



孕龍科技股份有限公司
Zeroplus Technology Co., Ltd.

SPECIFICATION

MODEL: B09005-LAP-UNI/O-M

PART NO : _____

VERSION : V1.01

Approver		Check	Design
GM	PM		

Customer Confirm

* Please fax the file to
Zeroplus Technology after
signing.

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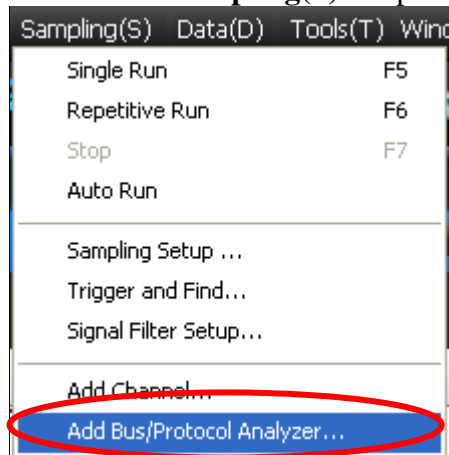
1 Software Register

Please register the software as the following steps:

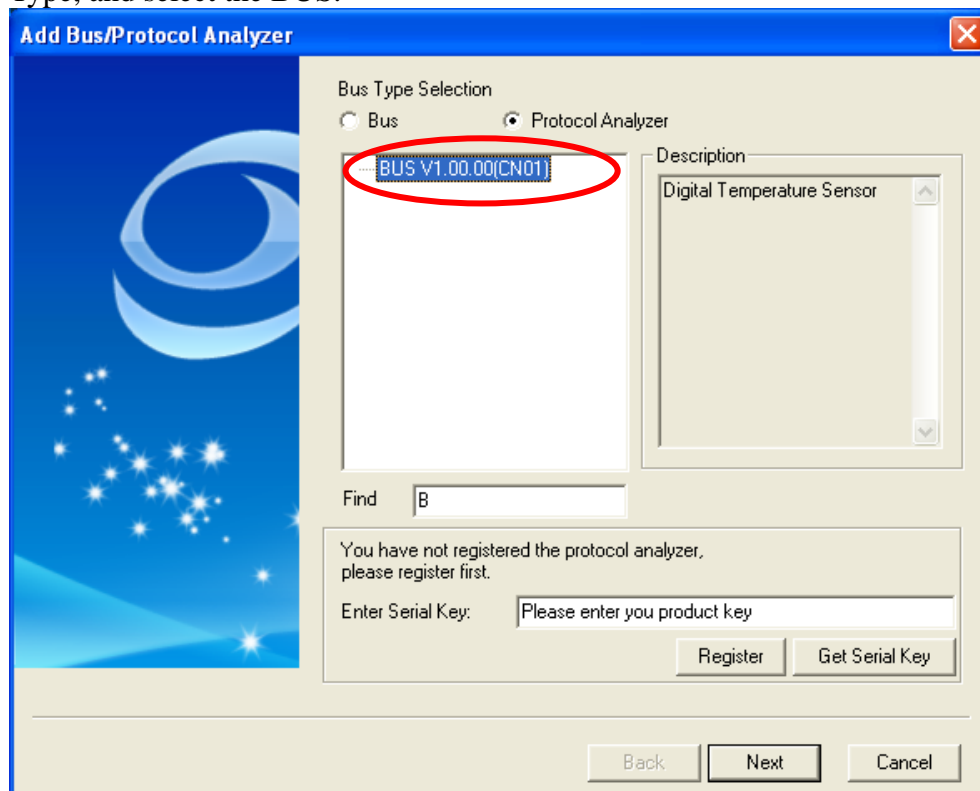
※ Remark1: The registration steps for all protocol analyzers are the same, you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ Remark2: We won't have additional notice for you, when there is any modification of the module specification. If there is some unconformity caused by the module version upgrade, users should take the module software as the standard.

STEP 1. Open the Logic Analyzer and select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.

