KSZ8895MLU/MLUB
Evaluation Board User's Guide

KSZ8895MLU/MLUB Integrated 4-port 10/100Base-T/TX and 1 port MII Interface Ethernet Managed Switch

Rev 1.1 May 2014

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Revision History

Revision	Date	Change
1.0	9/29/10	Initial release
1.1	5/05/14	Update eval board photos and add KSZ8895MLUB part.

1.0 Introduction

The KSZ8895MLU/MLUB is Micrel Operations' new generation integrated 5-port switch. The KSZ8895MLU/MLUB contains four 10/100Base-T/TX PHY transceivers and one MII interface with MAC mode and PHY mode configurable for MAC 5 of the port 5. The device had been designed with cost sensitive systems in mind but still offers a multitude of features such as switch management; port and tag based VLAN; QoS priority; CPU control SPI interface and CPU control MDC/MDIO for MIIM/SMI interfaces. The KSZ8895MLU/MLUB is an excellent choice in industrial automatic, automotive, etc. fields and as a managed Ethernet switch. The KSZ8895MLU/MLUB evaluation board is designed to allow the user to experience firsthand the rich feature set of this exciting new product. The evaluation board is highly configurable and easy to use.

2.0 Features

- Micrel KSZ8895MLU/MLUB Integrated 4 copper ports and 1 MAC MII interface for a 5-port Managed Ethernet Switch
- 4 RJ-45 Jacks for Ethernet LAN with Corresponding Isolation Magnetics.
- Auto MDI/MDIX on All Ports.
- 1 PHY mode and 1 MAC mode MII Connector are for the port 5 MAC 5 SW5-MII Interface
- 1 USB Port Interface Configurable to Emulate an I2C or SPI or MDC/MDIO Interfaces to access all control registers and all MIIM registers.
- On Board EEPROM
- 3 LEDs Per Port to Indicate the Status and Activity

3.0 Evaluation Kit Contents

The KSZ8895MLU/MLUB Evaluation kit includes the following:

- KSZ8895MLU/MLUB Evaluation Board Rev. 1.x
- KSZ8895MLU/MLUB Evaluation Board User's Guide Rev 1.x
- Micrel EEPROM/SPI/SMI/MIIM Configuration Software tools for KSZ8895 family.
- KSZ8895MLU/MLUB Evaluation Board Schematics and BOM
- The software, schematics and other design information will be found in the Design Kit (Design Package) of the KSZ8895MLU/MLUB Ethernet switch products on Micrel website. (Contact your Micrel FAE for the latest schematic).
- The USB cable is not included.

4.0 Hardware Description

The KSZ8895MLU/MLUB evaluation board is in a compact form factor and can sit on a bench near a computer with USB connector. There are four options for configuration: strap in mode; EEPROM mode, SMI mode and SPI mode. Strap in mode configuration is easily done with on board jumper options. EEPROM mode, SMI mode and SPI mode are accomplished through a built in USB port interface. Using Micrel EEPROM software and your PC, you can program the EEPROM on board by the USB port. Using Micrel SPI software and your PC, you can access the KSZ8895MLU/MLUB's full feature set registers by the USB to SPI interface. Or using Micrel MDC/MDIO software and SMI software with your PC, you can access the KSZ8895MLU/MLUB's MIIM PHY registers by generic MDC/MDIO interface and full feature set registers by the SMI mode of MDC/MDIO interface. The board also features the MII connectors for the Switch MII interface. These are to facilitate connections from the switch to an external MAC or PHY.

The KSZ8895MLU/MLUB evaluation board is easy to use. There are programmable LED indicators for link and activity on all ports and a power LED. A manual reset button allows the user to reset the board without removing the power plug. A standard 5VDC power supply is included so that the user can supply power from any 110-240 Volt AC wall or bench socket, and the power also can be provided by USB port when close pin 2-3 of the JP47 jumper.

