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## Overview

This xCHIP is based on the SC16IS750IBS chip-set, which is SC16IS750 is a slave I<sup>2</sup>C-bus/SPI interface to a single-channel high performance UART. IX03 is a UART to xBUS breakout designed for bread-boarding with UART ([https://en.wikipedia.org/wiki/Universal\\_asynchronous\\_receiver-transmitter](https://en.wikipedia.org/wiki/Universal_asynchronous_receiver-transmitter)) and I<sup>2</sup>C devices. The SC16IS750 supports SPI clock speeds up to 4 Mbit/s and has programmable I/O pins. The SC16IS740/750/760's internal register set is backward-compatible with the widely used and widely popular 16C450. This allows the software to be easily written or ported from another platform.

### Product Highlights

- Based on SC16IS750IBS from NXP Semiconductors

## Applications

- Factory automation and process control
- Portable and battery operated devices
- Cellular data devices

## Specifications

- Baud rates up to 5 Mbit/s in 16 $\mu$  clock mode
- Auto hardware flow control using RTS/CTS
- Auto software flow control with programmable Xon/Xoff characters
- Single or double Xon/Xoff characters
- Automatic RS-485 support (automatic slave address detection)
- Single full-duplex UART
- Selectable I<sup>2</sup>C-bus or SPI interface
- Industrial temperature range:  $-40^{\circ}\text{C}$  to  $+95^{\circ}\text{C}$
- 64 bytes FIFO (transmitter and receiver)

### Pin List

- GND
- VCC
- GPIO0
- GPIO1
- DSR
- DTR
- CD
- RI
- A0
- A1
- TX
- RX
- CTS
- RTC

## External Links

### Datasheet

- SC16IS740 From NXP Semiconductors ([https://www.nxp.com/docs/en/data-sheet/SC16IS740\\_750\\_760.pdf](https://www.nxp.com/docs/en/data-sheet/SC16IS740_750_760.pdf))

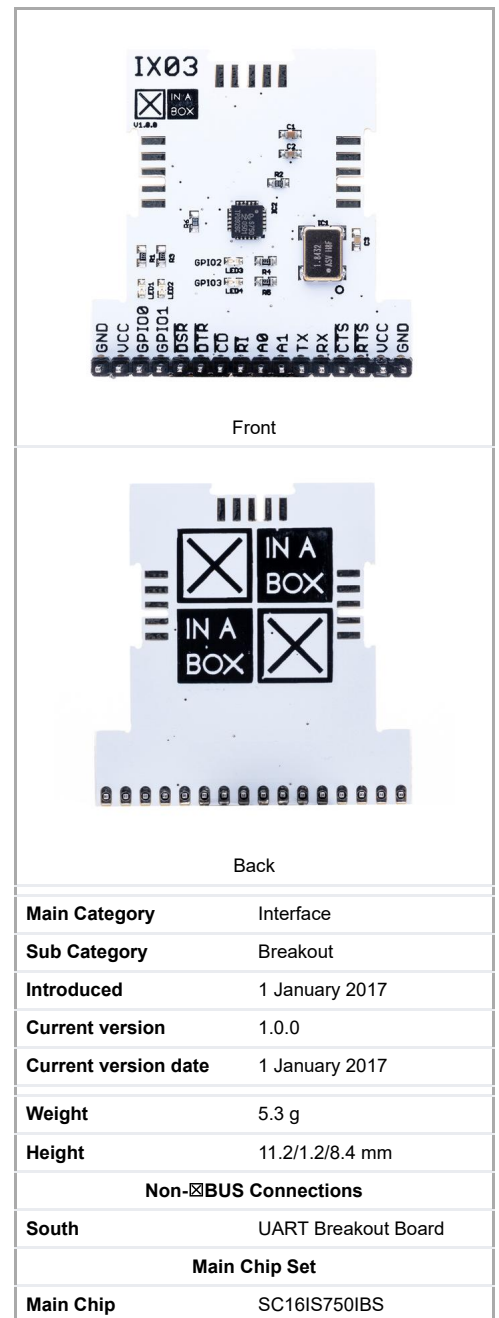
### Shop

- Buy IX03 (<https://xinabox.cc/products/IX03>)

### GitHub Libraries

- Arduino ([https://github.com/xinabox/Arduino\\_IX03](https://github.com/xinabox/Arduino_IX03))

IX03 - UART to xBUS breakout  
(SC16IS750IBS/SC16IS750)



<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>	UART Breakout Board
<b>Main Chip Set</b>	
<b>Main Chip</b>	SC16IS750IBS