

ID MOS Digital I.P. SHORTFORM

IM159: Master/Slave Serial Peripheral Interface (SPI)

PRODUCT DESCRIPTION

The SPI module is an interface module for communication on a common serial bus of type One-Master / Multiple-Slaves. The SPI module can either be configured as a master or slave interface depending on the application.

Communication on the bus is done through one read/write data shift register. All transactions on serial bus are under master interface responsibility. (serial clock is provided by master interface).

FEATURES

- Programmable master/slave interface
- Full duplex interface
- Variable data length
- Programmable clock polarity and frequency
- Up to 16 slaves addressing capability
- Maskable interrupt
- Transmission error detection
- Full synchronous module

TYPICAL APPLICATIONS

- Automotive
- Consumer Electronics
- Industrial Processes Automation
- Home Automation

BLOCK DESCRIPTION