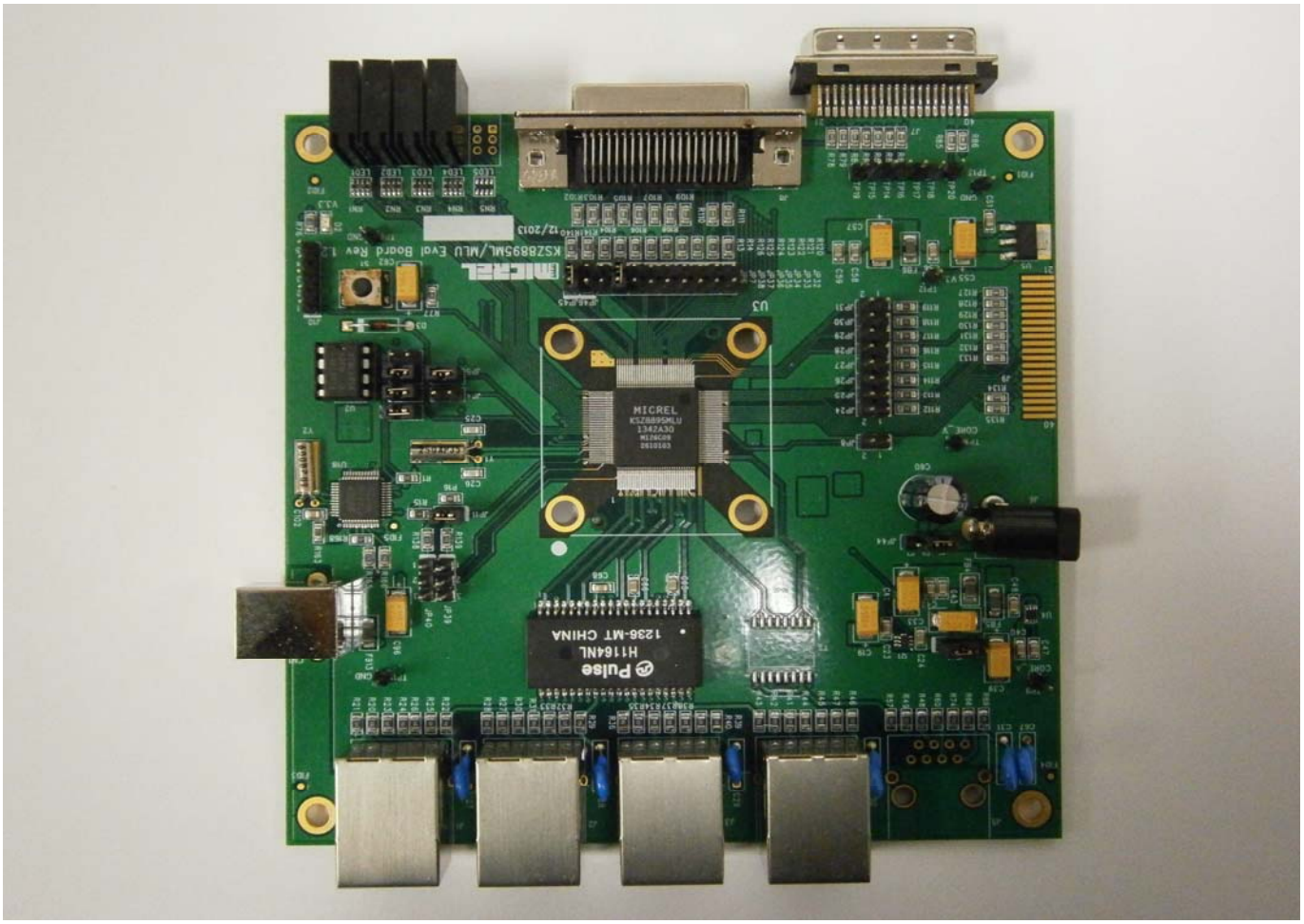


Figure 1 KSZ8895MLU/MLUB Evaluation Board

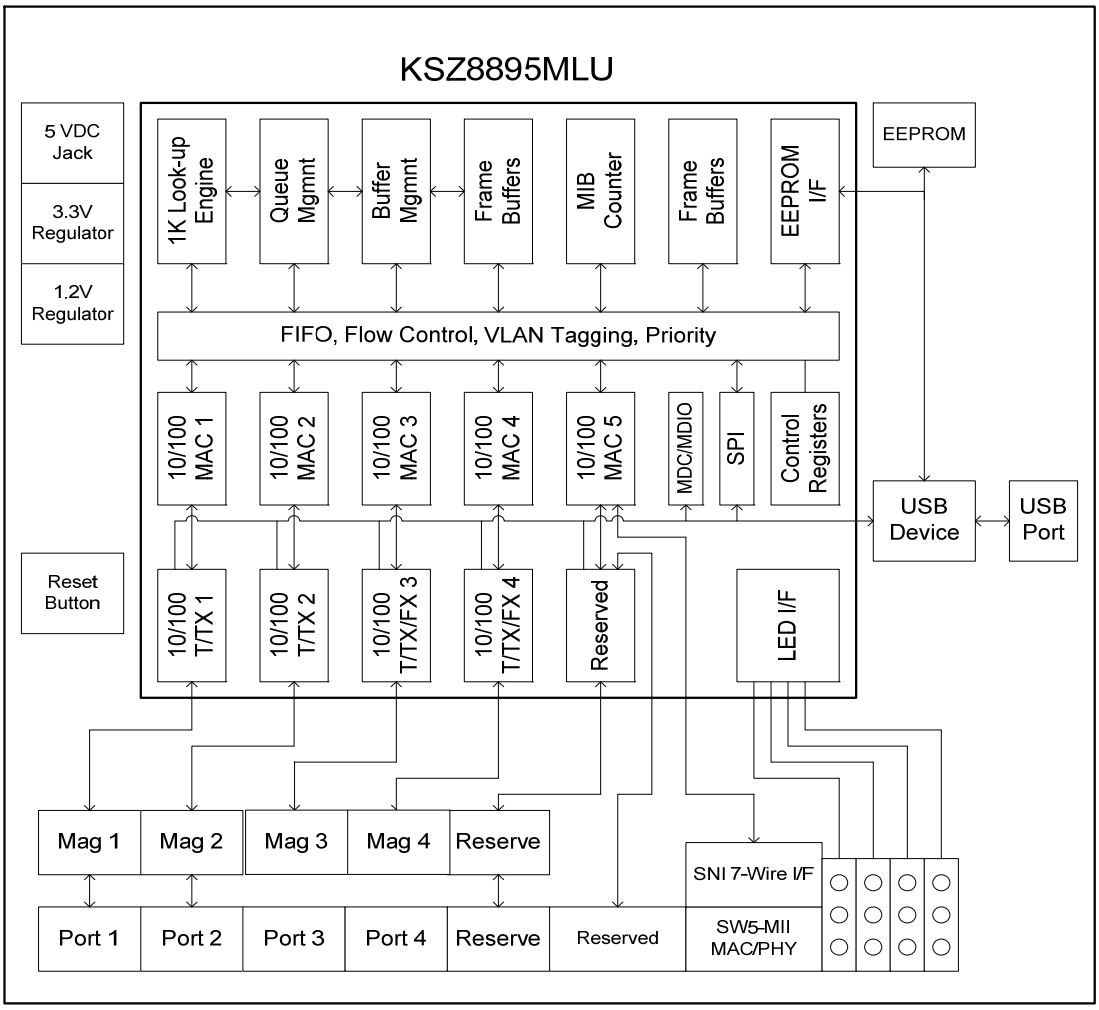


Figure 2 KSZ8895MLU/MLUB Evaluation Board Block Diagram

4.1 Strap in Mode

Strap in configuration mode is the quickest and easiest way to get started. In this mode, the KSZ8895MLU/MLUB acts as a standalone 5 port switch. The user has to simply set the board's configuration jumpers to the desired settings and apply power to the board. The user can also change jumper settings while power is applied to the board and press the convenient manual reset button for the new settings to take effect. Note that even if there is no external strap in values are set, internal pull up and pull down resistors will set the KSZ8895MLU/MLUB default configuration. Section 4.1.1 covers each jumper on the board and describes its function.

To start in strap in configuration mode, make sure that JP1 and JP2 are open and JP3 and JP9 are closed. In this mode, pins (PS1,PS0)=(0,0), the chip will start automatically, after trying to read the external EEPROM, if EEPROM does not exist, the chip will use the default values and the strap option setting for all internal registers.

4.1.1 Feature Setting Jumpers

The evaluation board provides jumpers to allow the user to easily set strap in configurations for the KSZ8895MLU/MLUB. Table 1 describes the jumpers and their function in the open or closed state.

Table 1 Feature Setting Jumpers

Jumper	KSZ8895MLU/ MLUB Signal	2-pin Jumper Open 3-pin Jumper 1-2 Closed	2-pin Jumper Closed 3-pin Jumper 2-3 Closed
JP1	SDA	SPI or EEPROM	MDC/MDIO for MIIM/SMI
JP2	SCL	SPI or EEPROM	MDC/MDIO for MIIM/SMI
JP3	SPIQ	SPI and EEPROM	EEPROM and MDC/MDIO
JP9	SCL	MDC/MDIO	EEPROM
JP4	PS0	SPI and EEPROM	SMI
JP5	PS1	EEPROM and SMI	SPI
JP6	SCONF0	MAC mode or disable MII	SW5-MII PHY mode or SNI
JP7	SCONF1	PHY mode or disable MII	SW5-MII MAC mode or SNI
JP8	PWRDN	Normal Operation	Hardware power down
JP25	PMRXD3	Enable flow control	Disable flow control
JP26	PMRXD2	Disable Back Pressure	Enable Back Pressure
JP27	PMRXD1	Drop excessive collision packets	Do not drop excessive collision packets
JP28	PMRXD0	Aggressive back off disable	Aggressive back off enable
JP29	PMRXER	Max Packet Size up to 1522/1518 bytes	Max Packet Size up to 1536 bytes
JP30	PCRS	Force Half Duplex on port 4 if AN is disabled or failed	Force Full duplex on port 4 if AN is disabled or failed
JP31	PCOL	No Force Flow Control on port 4	Force Flow Control on port 4
JP32	SMRXDV	Disable SW5-MII and RMII Flow Control	Enable SW5- MII and RMII Flow Control
JP33	SMRXD3	SW5-MII Half Duplex Mode	SW5-MII Full Duplex Mode
JP34	SMRXD2	SW5-MII 100BT mode	SW-MII 10BT mode
JP35	SMRXD1	LED Mode 0: LEDx_2 = Link/Act LEDx_1 = Full Duplex/Col LEDx_0 = Speed	LED Mode 1: LEDx_2 = 100Link/Act LEDx_1 = 10Link/Act LEDx_0 = Full Duplex
JP36	SMRXD0	Disable SW5-MII Flow Control	Enable SW5- MII Flow Control
JP45	LED5_1		Normal Operation (Default)
JP46	LED5_2	Enable Aging	Disable Aging
JP44 3-pin	DC from 5V Jack	1-2 Close: 5V DC from the power jack of AC adapter	2-3 Close: 5V DC from the USB connector.

Table 2 Reserved Jumpers and recommendation

Jumper Number	Description	Recommended Settings
JP19	SMRXDV	Open
JP24	PMRXDV	Open
JP37	SCRS	Open
JP38	SCOL	Open
JP40	Test 2	Open
JP41	MUX1	Open
JP42	MUX2	Open

4.2 EEPROM Mode

The evaluation board has an EEPROM to allow the user to explore more extensive capabilities of the KSZ8895MLU/MLUB. The user can conveniently program the EEPROM on board using the USB port from any computer with a WIN 2000/XP environment and the Micrel provided software. This makes it easy for the user to evaluate features like "broadcast storm protection" and "rate control".

To prepare the KSZ8895MLU/MLUB evaluation board for EEPROM configuration follow these steps:

1. Copy the Micrel provided EEPROM software to your computer.
2. Set JP3 and JP9 as specified in Table 3 for EEPROM mode configuration. Make sure that the EEPROM is installed on the board.

Table 3 EEPROM Mode Settings

Jumper	Description	Setting
JP1	SDA	Open
JP2	SCL	Open
JP3	SCL	Closed
JP9	SPIQ	Closed
JP4	Serial Bus Config. (PS0)	Open
JP5	Serial Bus Config. (PS1)	Open

3. Connect the computer's USB port to the KSZ8895MLU/MLUB board with a USB port cable.
4. There are two way to power up the evaluation board:
   a). Connect the 5 VDC power supply to the KSZ8895MLU/MLUB when JP44 pin1-2 is closed.
   b). 5 VDC power source from the USB port when JP44 pin 2-3 is closed.
5. The KSZ8895MLU/MLUB will power up in its default configuration if there is no information in the EEPROM.
6. Program the desired settings into the EEPROM using the Micrel software. See the software description section 5.1 for details.

7. Press the manual reset button. The KSZ8895MLU/MLUB will reset and read the new configuration in the EEPROM. After reset, the KSZ8895MLU/MLUB is ready for the operation with EEPROM configuration.

4.3 SPI Mode

From SPI interface to the KSZ8895MLU/MLUB, use a USB to SPI converter that allows accessing all of the KSZ8895MLU/MLUB features and registers. The user can easily access the SPI interface using a computer connected to the evaluation board's USB port interface. Micrel provides a Windows 2000/XP based program for the user to evaluate the KSZ8895MLU/MLUB's full feature set. In addition to all the control registers available via EEPROM programming, a host CPU connected to the KSZ8895MLU/MLUB's SPI interface will be able to access all static MAC table, the VLAN table, dynamic MAC address table and the MIB counters. Prepare the KSZ8895MLU/MLUB evaluation board for SPI mode configuration follow these steps:

1. Copy the Micrel provided SPI interface software on your computer.
2. Set JP5 as specified in Table 4 for SPI mode configuration.

