

September 2011

Author:  
Thomas W. Heck, Sr. Design Engineer  
Janus Remote Communications

## 400AP Application Note

# Atmel SAM-BA Application Modifications

### Supporting Documentation:

#### SAM-BA V2.10 Release Notes:

[http://www.janus-rc.com/Documentation/sam-ba\\_2.10\\_release\\_note.txt](http://www.janus-rc.com/Documentation/sam-ba_2.10_release_note.txt)

#### SAM-BA User Guide:

<http://www.janus-rc.com/Documentation/6421B.pdf>

#### LINUX 4SAM Support Information:

<http://www.at91.com/linux4sam/bin/view/Linux4SAM/SoftwareTools>

### Modifying Atmel SAM-BA Application for use with the 400AP – LINUX:

#### Step 1. Download Atmel SAM-BA 2.10 application for Linux.

[http://www.janus-rc.com/Documentation/sam-ba\\_2.10.zip](http://www.janus-rc.com/Documentation/sam-ba_2.10.zip)

Note: Linux Kernel 2.6.37 or higher is required for SAM-BA application to work with 400AP USB device port driver. Linux Kernel must be compiled with SAM-BA driver support.

Kernel Settings (make menuconfig):

Device Drivers --->

[\*] USB Support --->

<M> USB Serial Converter support --->

<M> USB Atmel SAM Boot Assistant (SAM-BA) driver

#### Step 2. Extract archive with default settings into your home folder.

#### Step 3. Download SAM-BA\_modified\_files.zip from Janus website and extract into at91sam9g20-ek directory.

[http://www.janus-rc.com/Documentation/SAM-BA\\_modified\\_files.zip](http://www.janus-rc.com/Documentation/SAM-BA_modified_files.zip)

Destination directory: /path/to/sam-ba\_cdc\_linux/tcl\_libs/at91sam9g20-ek/

## Modifying Atmel SAM-BA application for use with the 400AP - Windows:

### Step 1. Download Atmel SAM-BA 2.10 application for Windows.

[http://www.janus-rc.com/Documentation/sam-ba\\_2.10\\_win.zip](http://www.janus-rc.com/Documentation/sam-ba_2.10_win.zip)

### Step 2. Extract archive and install SAM-BA into default folder.

C:\Program Files\ATMEL Corporation\SAM-BA v2.10

### Step 3. Loading the SAM-BA CDC Serial Driver.

After installing SAM-BA you will need to follow these instructions to get Windows to assign the correct driver.

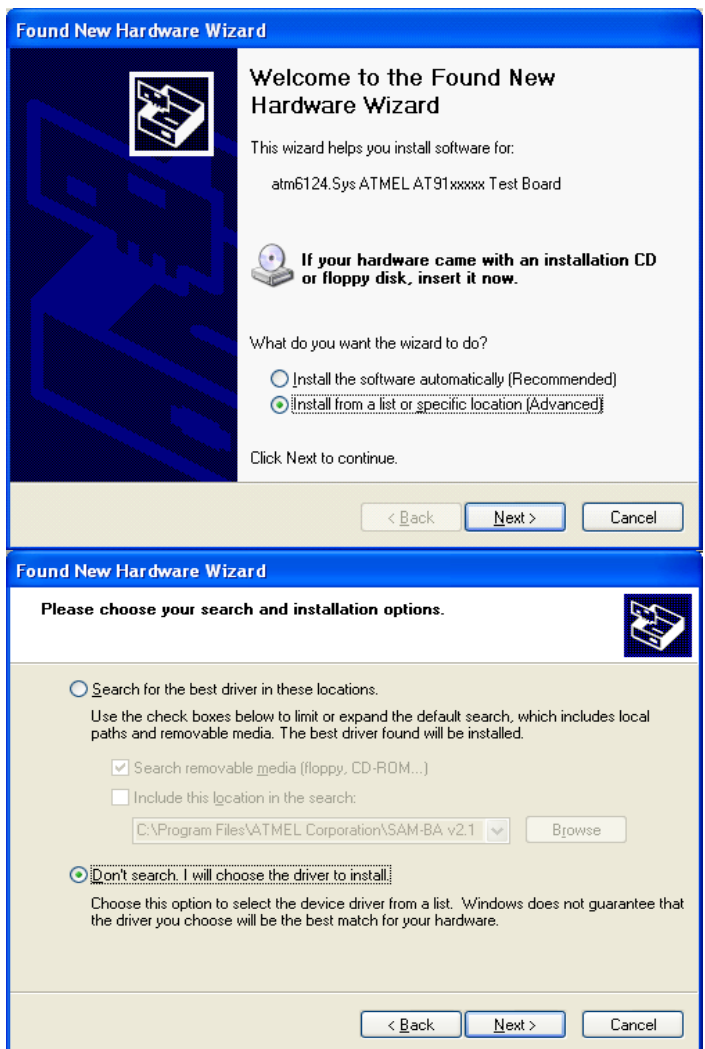
- Connect a USB cable from the device port of the 400AP to the computer with SAM-BA installed.
- Apply power to the 400AP
- If you have a Linux Kernel loaded into the 400AP you will need to press and release the reset button and within 1.5 seconds press and hold the mode button. When the green LED lights the 400AP will be in RomBOOT mode and your PC with SAM-BA installed will detect the 400AP board.

- When Windows detects the new hardware you will need to select the option, **Install from a list or specific location.**

- Select **Next.**

- Select – **Don't search. I will choose the driver to install**

- Select **Next.**

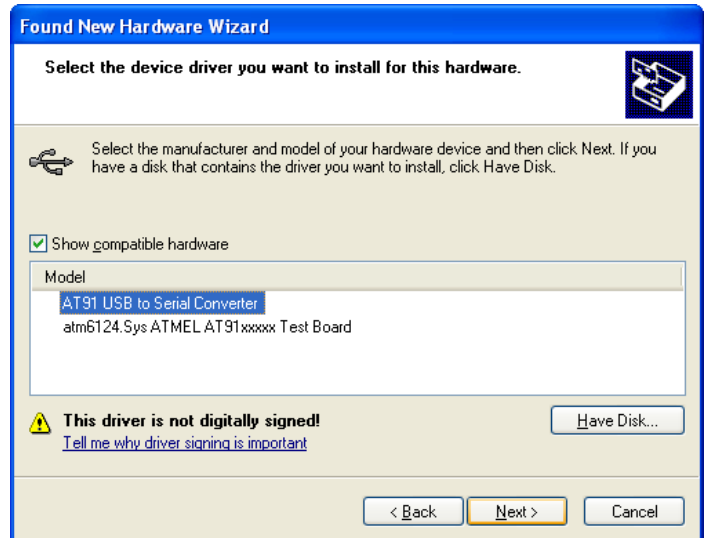


## Modifying Atmel SAM-BA application for use with the 400AP - Windows: continued

### Step 3. Loading the SAM-BA CDC Serial Driver continued

- Highlight **AT91 USB to Serial Converter**.

- Select **Next**.



- Select **Continue Anyway**.

- Select **Finish** when prompted.



**IMPORTANT:** If you change the USB port on which you connect the board, you will need to redo the install procedure described above.

### Step 4. Download **SAM-BA\_modified\_files.zip** from Janus website and extract into **at91sam9g20-ek** directory.

[http://www.janus-rc.com/Documentation/SAM-BA\\_modified\\_files.zip](http://www.janus-rc.com/Documentation/SAM-BA_modified_files.zip)

Destination directory: C:\Program Files\ATMEL Corporation\SAM-BA v2.10\tcl\_lib\at91sam9g20-ek\