

## Contents

- 1 Overview
- 2 Applications
- 3 Specifications
- 4 External Links

## Overview

This xCHIP forms part of the interface breakout modules.

The SC18IS602B is designed to serve as an interface between a standard I<sup>2</sup>C-bus of a micro-controller and an SPI bus. The IX02 is an SPI to xBUS breakout designed for bread-boarding with SPI ([https://en.wikipedia.org/wiki/Serial\\_Peripheral\\_Interface\\_Bus](https://en.wikipedia.org/wiki/Serial_Peripheral_Interface_Bus)) and I<sup>2</sup>C devices. This allows the micro-controller to communicate directly with SPI devices through its I<sup>2</sup>C-bus.

The SC18IS602B operates as an I<sup>2</sup>C-bus slave-transmitter or slave-receiver and an SPI master. It controls all the SPI bus-specific sequences, protocol, and timing. It has its own internal oscillator, and it supports four SPI chip select outputs that may be configured as GPIO when not used.

### Product Highlights

- I<sup>2</sup>C-bus slave interface operating up to 400 kHz
- SPI master operating up to 1.8 Mbit/s

## Applications

- Converting I<sup>2</sup>C-bus to SPI
- Adding additional SPI bus controllers to an existing system

## Specifications

- 200-byte data buffer
- Up to four slave select outputs
- Up to four programmable I/O pins
- Low power mode
- Internal oscillator option
- Active LOW interrupt output

### Pin List

- GND
- VCC
- SS0
- SS1
- SS2
- SS3
- INT
- RESET
- A0
- A1
- A2
- MISO
- MOSI
- CSK

## External Links

### Documents

- SC18IS602B From NXP Semiconductors (<https://www.nxp.com/docs/en/data-sheet/SC18IS602B.pdf>)

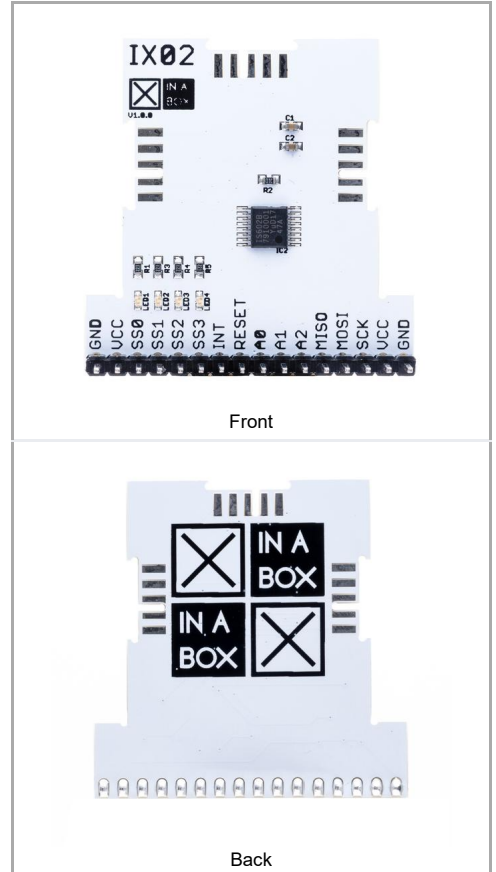
### Shop

- Buy IX02 (<https://xinabox.cc/products/IX02>)

### GitHub Libraries

- Arduino ([https://github.com/xinabox/Arduino\\_IX02](https://github.com/xinabox/Arduino_IX02))

## IX02 - SPI to xBUS breakout (SC18IS602B)



<b>Main Category</b>	Interface
<b>Sub Category</b>	Breakout
<b>Introduced</b>	1 January 2017
<b>Current version</b>	1.0.0
<b>Current version date</b>	1 January 2017
<b>Weight</b>	5.3 g
<b>Height</b>	11.2/1.2/8.4 mm
<b>Non-xBUS Connections</b>	
<b>South</b>	SPI Breakout Board
<b>Main Chip Set</b>	
<b>Main Chip</b>	SC18IS602B