Table 4 SPI Mode Settings

Jumper	Description	Setting
JP1	SDA	Open
JP2	SCL	Open
JP3	SCL	Open
JP9	SPIQ	Open
JP4	Serial Bus Config. (PS0)	Open
JP5	Serial Bus Config. (PS1)	Closed

3. Connect the computer's USB port to the KSZ8895MLU/MLUB board with a USB port cable.
4. There are two ways to power up the evaluation board:
   - Connect the 5 VDC power supply to the KSZ8895MLU/MLUB when JP44 pin1-2 is closed (default).
   - 5 VDC power source comes from the USB port when JP44 pin 2-3 is closed.
5. The KSZ8895MLU/MLUB will power up initial default configuration with the start switch in register 1 bit 0 = '0' which means the switch is "off". You can set the bit 0 ='1' to start switch.
6. Open the Windows and navigate to the directory where the Window SPI file is stored. Click its icon to invoke the software.
7. Program the desired settings using the Micrel SPI interface software. See the software operation description section 5.2 for details.

4.4 10/100 Ethernet Ports

There are four 10/100 Ethernet ports on the KSZ8895MLU/MLUB evaluation board. The ports J1, J2, J3 and J4 can be connected to a traffic generator/analyzer or a SmartBit via standard RJ45 connectors using CAT-5 cables. Each port can be used as either an uplink or downlink. All ports support auto MDI/MDIX so there is no need for cross over cables.

J1 = RJ45 connector for port 1

J2 = RJ45 connector for port 2
J3 = RJ45 connector for port 3
J4 = RJ45 connector for port 4

4.5 LED indicators

Ethernet Port LEDs

There are five columns of LED indicators on the board, one column for each of the five ports. The LED indicators are programmable to two different modes. You can program the LED mode through a strap in option on JP23 or in register 11, bit 1. The mode definitions are shown in Table 5. There are three LEDs per port. The naming convention is "LEDx_y", where "x" is the port number, and "y" is the number of the LED for that port.

Table 5 LED Modes

Mode 0	Mode1
LEDx_2 = Link/Act	LEDx_2 = 100Link/Act
LEDx_1 = Full Duplex/Col	LEDx_1 = 10Link/Act
LEDx_0 = Speed	LEDx_0 = Full Duplex

LED1_y are assigned to Port1

LED2_y are assigned to Port2

LED3_y are assigned to Port3

LED4_y are assigned to Port4

Power LED

The board also has a power LED D2 for the 3.3V power supply. D2 LED indicates 3.3V Power on and off.

4.6 MII Ports Configuration

There is one MII ports on the KSZ8895MLU/MLUB. This MII port connects to the fifth MAC in the KSZ8895MLU/MLUB, and we refer to it as the port 5 Switch SW5-MII port. The SW5-MII can be configured to MAC mode and PHY mode by jumpers of JP6 and JP7 as shown in Table 6.

The Switch MII port can be set to SNI mode also. In PHY mode, the Switch MII port will transmit and receive signals on J7 of the board's male MII connector. This mode is usually used to connect the KSZ8895MLU/MLUB to a CPU with MAC. In MAC mode, the Switch MII port will transmit and receive signals on J8 of the board's female MII connector. This interface is normally used to connect the KS8895MLU to an external PHY. We also have provisions on the board to support the SNI 7 wire interface. In SNI mode, the Switch MII port will transmit and receive signals on header

pins. The connections between the header pins and the SNI signals are shown in the Table 7.

Table 6 MII Mode Settings

JP45 Closed as default for '0' Pin 91 LED5_1	JP7 Open='0', Close='1' Pin 86	JP6 Open='0', Close='1' Pin 87	Switch MAC5 SW5- MII	PHY[5] P5- MII (Reserved)
0	Open	Open	Disable, Outputs Tri-stated	Disable, Outputs Tri-stated
0	Open	Close	PHY mode MII	Disable, Outputs Tri-stated
0	Close	Open	MAC mode MII	Disable, Outputs Tri-stated
0	Closed	Close	PHY mode SNI	Disable, Outputs Tri-stated
1	Open	Open	Disabled	Disabled
1	Open	Close	PHY mode MII	Reserved
1	Close	Open	MAC mode MII	Reserved
1	Close	Close	PHY mode SNI	Reserved

Table 7 SNI Header Pin Definitions

Header Pin	SNI Signal	KSZ8895MLU/MLUB Signals
TP1	RXC	SMRXC
TP2	CRS	SMRXDV
TP3	TXC	SMTXC
TP4	TXEN	SMTXEN
TP5	TXD	SMTXD0
TP6	RXD	SMRXD0
TP7	COL	SCOL

Table 8 Configure for SW5-MII

Modes	JP7 SCONF1	JP6 SCONF0	JP45 LED5_1
SW5-MII MAC Mode with J8 used	Closed	Open	Closed
SW5-MII PHY Mode with J7 used	Open	Closed	Closed

4.7 MDC/MDIO Interface for MIIM Registers mode and SMI mode

From MDC/MDIO interface to the KSZ8895MLU/MLUB, use a USB to MDC/MDIO converter that allows accessing all of PHY related registers by MIIM mode and all of the KSZ8895MLU/MLUB registers by SMI mode. The user can easily access the MDC/MDIO interface using a computer connected to the evaluation board's USB port interface. Micrel provides Windows based programs for the user to evaluate for both MIIM and SMI. For the MIIM software to be used all of PHY related registers, please use the software tool in the folder of MDC_MDIO MIIM of the software directory. For the SMI software to be used all of registers, please use the software tool in the folder of MDC_MDIO SMI of the software directory.

To prepare the KSZ8895MLU/MLUB evaluation board for MDC/MDIO configuration, please follow these steps:

1. Copy the Micrel provided software on your computer.
2. Set JP2, JP3 and JP4 as specified in Table 8 for MDC/MDIO configuration.

Table 9 MDC/MDIO Settings for MIIM and SMI

Jumper	Description	Setting
JP1	MDIO/SDA	Close
JP2	MDC/SCL	Close
JP3	SPIQ/SDA	Close
JP9	EEPROM/SCL	Open
JP4	Serial Bus Config. (PS0)	Open (Close for SMI)
JP5	Serial Bus Config. (PS1)	Open

8. Connect the computer's USB port to the KSZ8895MLU/MLUB board with a USB port cable.
9. There are two ways to power up the evaluation board:
   a). Connect the 5 VDC power supply to the KSZ8895MLU/MLUB when JP44 pin1-2 is closed.
   b). 5 VDC power source from the USB port when JP44 pin 2-3 is closed.
10. The KSZ8895MLU/MLUB will power up initial default configuration with the start switch in register 1 bit 0 = '0' which means the switch is "off". You can set the bit 0 ='1' to start switch in SMI mode. When JP5 and JP4 are open, the switch will be started automatically when power up.
11. Open the Windows and navigate to the directory where the Window MDC/MDIO files are stored. Click its icon to invoke the software.
12. Program the desired settings using the Micrel MDC/MDIO software. See the software operation description section for details.

5.0 Software Description

5.1 Introducing Application Software Tools

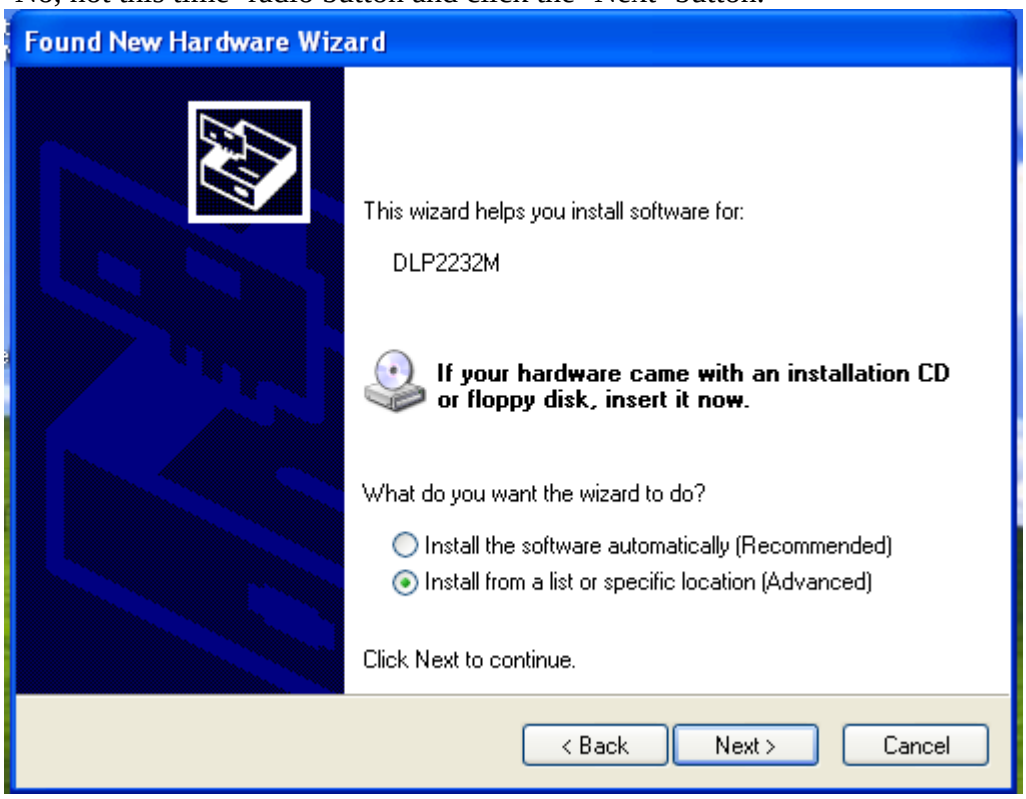
The Design Kit provides some software tools to support SPI interface, EEPROM (I2C) and MDC/MDIO access for MIIM registers and SMI interface. They are located folders in the software tool directory as follows:

