MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ABB

PU515 3BSE013063R1

PCI REAL-TIME ACCELERATOR BOARD

Used with the applicable Advant Master configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ABB 800xA 5.1 Manual Installation, PU515 slot and driver sections; listed exact-article PCI/MB300 data

Installation Procedure

The following installations are supported by the 800xA for MOD 300 installation wizard.

- 800xA for MOD 300 Connectivity Server with 800xA for MOD 300 Client/Server.
- Any other 800xA System node type with the 800xA for MOD 300 Client.

Follow this general procedure to load the 800xA for MOD 300 software.

1. Install the RTA board on the 800xA for MOD 300 Connectivity Server or connect the RTA unit to access the Advant OCS Control Network (MOD 300 DCN). The RTA can provide time from the MOD 300 system. Setting up time synchronization is a post installation activity. Refer to *System 800xA Post Installation (3BUA000156*)*.

   If the RTA Board is the method of communication hardware used, refer to Real-Time Accelerator Board Installation on page 179. If the RTA unit is the method of communication hardware used, refer to Real-Time Accelerator Unit Installation on page 181.

2. Insert the installation media and install the 800xA for MOD 300 software using the installation wizard. Refer to 800xA for MOD 300 Installation Wizard on page 182.

   ABB PAS System Services is installed on the 800xA for MOD 300 Connectivity Server with 800xA for MOD 300 Client/Server node. Refer to ABB PAS System Services on page 182.

3. Complete the post installation activities. Refer to *System 800xA Post Installation (3BUA000156*)*.

Real-Time Accelerator Board Installation



Internal RTA boards are not supported in the 64-bit operating systems, it supports only the RTA units.

This topic is only required if installing an internal PCI RTA board on an 800xA for MOD 300 Connectivity Server with 800xA for MOD 300 Client/Server node. Refer

to the applicable computer documentation to determine the physical, electrical, and environmental requirements for the computer.



The PU514 or PU515 PCI RTA boards require a 5V PCI slot. Do not put the PU514 or PU515 RTA board in a PCI slot that uses the PCI-X133 standard. Also, do not use the USB capable PU518 or PU519.

The latest PU514A or PU515A PCI RTA boards use a PCI-X133 slot and are backward compatible to earlier PCI slot specifications. These cards can not be used in PCI-X266 or higher, or in PCI Express slots. PU514A and PU515A RTA boards replace PU514 and PU515 RTA boards respectively.

To install the PCI RTA board:

1. Disconnect the computer power cord from the power line.



Remove the computer power cord from the power line before removing the cover. There are unisolated and potentially fatal power line voltages present under the cover.

2. Remove the computer cover. Refer to the computer hardware manual for details.



Wear a properly grounded antistatic wrist strap and handle the PCI RTA board with care. Static discharges may damage the PCI RTA board when it is removed from the antistatic bag. Do not touch connectors with bare hands.

3. Unpack the PCI RTA board.
4. Detach the plastic handle from the PCI RTA board, if required.
5. Remove the cover plate of any PCI slot and mount the PCI RTA board in the slot.
6. Install the computer cover. Refer to the computer hardware manual for details.
7. Connect the computer power cord into the power line.
8. Turn on the computer.



Windows will detect the PCI RTA board as new hardware will attempt to configure it. Cancel any attempts by Windows to configure the PCI RTA board. The ABB PAS System Services software install will configure the PCI RTA board (refer to ABB PAS System Services on page 182).

5. The RTA unit communicates at 100 Mbit/sec on the PC 1 and PC 2 ports. It is recommended to configure the network interface card in the 800xA for MOD 300 Connectivity Server to 100 Mbit/sec full duplex.

800xA for MOD 300 Installation Wizard

To install the software:

1. This software is accessible from the Installation AUTORUN screen by selecting:

   Manual Installation > Connectivities > 800xA for MOD 300

2. Follow the Installation Wizard to complete the installation. Perform the following when the indicated dialog boxes appear:

   a. **Welcome dialog box:** Select the following as appropriate:

   – For MOD 300 Connectivity Servers with 800xA for MOD 300 Client/Server nodes select: **ABB PAS - System Services** and **ABB MOD300 Connect**.

   – For all other nodes select: **ABB MOD300 Connect**.

3. Refer to ABB PAS System Services for MOD 300 Connectivity Server with 800xA for MOD 300 Client/Server installations.

4. Refer to 800xA for MOD 300 Software (MOD 300 Connect) for all installations.

ABB PAS System Services

1. The InstallShield Wizard for ABB PAS System Services dialog box appears, as shown in Figure 43.

2. Select **MOD 300 Connection** as the installation type and then click **Install Now**. This installs the MOD 300 Software and Drivers required for MOD 300.

3. The Installing ABB System Services dialog box appears. During the installation, the RTA device driver is installed. Wait for the installation status screen to complete.

a. **Windows Security dialog box:** The Windows Security dialog box shown in Figure 44 will appear once if PU515 was selected and twice if PU410 was selected. Click **Install** to continue.

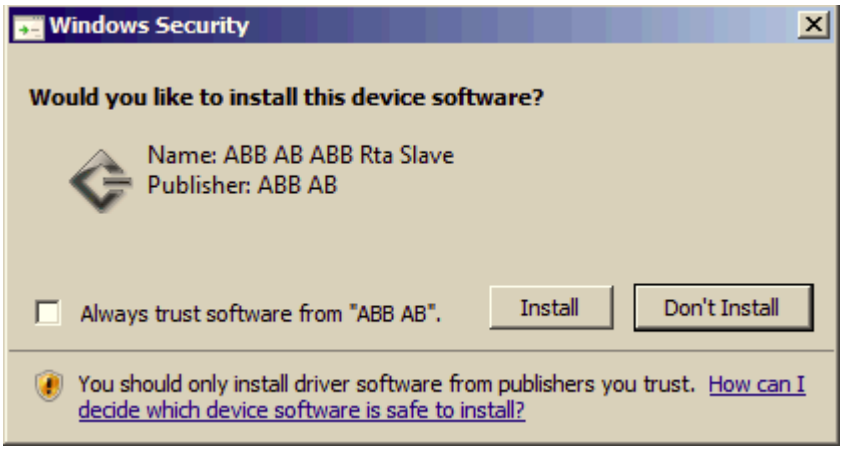


Figure 44. Windows Security Dialog Box

The driver installation will take a few minutes and create 40 driver instances and 40 WudfHost processes that will be visible in the Windows Task Manager if the external PU410/PU412 is being used.

b. Select **NO** If the `System Settings Change` restart message appears. This usually happens because of an uninstall/reinstall of ABB PAS System Services. The reboot will be necessary later.

c. Select **Continue Anyway** if the Hardware Installation dialog with the following message appears. This message may only appear if the installation includes the PU515 (internal RTA board).

```
The software you are installing for this hardware: RTA
Board PU510/PU511 has not passed Windows Logo testing
to verify its compatibility with Windows 2008.
```

4. The InstallShield Wizard Complete dialog box appears. Click **Finish** to complete the installation.