



I2C GPIO
Efficient Tool For
Enhancing Signal Analysis
SPI

ZEROPLUS I2C-SPI Control Center

- It is a convenient tool to access the Data of the I2C/SPI Interface.
- It can be used to access the Data of I2C/SPI quickly and simulate the Master or Slave Status synchronously.
- When the Trigger Mode is used in the I2C Mode and the SPI Mode, the Data of I2C/SPI can be used as the Trigger Condition of Hardware.
- When the Mode is switched into the GPIO Mode, the users can use the Command to transmit the Signal.
- The Working Efficiency of analyzing the signals of I2C/SPI can be improved, matching with the ZEROPLUS Logic Analyzer.
- When the Data is satisfied with the condition, the Trigger Signal will be transmitted, or the Signal can be transmitted through the GPIO Batch Interface.

I2C-SPI Control Center

I2C-SPI Control Center can simulate I2C and SPI signals and test circuit reaction. It could also connect with ZEROPLUS Logic Analyzer to record, trigger, debug and signal analysis.

Accessories Include: Test Cable (10pins) / Test Cable (12pins) / USB Cable / User Guide / Driver CD

I2C Mode

Function · Produce and transmit the data of I2C, and simulate the state of the Master or Slave.

Features · The Bit Rate of I2C Signal can be set as users' requirements (the range is from 2KHz to 833KHz).
· Support 10 Bits Address.
· Support transmitting the data of I2C continuously (No Stop) and the Combined Format.
· Support I2C Trigger function, that is to say, the state of the data of I2C can be set as the Trigger Condition according to users' requirements.

I2C Monitor

Function · Monitor the State of Read/Write, Address and Data Packet on the Protocol Analyzer I2C.

Features · Record all packets in the Protocol Analyzer I2C continuously.
· Include the State of Read/Write, the number of the Address and the contents of the Data Packet.
· Save the recorded results by way of the EXCEL File mode.

SPI Mode

Function · Generate, transmit, simulate and analysis SPI signal (Master/Slave side)

Features · The Bit Rate of SPI Signal can be set according to users' requirements (the range is from 158KHz to 1MHz).
· Adjust the SPI Mode (Phase/Polarity).
· Support SPI Trigger function, that is to say, the state of the data of SPI can be set as the Trigger Condition according to users' requirements.

GPIO Mode

Function · Set the state of the 8bits Data according to users' requirements, which is required to be produced.

Features · Set the 8 Pin Mode or 6 Pin Mode.
· Match the GPIO Mode with the I2C Mode or SPI Mode to use.
· Adjust the IO Pin to judge whether the Pull-Up Resistance needs to be added.

Batch Mode

Function · Support the I2C, SPI and GPIO Modes, and deal with the data to be produced in the Batch Mode.

Features · Define the state of the Data Transmission flexibly and simulate the reaction of the actual device through the Batch Mode.

The example of I2C Batch Mode is listed as following:

```
ModeStatus=FTXX_I2CMODE|FTXX_SPIMODE|FTXX_GPIOMODE
I2CFunctionStatus=I2C_I2CMASTER
I2CBitRate=400
I2CSlaveAddress=65535
I2CMasterModeTxData=[00 01 02 03 04 05 06 07 08 09 0a 0b 0c 0d 0e 0f 10 11 12 13 14 15 16 17 18 19 1a 1b 1c 1d 1e 1f 20 21]
I2CMasterModeReadByteLength=5
I2CFreeBus=true
I2CSlaveModeTxByteLength=10
I2CSlaveModeRxByteLength=10
I2CSlaveRespondData=[00 01 02 03 04 05 06 07 08 09 0a 0b 0c 0d 0e 0f 10 11 12 13 14 15 16 17 18 19 1a 1b 1c 1d 1e 1f 20 21]
I2CSlaveModeEnabled=true
```

Due to the various types of Batch command, for more information, please refer to manual book.



孕龍科技
Zeroplus Technology co.,Ltd.

2F., No.123, Jian Ba Rd., Chung Ho City, Taipei County 235, Taiwan
Tel: +886 2-66202225 #212 Effie, #223 Olivia Fax: +886 2-22234362
Service Mail: service_2@zeroplus.com.tw
www.zeroplus.com.tw