1. In folder of DOS SPI Tool, there is an 8895SPI_DOS.exe file which can be executed directly. The tool is used to access all registers by SPI in a DOS Window.
2. In folder of MDC_MDIO SMI, there is a MicrelSMIIfApp.exe file which can be executed directly by clicking its icon. The software tool is used to access all registers by MDC/MDIO interface with SMI mode.
3. In folder of Window SPI_I2C_MIIM Tools, there is a MicrelSwitchPhyTools_1.xx.msi file which is clicked to create two application files in the default folder of Micrel (or you selected folder) and two icons on desktop, they need window drivers supported first, see 5.2 section for detail. One software tool is used to access all registers by SPI interface or is used to read/write all control register on I2C EEPROM mapping. Another software tool is used to access all MIIM registers for all PHYs.

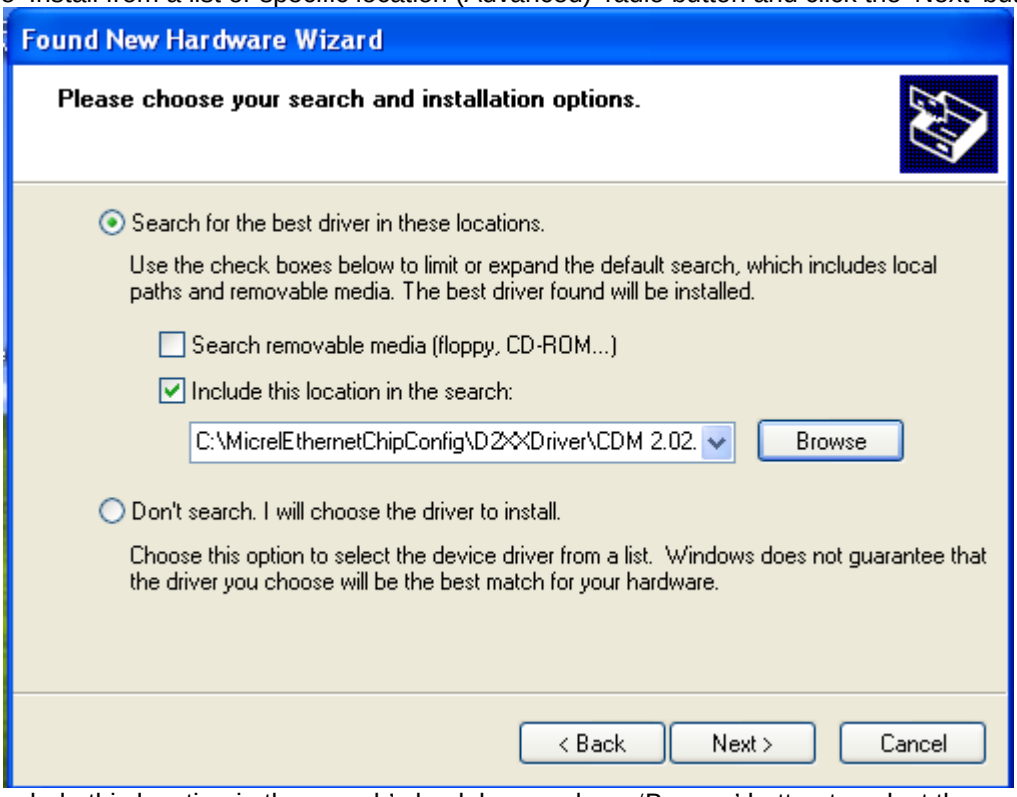
5.2 Install Window Driver First

Before use the Window based application software tool, the support drivers need to be installed to PC/Laptop first and this installation is just one times only. When connect one standard USB cable with type A and type B connectors between the evaluation board and PC computer first time, the Found New Hardware Wizard window will pop-up and then follow the instructions step by step as below.

. Choose 'No, not this time' radio button and click the 'Next' button.



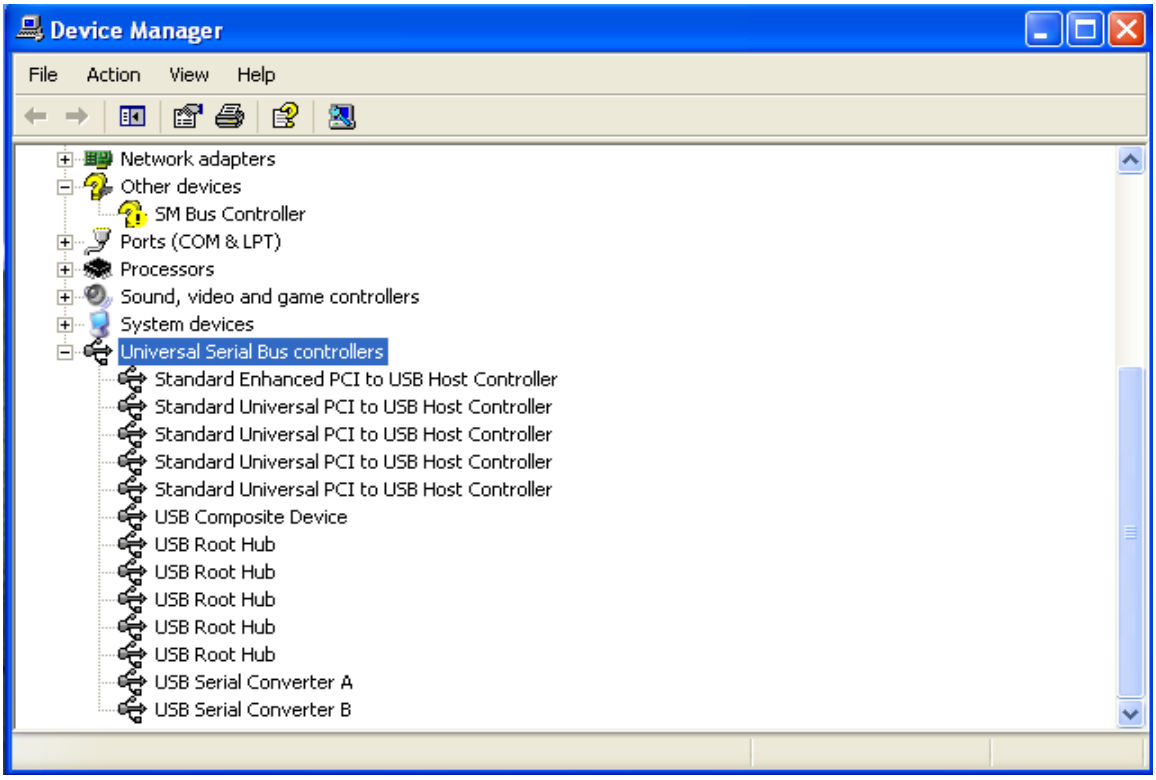
Choose the 'Install from a list or specific location (Advanced)' radio button and click the 'Next' button.



Click the 'Include this location in the search' check box, and use 'Browse' button to select the

'C:\MicrelEthernetChipConfig\D2XXDriver\CDM 2.02.04 WHQL Certified' directory and click the 'Next' button. The window will install the drivers from this location.

