MOD-RS485-ISO

1. Description

Build with MPLAB X 1.10 with C18 version 3.40 compiler for the host and HI-TECH PICC compiler version 9.83 for the slave devices.

This demo shows how to control several MOD-RS485-ISO boards via I2C communication protocol. The host board is PIC-P2xJ50.

The format of the protocol is:

S | AAAAAAAA | ACK | AAAAAAAA | ACK | AAAAAAAA | ACK | CCCCCCCC | ACK | DDDDDDDD | ACK | P

Where:

***S** – Start bit*
***AAAAAAAA** – Address: The first byte should be 0x90, the second – 0x04. The third byte is device ID and can be changed.*
***ACK** – Acknowledge bit – should be low if there is a slave device on the bus*
***CCCCCCCC** – Command byte;*
***DDDDDDDD** – Data byte: Can be both ways and depends of the command*

By default the address of the slave device is 0xA0. To change the address the jumper should be closed and after that the device must be reset. After that command for changing the address can be send. The new address range is set from 0xB0 to 0xB9. This can be changed.

The host device create virtual COM port. After you connect it with mini USB you can open the appropriate port and baud rate of 9600. Press any key and the demo menu should show. After that press one of the menu keys ("1", "2","3", "4", "5", "6") and the commands should be executed.

1 – Scan for devices on the bus (The scan is from addresses 0xB0 to 0xB9).
2 – Set new address – The host send the first free address in the rang of 0xB0 to 0xB9.
3 – Open CLC for read and write at address 0xB0
4 – Turn off CLC
5 – Open CLC for read and write at address 0xB1
6 – Turn off CLC

2. Support - https://www.olimex.com/dev/

3. Release Notes - 12 July 2012 – Initial release