
How to use the SPI library as SPI slave

This application note shows how to use the SPI library to make the xCORE use an SPI bus as SPI slave. The application provides a register file that can be read and written by the internal application and by the SPI master using a simple command set. The code is run in simulation with an SPI master output looped-back onto the SPI slave input to show the bus functioning.

Required tools and libraries

- xTIMEcomposer Tools - Version 14.0
- XMOS SPI library - Version 3.0.0

Required hardware

This application note is designed to run in simulation so requires no XMOS hardware.

Prerequisites

- This document assumes familiarity with the XMOS xCORE architecture, the SPI bus protocol, the XMOS tool chain and the xC language. Documentation related to these aspects which are not specific to this application note are linked to in the references appendix.
- For descriptions of XMOS related terms found in this document please see the XMOS Glossary¹.
- For the full API listing of the XMOS SPI Device Library please see the library user guide².

Xmos Ltd. is the owner or licensee of this design, code, or Information (collectively, the “Information”) and is providing it to you “AS IS” with no warranty of any kind, express or implied and shall have no liability in relation to its use. Xmos Ltd. makes no representation that the Information, or any particular implementation thereof, is or will be free from any claims of infringement and again, shall have no liability in relation to any such claims.

¹<http://www.xmos.com/published/glossary>

²http://www.xmos.com/support/libraries/lib_spi