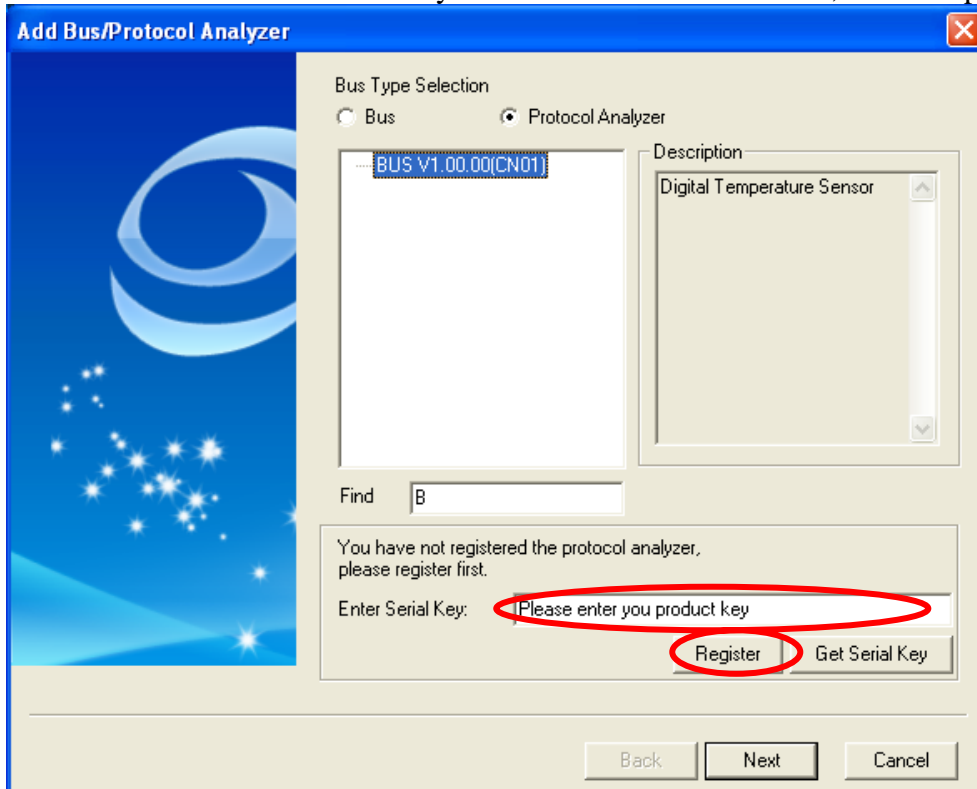


STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Other Type, and select the BUS.