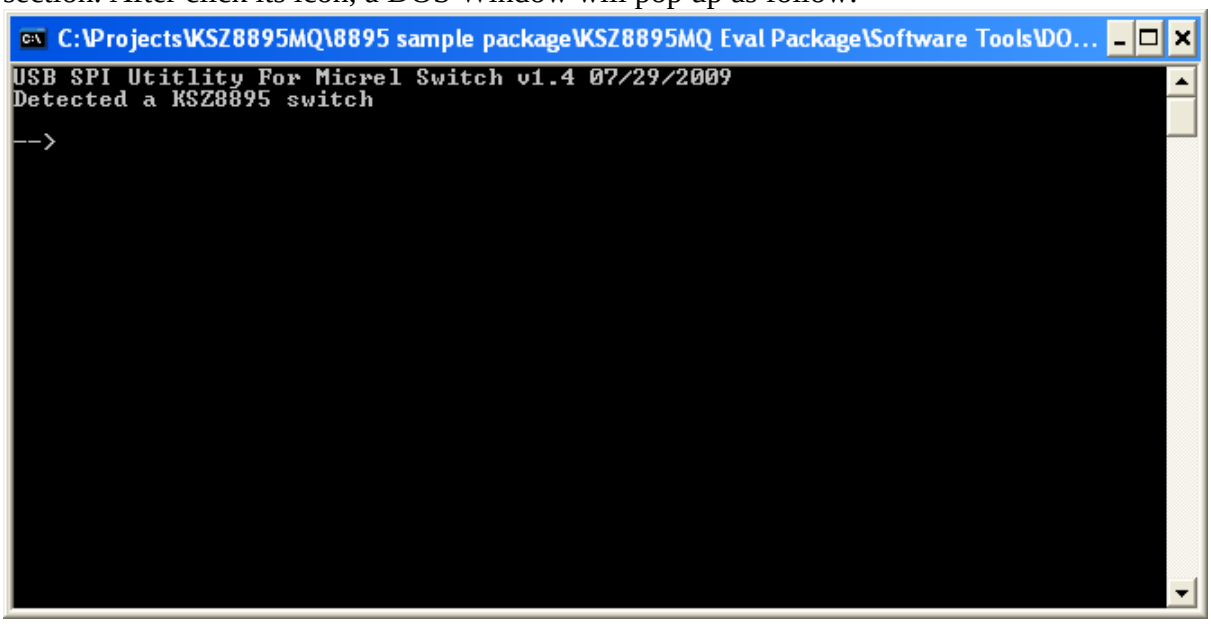
Click 'Finish' button. The Window will install another driver called 'USB Serial Converter B'. After the drivers installed, Window Device Manager will show 'USB Serial Converter A' and 'USB Serial Converter B' as below figure. That means the installation successful.



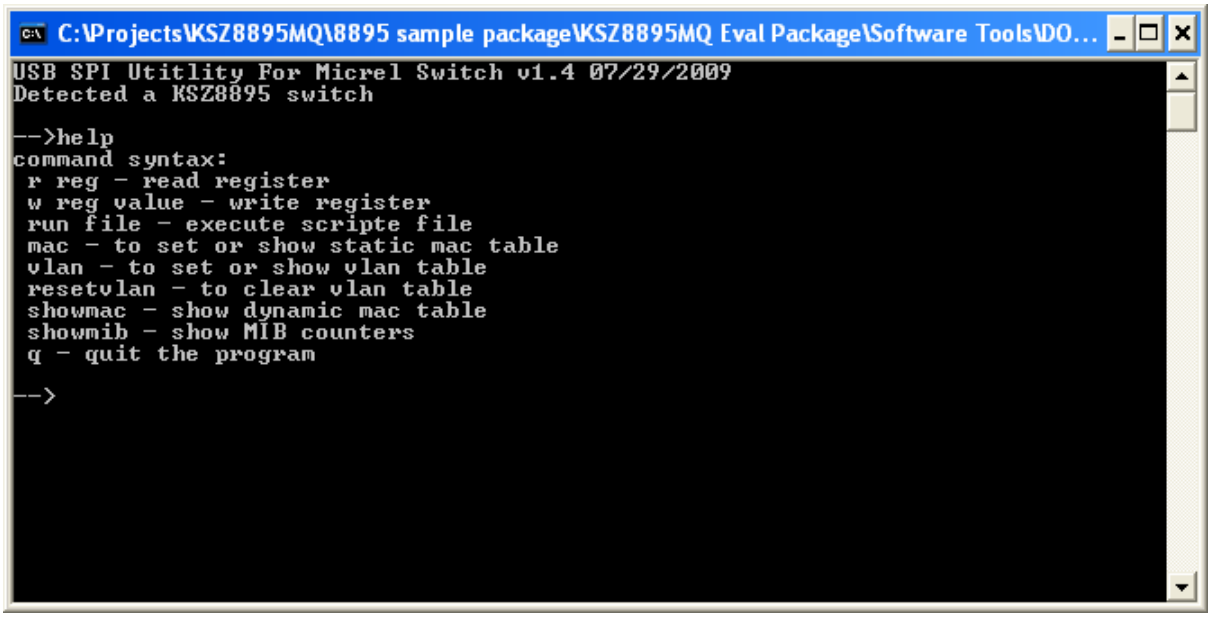
5.3 DOS SPI Tool

This is a simple and powerful tool to access all register. The tool located in the folder of DOS SPI Tool in the Software tools folder. There is an USBSPI.exe file which can be executed directly by clicking its icon.

Before run the software tool, the JP5 should be closed, please check the SPI setting in 4.3 SPI mode section. After click its icon, a DOS Window will pop up as follow:



Type a 'help' and press Enter, all commands will display as follows,



For Read or Write registers, reg is the offset address of the register, value is Hex number.

The 'run file' command can execute multiple commands by a script file, the script file is a .txt file which can be created by any edit tools.

→ run xxxx.txt //will run the .txt script file.

