AXILite I2C Slave v1.0

IP User Guide (Alpha Release)

January 26, 2023

RapidSilicon

Contents

IP Summary

Introduction

An I2C slave device is a device that communicates with an I2C master device over an I2C bus. The slave device does not control the clock signal and can only respond to commands and requests from the master device. Each slave device on the bus has a unique address that the master device uses to communicate with it. The slave device can be a sensor, a display, or other types of peripheral devices. In I2C communication protocol slave device can only respond to the master device, it doesn't initiate the communication. This I2C IP acts as a Slave that can be connected to a Master via the AXILite interface making it compatible with other AXI based systems. A macro block diagram for the top level of this AXILite I2C Slave is shown in Figure 1.

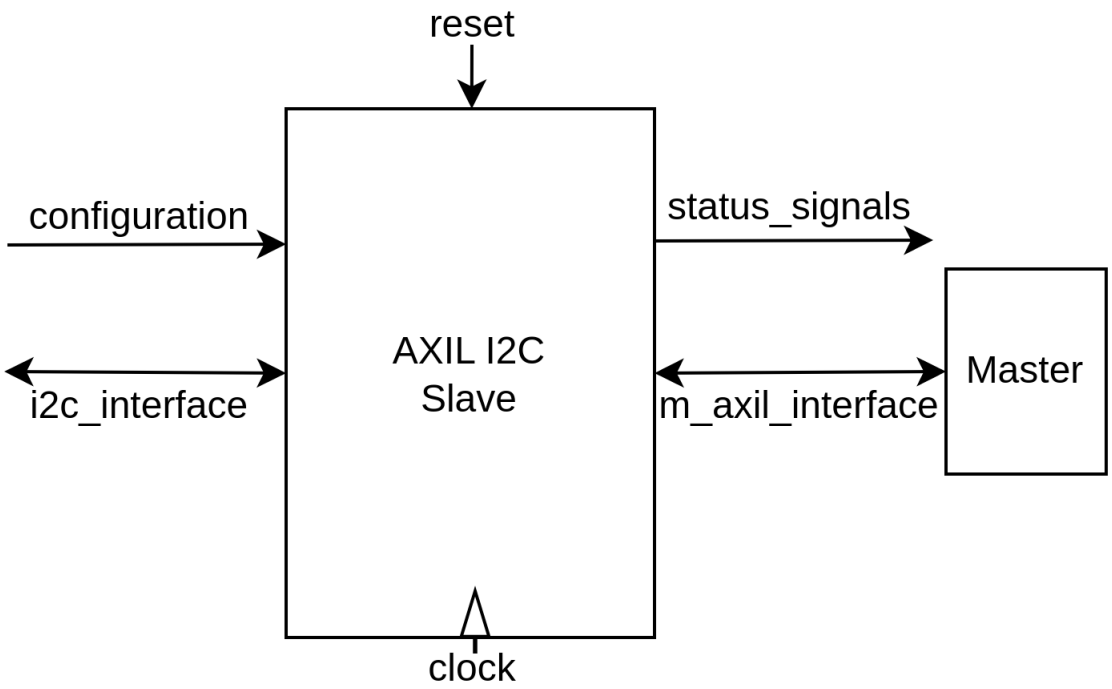

Figure 1. AXILite I2C Slave Block Diagram

Revision History

Date	Version	Revisions
January 26, 2023	0.01	Initial version AXILite I2C Slave User Guide Document