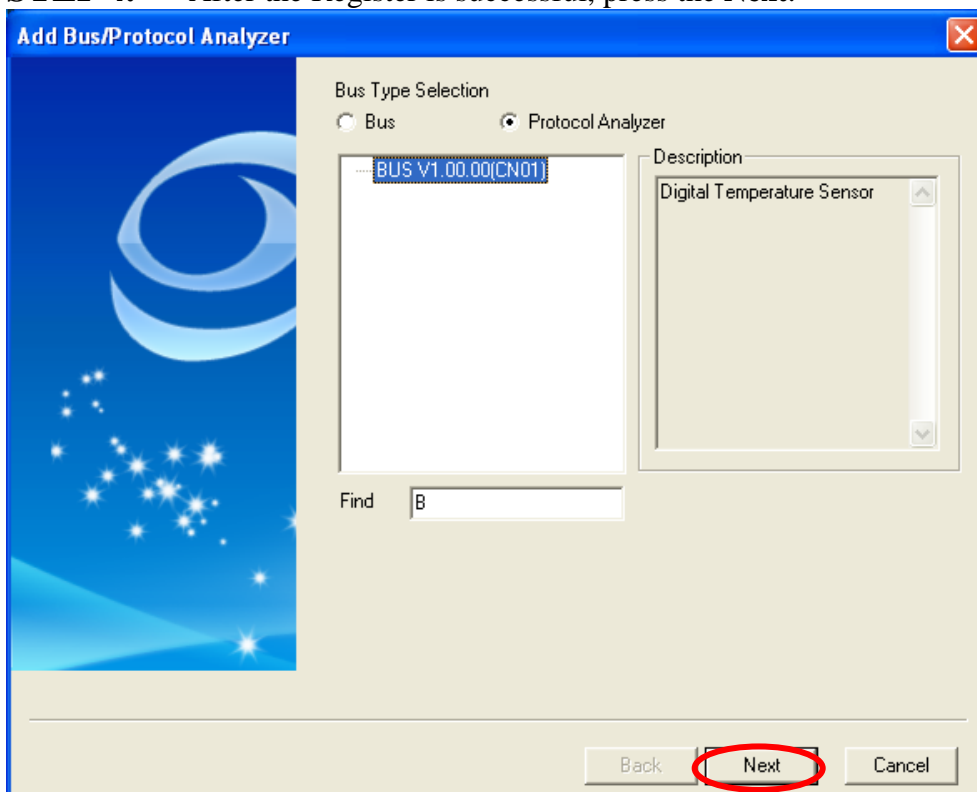




STEP 3. Enter the Serial Key of the BUS under this Model, and then press the **Register**.

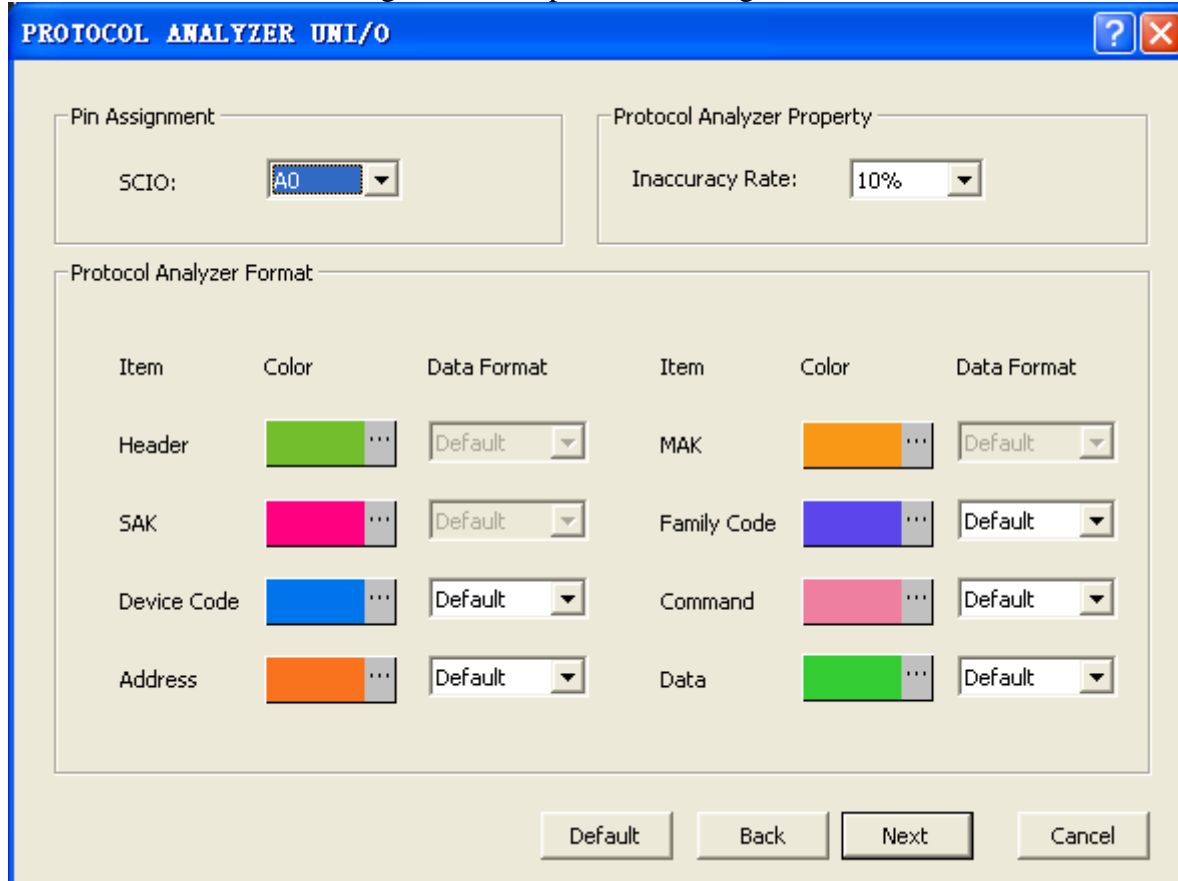


STEP 4. After the Register is successful, press the **Next**.



2 User Interface

Please refer to the below image to select options of setting UNI/O Module.