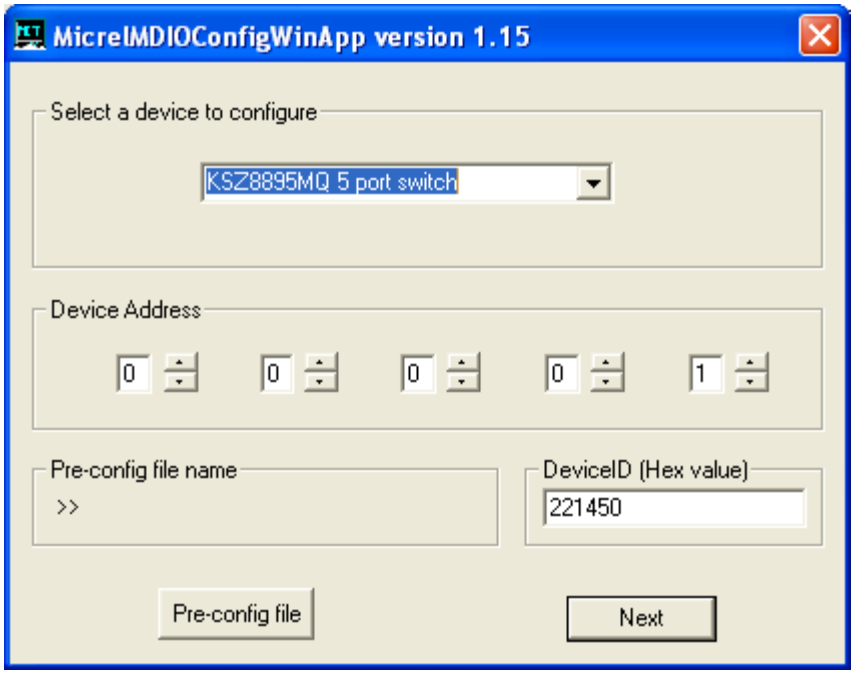
5.4 MDC/MDIO MIIM Software Tool

5.4.1 MDC/MDIO MIIM software installation

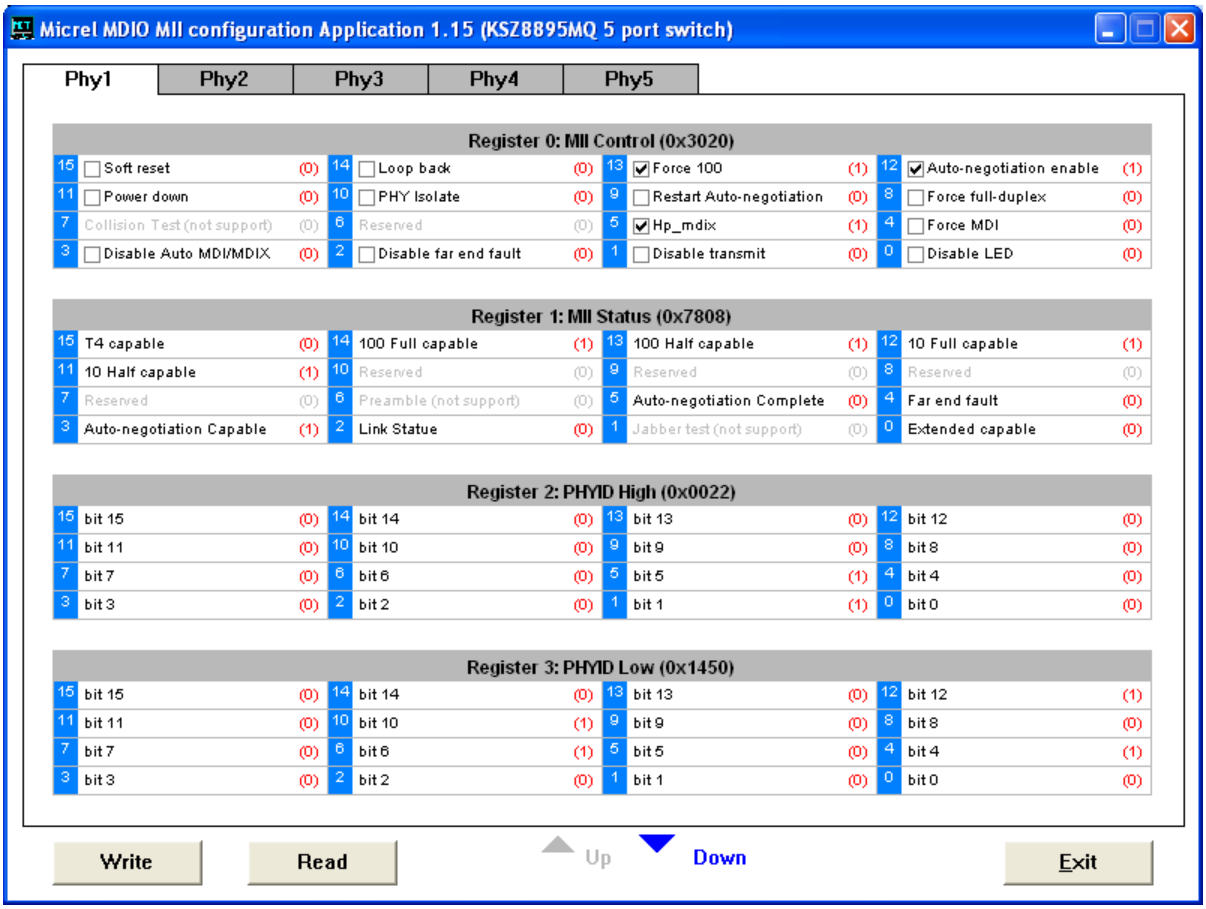
The software tool can be used to access all MIIM registers for PHY based.
This install file of the software tool locates in folder of Window SPI_I2C_MIIM Tools in the software tools folder of the Design Kit, there is MicrelSwitchPhyTools_1.xx.msi file which is clicked to install application file and add two application icons on the desktop, this installation just do one times only, the application file will be copied into the folder of Micrel\MicrelSwitchPhyTools (default) or other assigned folder in the installation.
The MDC/MDIO MIIM Software Tool can be executed directly by clicking its application file or icon with name of MicrelMDIOConfigWinApp on the desktop.

5.4.2 On board jumper setting and Software Application

Before run the software tool, the JP1, JP2 and JP3 should be closed, please check the MDC/MDIO setting in section of 4.7 MIIM SMI mode section. After click its icon, a Window will pop up as follow:



Select 'KSZ8895MQ 5 port switch' which supports KSZ8895 family and click Next button, Pop up a MDIO MIIM Configuration window as follows:
By this window, all of MIIM registers on 4 PHYs can be read and written directly (PHY5 is not used for KSZ8895MLU/MLUB switch). Click the mark of down or up, all MIIM registers will display for configuration. Check any writable bits of registers and click Write button, the value of registers will be changed.



5.5 MDC/MDIO SMI Software Tool

5.5.1 MDC/MDIO SMI software

The software tool can be used to access all registers of KSZ8895MLU/MLUB by MDC/MDIO interface

This tool locate in folder of MDC_MDIO SMI in the Design Kit, there is MicrelSMIIfApp.exe file which can be executed directly by clicking its icon.

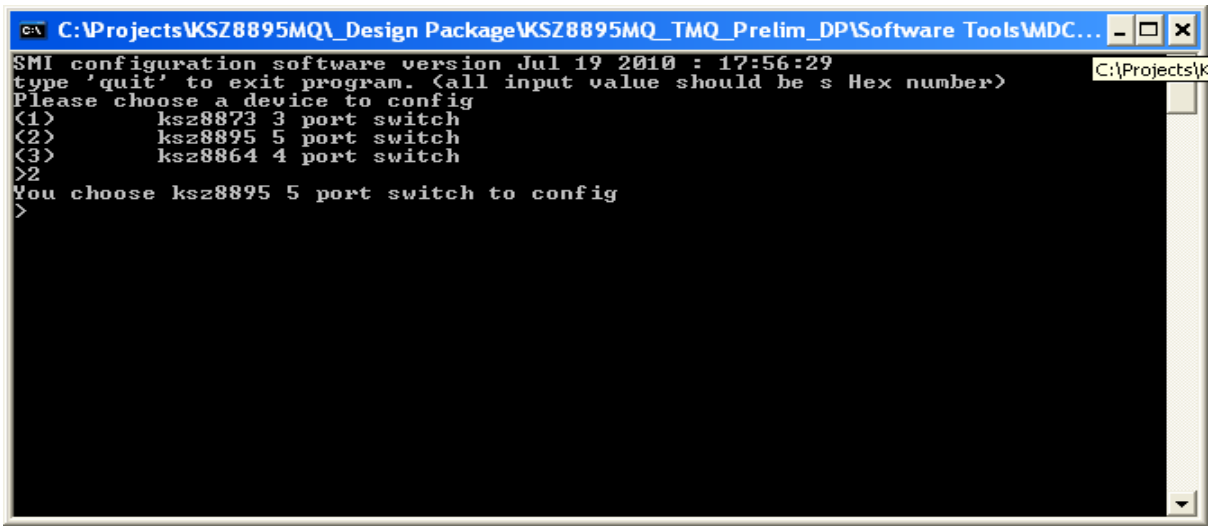
5.5.2 On board jumper setting and Software Application

Before run the software tool, the JP1, JP2 and JP3 should be closed, please check the MDC/MDIO setting in section of 4.7 MIIM SMI mode and pins PS[1:0]=01, JP8 should be closed also. After click its application file of MicrelSMIIfApp, a Window will pop up as follow:

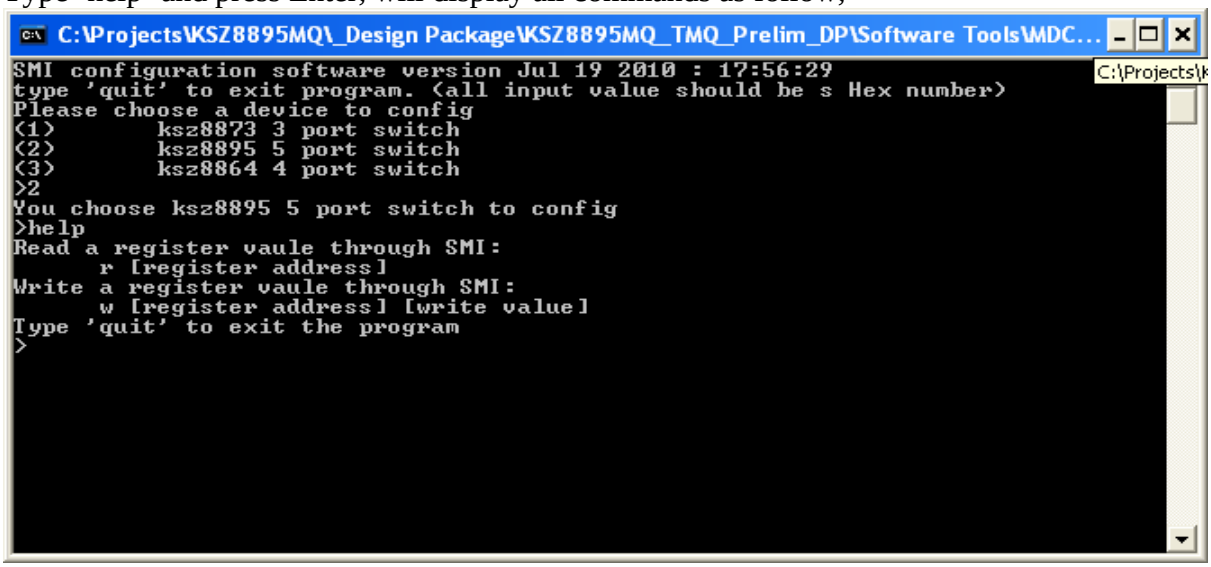
There are three options:

(1) KSZ8873 3 port switch
(2) KSZ8895 5 port switch
(3) KSZ8864 4 port switch

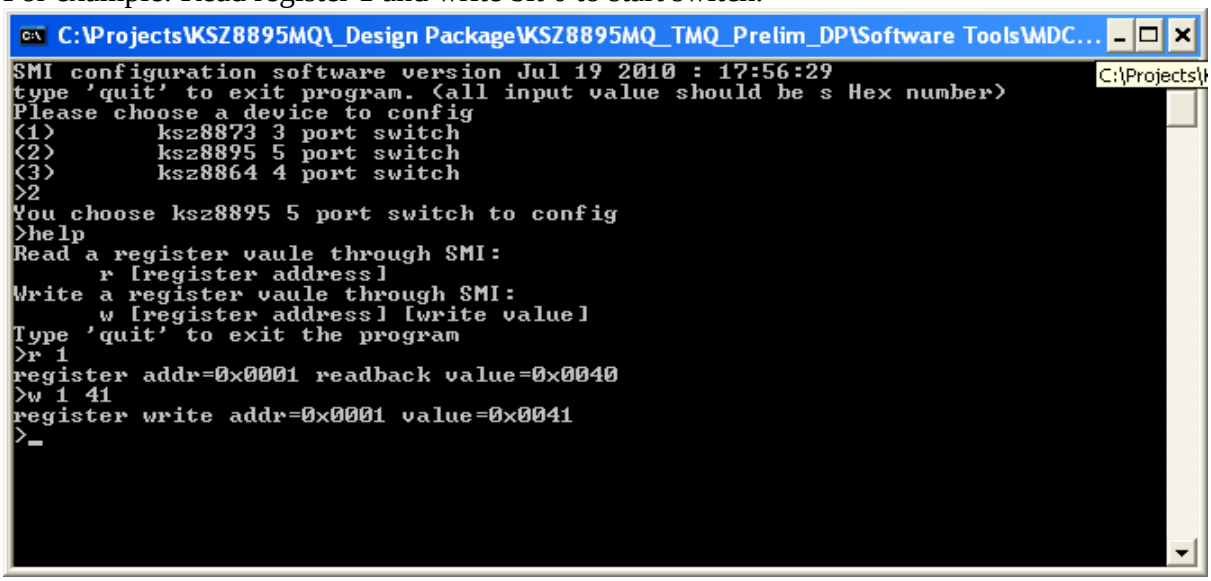
Please select (2) to support KSZ8895MLU/MLUB configuration by SMI mode



Type 'help' and press Enter, will display all commands as follow,



For example: Read register 1 and write bit 0 to start switch.



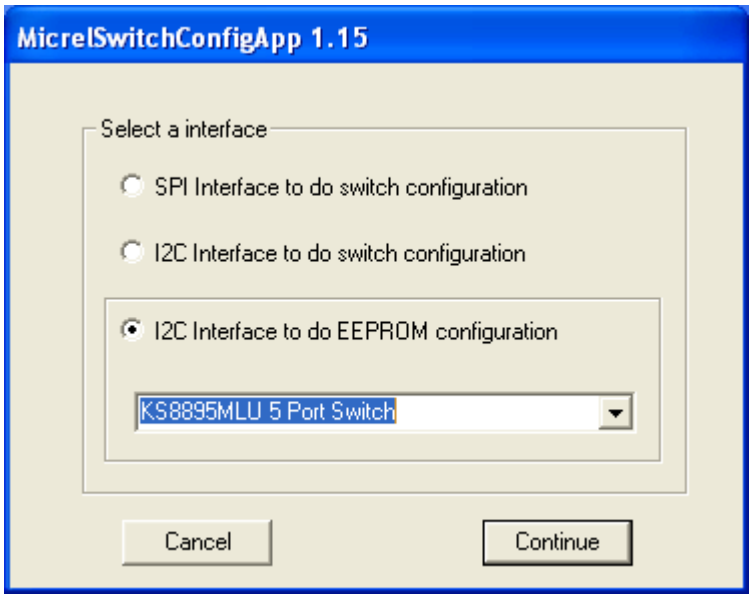
5.6 EEPROM Software Tool

5.6.1 EEPROM software installation

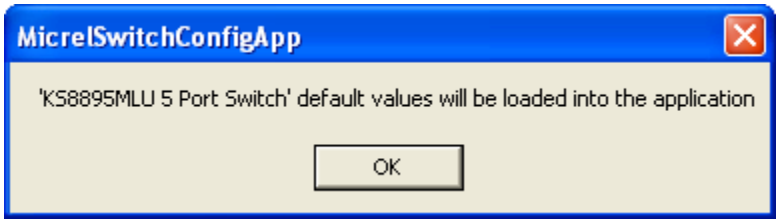
Micrel provides EEPROM software tool can use a PC/Laptop via the on board USB port to program the KSZ8895MLU/MLUB evaluation board's EEPROM without the added expense of an external EEPROM programmer.
The software tool can be used to read/write all control registers of the KSZ8895MLU/MLUB.
The installation file of the tool is located in folder of Window SPI_I2C_MIIM Tools in the software tools folder of the Design Kit, there is MicrelSwitchPhyTools_1.xx.msi file which is clicked to install application file and add two application icons on the desktop, this installation just do one times only, the application file will be copied into the folder of Micrel\MicrelSwitchPhyTools (default) or other assigned folder in the installation.
The MDC/MDIO EEPROM Software Tool can be executed directly by clicking its application file or icon with name of MicrelSwitchConfigApp on the desktop.

5.6.2 On board jumper setting and Software Application

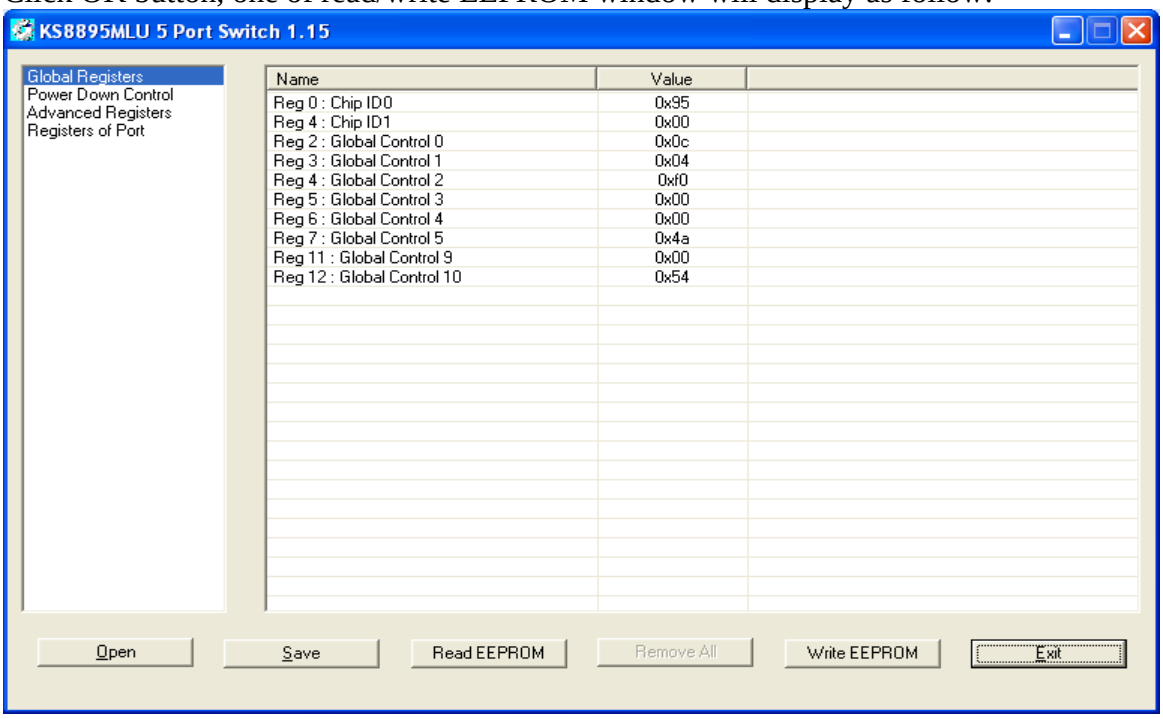
Before run the software tool, the JP3 and JP9 should be closed, please check the EEPROM setting in section of 4.2 EEPROM modes. After click its icon, a Window will pop up as follow:



Select the radio of I2C interface to do EEPROM configuration and press Continue button, pop up a window as follow.

