Notice

This guide is designed for experienced users to setup the system in the shortest time.

Safety Precautions

Warning! *Always completely disconnect the power cord from your board whenever you are working on it. Do not make connections while the power is on, because a sudden rush of power can damage sensitive electronic components.*

Caution! *Always ground yourself to remove any static charge before touching the board. Modern electronic devices are very sensitive to static electric charges. Use a grounding wrist strap at all times. Place all electronic components on a static-dissipative surface or in a static-shielded bag when they are not in the chassis.*

A Message to the Customer

First of all, thank you for purchasing PER-C41C Mini Card. This Quick Installation Guide will help you on the process of the installation. Please read it thoroughly before you start to install it. The product comes with a sheet of warranty for two years assurances except for improper use. Therefore, we strongly suggest you to read and refer to the Quick Installation Guide before any installation. You may visit AAEON website for the latest version of the instruction. Please refer to http://www.aaeon.com/

Product Warranty

AAEON Customer Services

All products in AAEON are designed as the strictest specifications to ensure that the products will own the reliable performance in the typical industrial environments. Whether your purchase from AAEON is made to the purpose of the laboratory or the factory facility, you can be assured that every purchase in AAEON will provide the reliability and stability of operation.

Your satisfaction is our primary concern. Here is a guide for AAEON's customer services. Ensure you get the full benefits of our services, please follow the instructions below step by step.

Technical Support

We require you to get the maximum performance from your products. If you run into technical difficulties, we'll be here always for you. For the most frequently asked questions, you can easily find solutions in your product documentation. The guide is for your quick and accurate installation so please refer to it first. We strongly suggest you to read it before asking for a customer service over the phone. If you still cannot find the answer, gather all questions you can think of and have the product at hand before giving a call to your dealer. All dealers of AAEON are well-trained and ready to provide you as many supports as we can. Based on the customer service we've encountered until now, most of problems are minor and able to be

easily solved over the phone. In addition, free-charged technical support is available from AAEON engineers in the office time. We are always pleased to give advice regarding to any installation and operation for AAEON products.

Ordering Information

- TF-PER-C41C-A10

  Mini Card Express, Four RS-232 Module, Rev. A1.0

Packing List

- 1701090150 RS-232 Cable

- Product CD (including Quick Installation Guide)

- PER-C41C

Content

1.1 Features

- PCI-Express Mini Card Interface

- Four RS-232 Ports Onboard

- Full Duplex Serial Communication

1.2 Specifications

- Form Factor: PCI-Express Mini Card (30mm x

  50.95mm)

- UART Chipset   MosChip (MCS9904)

- COM Port   Isolated RS-232 Port x 4

- Power Requirement: +3.3V

- Operating Temperature: 32˚F~140˚F (0˚C~60˚C)

1.3 Location of Connectors

1.4 Mechanical Drawing

1.5 List of Connectors

Label	Function
CN2	COM1 RS-232 Serial Port Connector
CN3	COM3 RS-232 Serial Port Connector
CN4	COM2 RS-232 Serial Port Connector
CN5	COM4 RS-232 Serial Port Connector

1.6 COM1 RS-232 Serial Port Connector (CN2)

Pin	Signal	Pin	Signal
1	DCD#1	2	DSR#1
3	RXD1	4	RTS#1
5	TXD1	6	CTS#1
7	DTR#1	8	RI#1
9	GND		

1.7 COM 3 RS-232 Serial Port Connector (CN3)

Pin	Signal	Pin	Signal
1	DCD#3	2	DSR#3
3	RXD3	4	RTS#3
5	TXD3	6	CTS#3
7	DTR#3	8	RI#3
9	GND		

1.8 COM 2 RS-232 Serial Port Connector (CN4)

Pin	Signal	Pin	Signal
1	DCD#2	2	DSR#2
3	RXD2	4	RTS#2

5	TXD2	6	CTS#2
7	DTR#2	8	RI#2
9	GND		

1.9 COM 4 RS-232 Serial Port Connector (CN5)

Pin	Signal	Pin	Signal
1	DCD#4	2	DSR#4
3	RXD4	4	RTS#4
5	TXD4	6	CTS#4
7	DTR#4	8	RI#4
9	GND		

1.10 Driver Installation:

Insert the PER-C41C CD-ROM into the CD-ROM drive and install

the driver in terms of the following procedures.