Item	Color	Data Format	Item	Color	Data Format
Header		Default	MAK		Default
SAK		Default	Family Code		Default
Device Code		Default	Command		Default
Address		Default	Data		Default

Pin Assignment:

SCIO: It is the signal channel of the UNI/O, and the default is A0.

Protocol Analyzer Property:

Inaccuracy Rate: Set the Offset Range of the Rising Edge or Falling Edge which happens at the middle Bit of the Manchester decoding. The default is “10%”; it means that it will judge the Edge in the range of 40% and 60% of the Bit. Users can choose the selectable value from the pull-down menu, which consists of 5%, 10% and 15%.

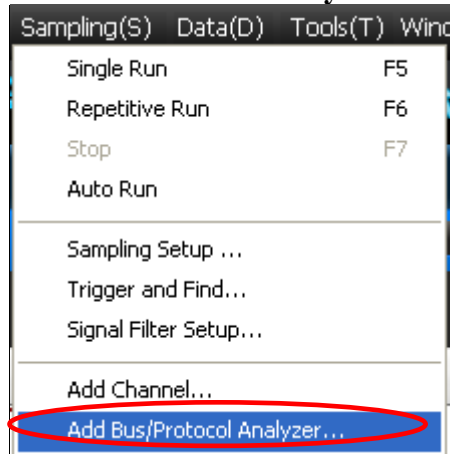
Protocol Analyzer Format:

The color of protocol analyzer can be varied by users. The Items (Family Code, Device Code, Command, Address, Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of these Items (Family Code, Device Code, Command, Address, Data) in the Waveform Display Area and Packet List is controlled by the Protocol Analyzer. The default Data Format is controlled by the main program and the Data Format of these items is the Default.

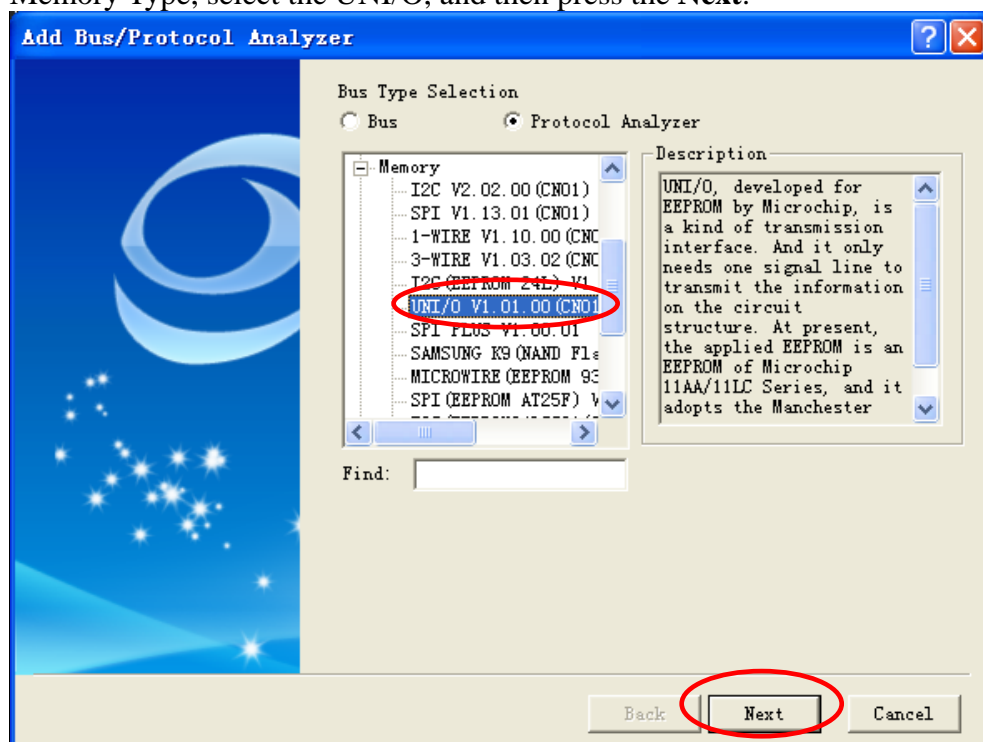


3. Operating Instructions

STEP 1. Select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.



STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Memory Type, select the UNI/O, and then press the **Next**.





STEP 3. Set the Pin Assignment.

PROTOCOL ANALYZER UNI/O

Pin Assignment

SCIO: A0

Protocol Analyzer Property

Inaccuracy Rate: 10%

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	MAK	Orange	Default
SAK	Pink	Default	Family Code	Purple	Default
Device Code	Blue	Default	Command	Light Pink	Default
Address	Orange	Default	Data	Green	Default

Default Back Next Cancel

STEP 4. Set the Protocol Analyzer Property.

PROTOCOL ANALYZER UNI/O

Pin Assignment

SCIO: A0

Protocol Analyzer Property

Inaccuracy Rate: 10%

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	MAK	Orange	Default
SAK	Pink	Default	Family Code	Purple	Default
Device Code	Blue	Default	Command	Light Pink	Default
Address	Orange	Default	Data	Green	Default

Default Back Next Cancel



STEP 5. Set the Protocol Analyzer Format.

PROTOCOL ANALYZER UNI/O

Pin Assignment: SCIO:

Protocol Analyzer Property: Inaccuracy Rate:

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header		<input type="text" value="Default"/>	MAK		<input type="text" value="Default"/>
SAK		<input type="text" value="Default"/>	Family Code		<input type="text" value="Default"/>
Device Code		<input type="text" value="Default"/>	Command		<input type="text" value="Default"/>
Address		<input type="text" value="Default"/>	Data		<input type="text" value="Default"/>

Buttons: Default, Back, Next, Cancel

STEP 6. Press the Next to finish all settings.

PROTOCOL ANALYZER UNI/O

Pin Assignment: SCIO:

Protocol Analyzer Property: Inaccuracy Rate:

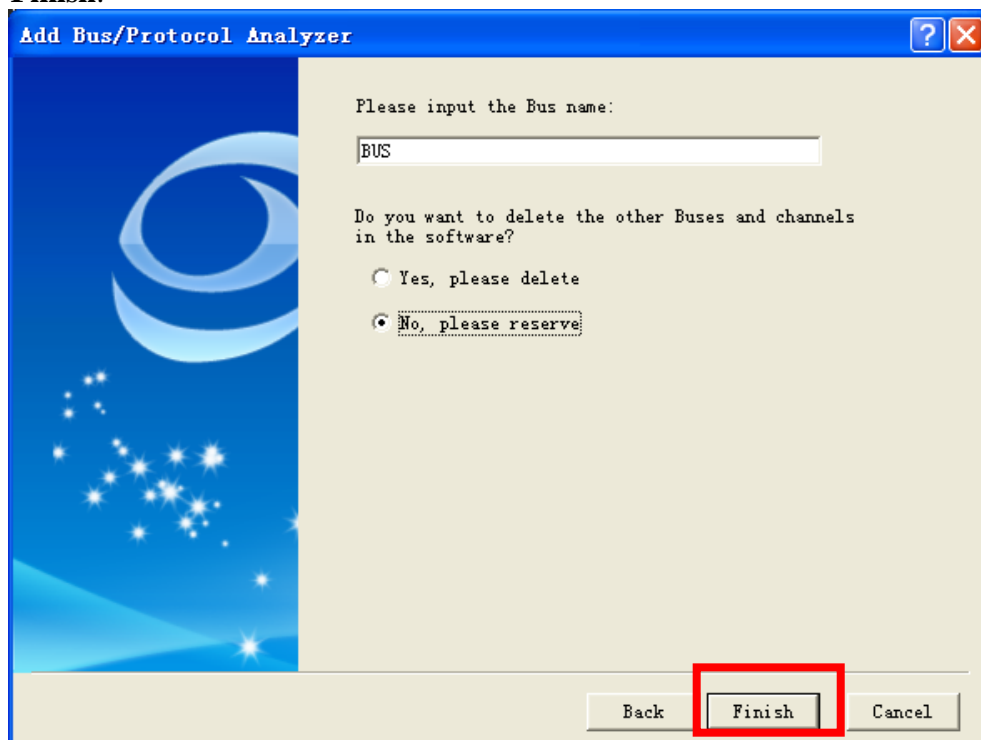
Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header		<input type="text" value="Default"/>	MAK		<input type="text" value="Default"/>
SAK		<input type="text" value="Default"/>	Family Code		<input type="text" value="Default"/>
Device Code		<input type="text" value="Default"/>	Command		<input type="text" value="Default"/>
Address		<input type="text" value="Default"/>	Data		<input type="text" value="Default"/>

