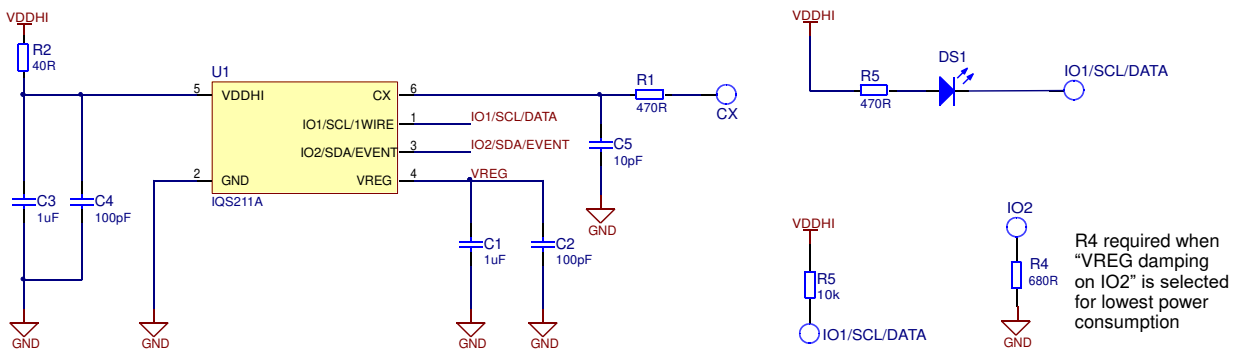
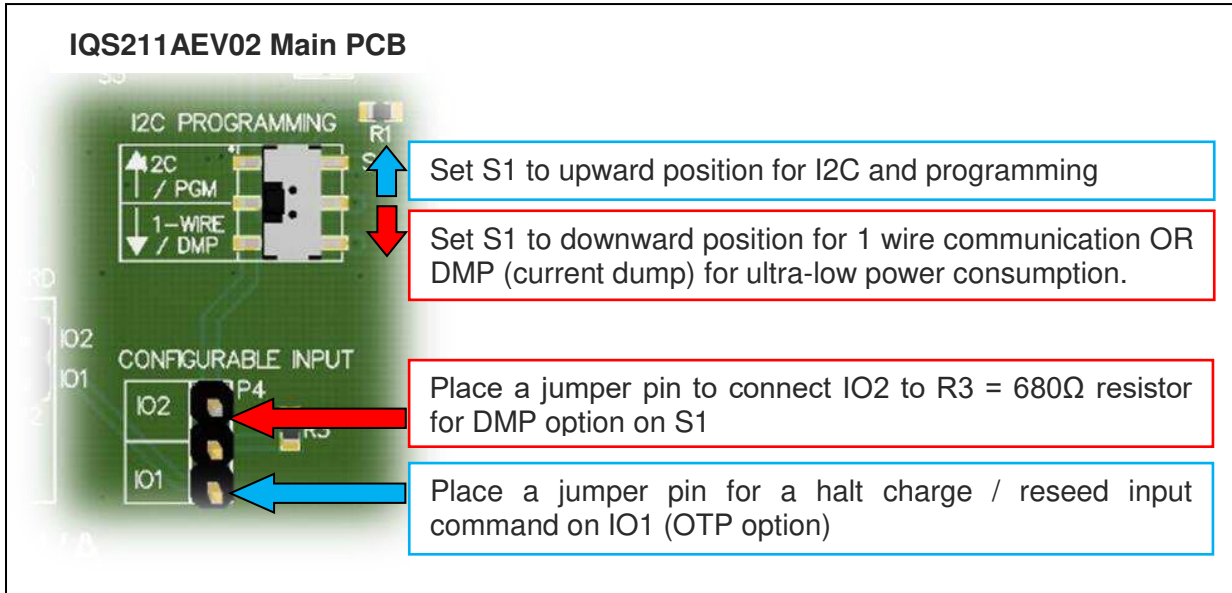


Figure 2.1 IQS211A reference design (Ultra-low power)

### 3 Default UI

Different UI's can be selected in the IQS211A GUI and can then be selected to run in standalone mode.

The GUI is available for download from the Software & Tools section of [azoteq.com](http://azoteq.com) and the [CT210](#) (sold separately) is used in conjunction with the GUI to select the different UI's and settings.

Using [USBProg](#) the IQS211A can be configured in different variations. Please note when settings are programmed it is permanent.