Note: The following driver installation is cited from the MosChip
Semiconductor MCS9900 user manual. Please refer to the link below.
http://www.moschip.com/mcs9900_downloads.php
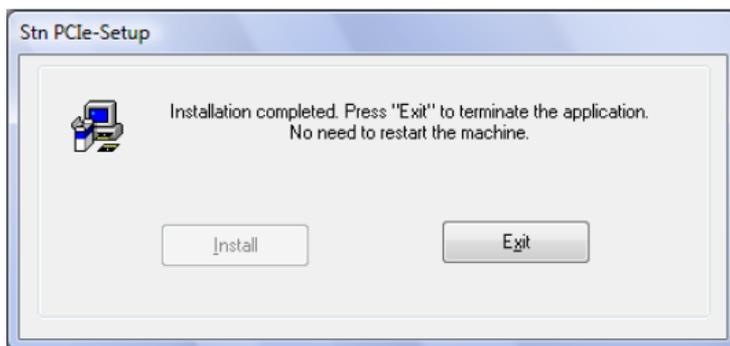
For Windows® 7, Windows® Vista, Windows® 2000

WHQL Driver Installation

Run "StnSetup.exe" file from the driver disk. PCIeSetup window will
be popped up as shown below.
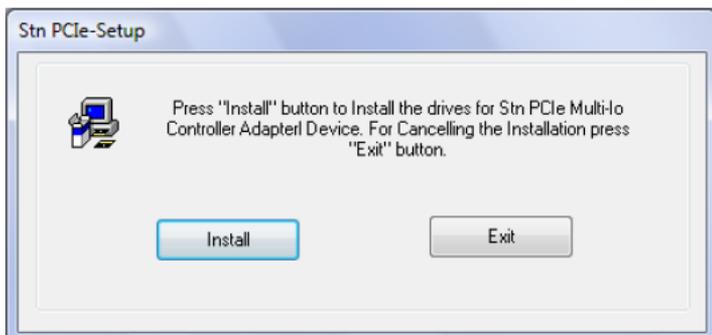
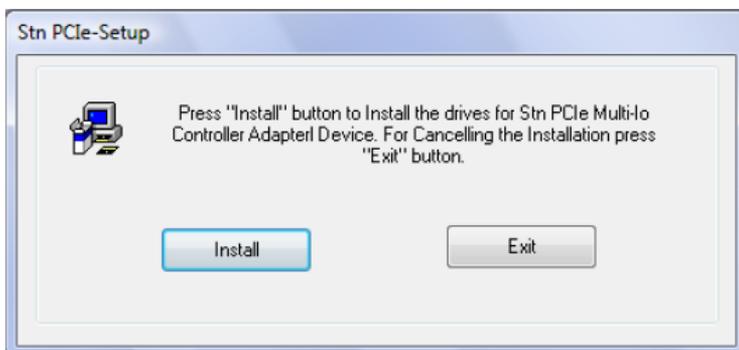Click on "Install" button to install the PER-C41C drivers
automatically.

On successful driver installation, the utility will display "Installation
Completed" message. Click on "Exit" button to complete the driver
installation.

Shutdown the PC and insert the PER-C41C based PCIe card into PCIe slot and then turn ON the PC.

Non-WHQL Driver Installation

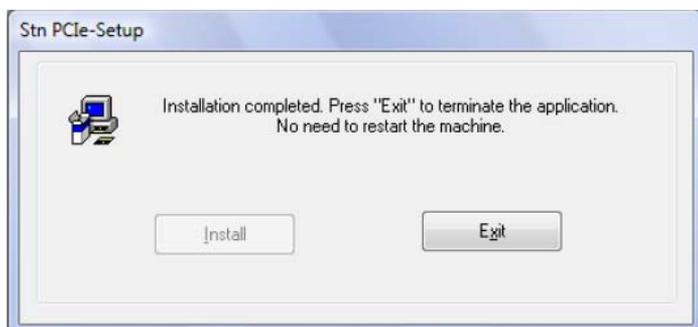Run "StnSetup.exe" file from the driver disk. PCIeSetup window will be popped up as shown below.

Click on "Install" button to install the PER-C41C drivers automatically.

While installation is in process, "Windows Security" warning message pops up for Windows Vista compatibility, this message appears for three times. Ignore the warning message by clicking on

"Install this driver software anyway" button.

On successful driver installation, the utility will display "Installation Completed" message. Click on "Exit" button to complete the driver installation.

Shutdown the PC and insert the PER-C41C based PCIe card into PCIe slot and then turn ON the PC.

For Windows® XP

Run "StnSetup.exe" file from the driver disk folder. PCIe Setup window will be popped up as shown below

Click on "Install" button to install the PER-C41C drivers automatically.

While installation is in process, "Software Installation" warning message pops up for Windows XP compatibility, this message appears for two times. Ignore the warning message by clicking on "Continue Anyway" button. This warning message does not appear if customer uses a WHQL certified driver.

On successful driver installation, the utility will display "Installation

Completed" message, click on "Exit" button to complete the driver installation.

Shutdown the PC and insert the PER-C41C based PCIe card into PCIe slot and then turn ON the PC.

For the first time windows will bring up the "Found New Hardware Wizard" window to guide through the initial configuration process. Select "No, not this time" option and click on "Next" button to continue driver installation.

Select "Install the software automatically (Recommended)" option and click "Next" button.

If the "Hardware Installation" wizard pops for Windows XP compatibility, click on "Continue Anyway" button to ignore the warning message.

Click on "Finish" button to complete the PER-C41C Peripheral Port installation.

Note: Above procedure shall be followed to install the remaining ports of PER-C41C peripheral.