Buttons: Default, Back, Next, Cancel

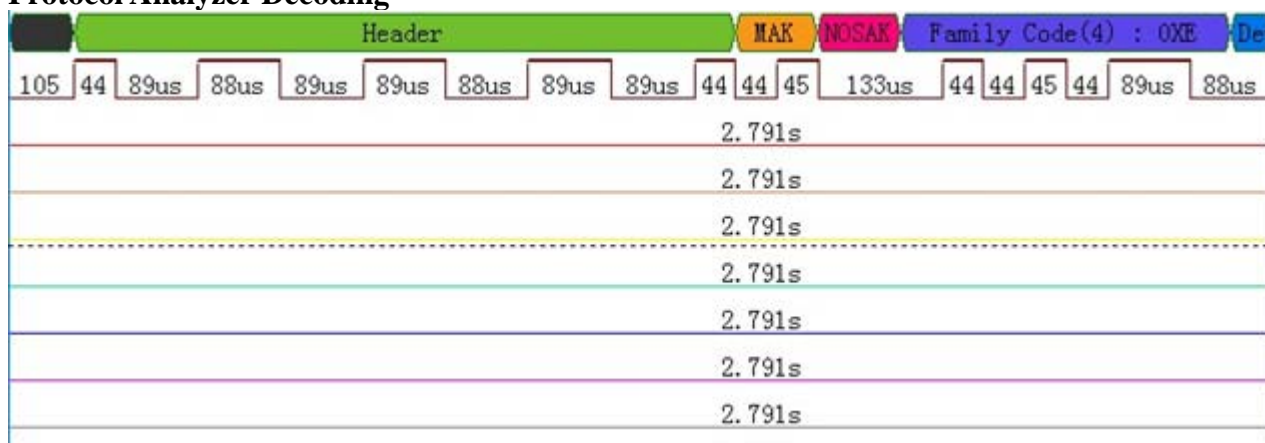


STEP 7. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.



STEP 8. Following pictures show the completion of the protocol analyzer decoding and packet list. The memory depth is 16K; the sampling frequency is 1MHz. (the sampling frequency should be more than 10 times higher than the signal to be tested.)

Protocol Analyzer Decoding





Packet List

Navigator														Packet List										Statistics										Memory Analyzer										?										-										x									
✕														🔄														📄														🔍																															
Packet #		Name		TimeStamp		Header		MAK		NOSAK		Family Code(4)				Device Code(4)				MAK		SAK		Command(READ)				MAK		SAK																																											
1		Bus1(UNI/O)		1.106ms		Header		MAK		NOSAK		E				8				MAK		SAK		03				MAK		SAK																																											
		Address_H		MAK		SAK		Address_L		MAK		SAK		Data		MAK		SAK		Data		MAK		SAK		Data		NOMAK		SAK																																											
		7E		MAK		SAK		BC		MAK		SAK		DB		MAK		SAK		EA		MAK		SAK		F2		MAK		SAK		F6		NOMAK		SAK																																					
Packet #		Name		TimeStamp		Header		MAK		NOSAK		Family Code(4)				Device Code(4)				MAK		SAK		COMMAND(WRITE)				MAK		SAK																																											
2		Bus1(UNI/O)		10.348ms		Header		MAK		NOSAK		E				8				MAK		SAK		6C				MAK		SAK																																											
		Address_H		MAK		SAK		Address_L		MAK		SAK		Data		MAK		SAK		Data		MAK		SAK		Data		NOMAK		SAK																																											
		B3		MAK		SAK		D6		MAK		SAK		E8		MAK		SAK		F1		MAK		SAK		F5		MAK		SAK		F7		NOMAK		SAK																																					
Packet #		Name		TimeStamp		Header		MAK		NOSAK		Family Code(4)				Device Code(4)				MAK		SAK		Command(READ)				MAK		SAK																																											
3		Bus1(UNI/O)		187.972ms		Header		MAK		NOSAK		E				8				MAK		SAK		03				MAK		SAK																																											