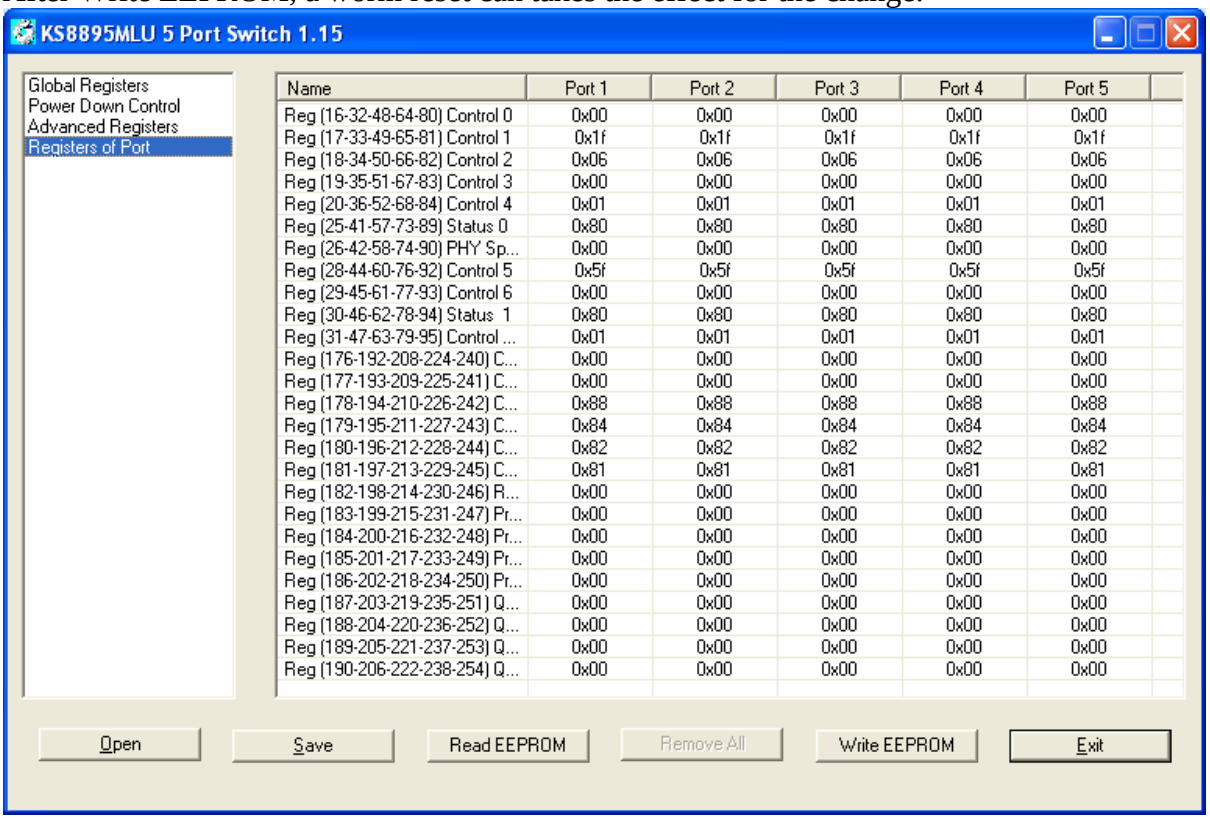


Click OK button, one of read/write EEPROM window will display as follow:



Note: Chip ID has to set to 0x00 for EEPROM contents to be downloaded to all registers in current device revision.

The software tool can read/write all advanced and port control registers into EEPROM as follow. After Write EEPROM, a worm reset can takes the effect for the change.



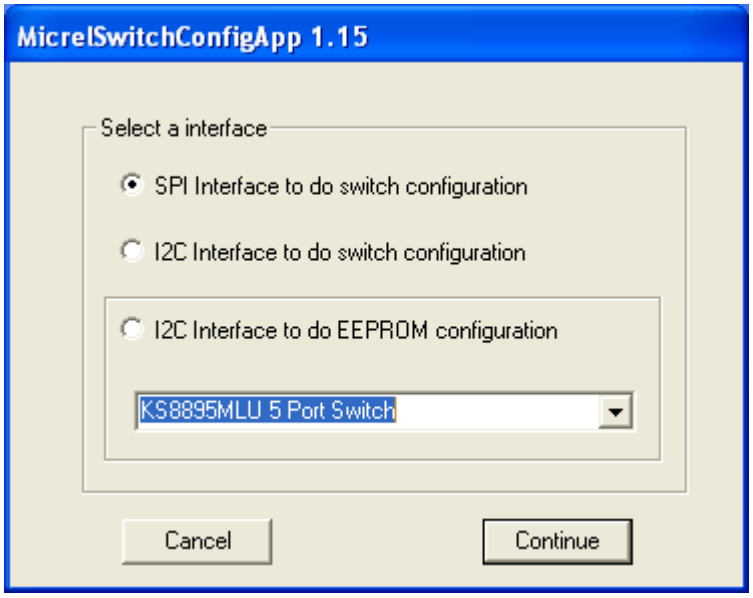
5.7 Window SPI Software Tool

5.7.1 Window SPI software installation

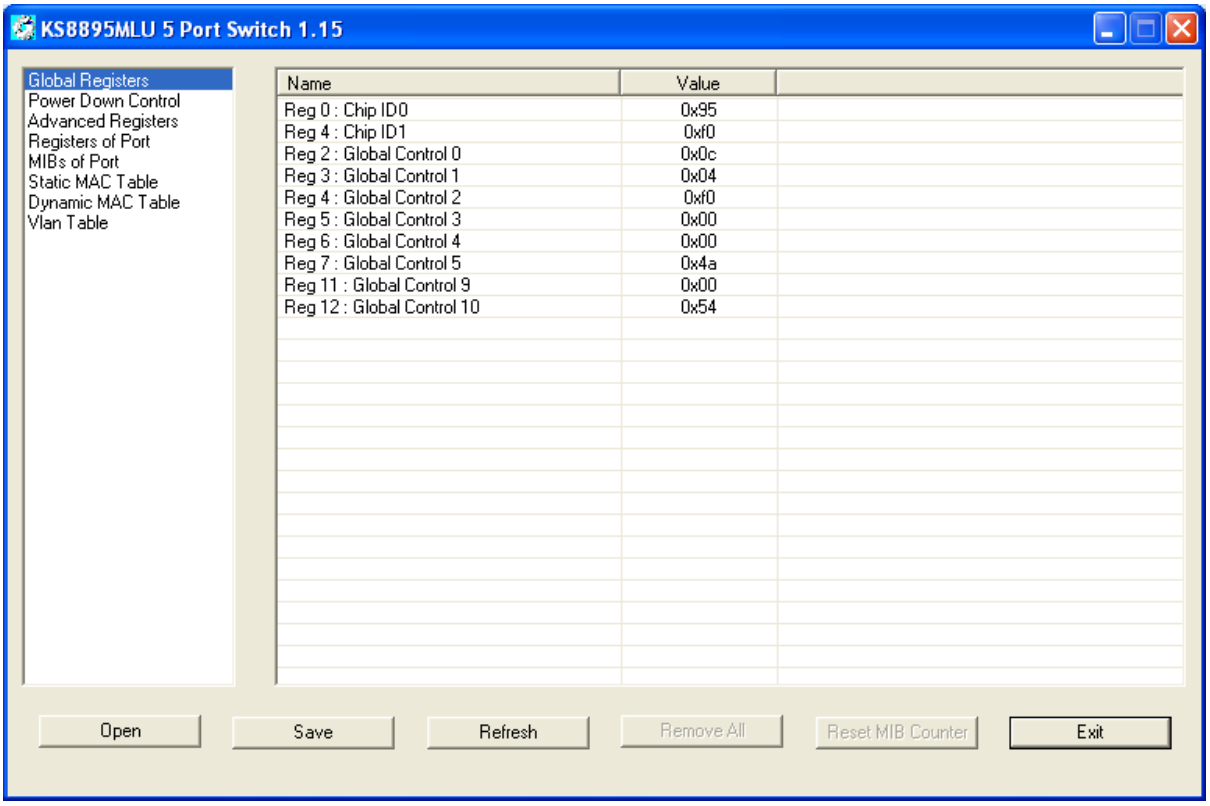
The software tool can be used to read/write all of registers of the KSZ8895MLU/MLUB.
The installation file of the tool is located in folder of Window SPI_I2C_MIIM Tools in the software tools folder of the Design Kit, there is MicrelSwitchPhyTools_1.xx.msi file which is clicked to install application file and add two application icons on the desktop, this installation just do one times only, the application file will be copied into the folder of Micrel\MicrelSwitchPhyTools (default) or other assigned folder in the installation.
The MDC/MDIO SPI Software Tool can be executed directly by clicking its application file or icon with name of MicrelSwitchConfigApp on the desktop.

5.7.2 On board jumper setting and Software Application

Before run the software tool, the JP5 should be closed (PS [1:0] =10), please check the SPI setting in section of 4.3 SPI mode. After click its icon, a control Window will be pop up as follow:



The default is SPI interface to do switch configuration. From the device selection window to select any KS8895 devices (or press the Continue button directly) and press Continue button. A control window will be pop up as follow.
All register can be read/ written in the window.



The control Window includes all registers, static MAC table, VLAN table, dynamic table and MIB counter that are supported by SPI.

The software can save and open the configuration file as a back-up.

6.0 Reference Documents

KSZ8895MLU/MLUB/FMQ Data Sheets (Contact Micrel for Latest Datasheet),
KSZ8895MLU/MLUB Design Package includes all design information as a Design Kit separately for the KSZ8895MLU/MLUB device (Contact Micrel for the updates).

7.0 Bill of Material

Please see the detail BOMs in the BOM folder of the hardware design package for the KSZ8895MLU/MLUB Evaluation Board.

8.0 Schematics

Please see the schematics of the evaluation board and reference design in the schematics folder of the hardware design package for the KSZ8895MLU/MLUB Evaluation Board.

Magnetics Vendors:

See the datasheets for the recommendation.

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