

TI C2000 Toolbox SCI Read SCADA Widget

This document describes *SCI Read* SCADA widget from TI C2000 Toolbox widget library.

Short description

SCI Read widget is used to read messages from the COM port that is connected to the MCU. In order to successfully read (receive) data from the MCU, generated code must include [SCI Send Schematic Editor component](#) (and vice versa, *SCI Read* widget should not be present on SCADA panel if [SCI Send](#) is not included in generated code).

One instance of *SCI Read* widget should be used for each message defined in *Message configuration* property of [SCI Send](#) component. This widget should be used if *Access port* property of [SCI Send](#) component is set to *USB*.

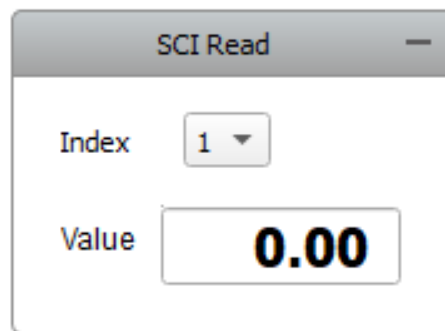


Figure 1. SCI Read – Digital Display widget.

IMPORTANT NOTE: [SCI Setup Schematic Editor component](#), [SCI Send Schematic Editor component](#) and [SCI Setup SCADA widget](#) must be configured before attempting to read any message.

SCI Read widget is available in form of a Digital Display, LED, Gauge, Bar Graph and Trace Graph.

Properties

- **Index** - message identification. If [SCI Setup widget](#) is properly configured, messages are organized in the same way as they are in *Message configuration* property of [SCI Send Schematic Editor component](#). For example, by selecting an *Index* value to be 1, it will read the value of the first message in the defined payload that controller is sending.
- **Value** - message content (number) received from the MCU.

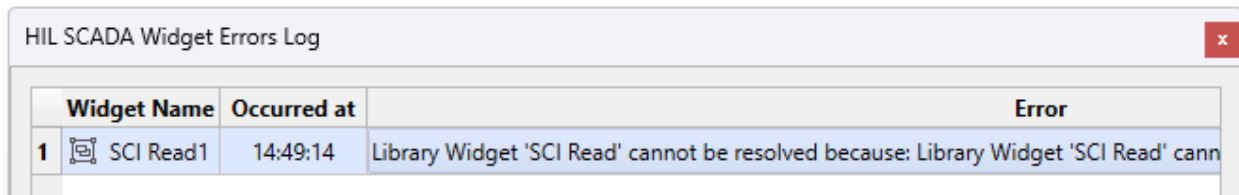
- **[min, max]** – available on SCI Read – Gauge and SCI Read – Bar Graph widgets. Defines minimum and maximum values of the range that widget displays. It should be defined as a list of two elements in ascending order.

Backward incompatibility

In *TI C2000 Toolbox* version 1.0.0 widget library suffered major changes. When it comes to *SCI Read* widget, previously there was just one type of *SCI Read* widget (with the digital display), but with the new version, four more types are introduced. Now, the widget library contains five types of *SCI Read* widgets:

- SCI Read – Bar Graph,
- SCI Read – Digital Display,
- SCI Read – Gauge,
- SCI Read – LED,
- SCI Read – Trace Graph.

Since every widget in the library must have the unique name, previous name *SCI Read* does not unambiguously represent any of the five widgets anymore. For this reason, SCADA panels with old *SCI Read* widgets will not recognize them anymore when loaded and a widget error flag will be raised (Fig. 2) and they will appear like they are “unresolved” (Fig. 3). This is solved just by replacing them with the new *SCI Read* widgets.




HIL SCADA Widget Errors Log		
Widget Name	Occurred at	Error
1  SCI Read1	14:49:14	Library Widget 'SCI Read' cannot be resolved because: Library Widget 'SCI Read' cann

Figure 2. Widget error: *SCI Read* cannot be resolved.

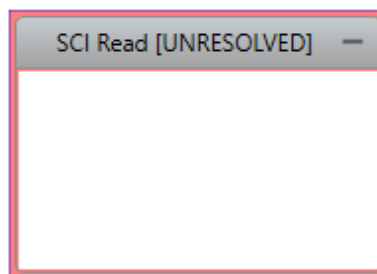


Figure 3. *SCI Read* unresolved widget.