



# PDA TM4301 – SAMA5D3 Xplained

## Quick Start

Apr 3, 2014



# Hardware

TM4301 Touch Module



Flex



USB cable  
(Micro-A)

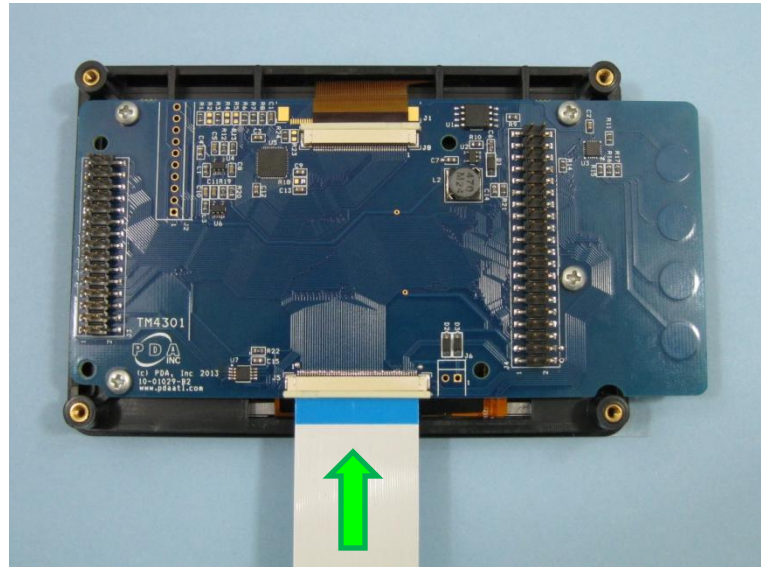


SAMA5D3 Xplained

# Hardware Setup

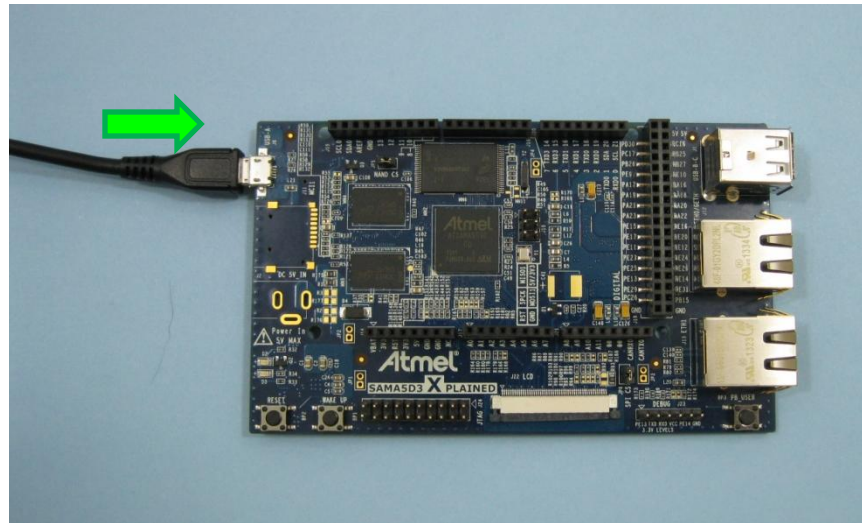
# Hardware Setup

1. Connect flex cable to the Touch Module (J5)
  - Contacts on flex face **DOWN** toward PCB



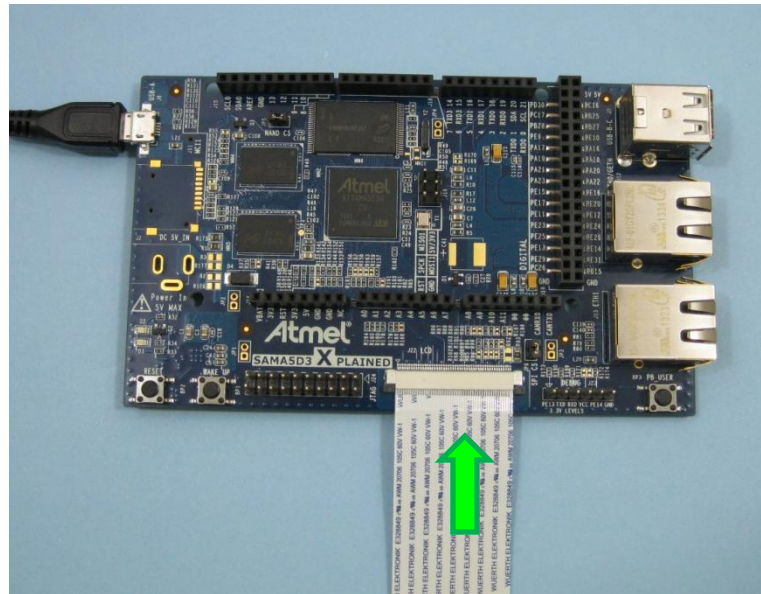
# Hardware Setup

2. Connect USB cable to the SAMA5D3 Xplained USB-A Connector (J6)  
(Do not connect USB cable to computer)



# Hardware Setup

3. Connect flex cable to SAMA5D3 Xplained LCD Connector (J22)
  - Contacts on flex face **UP** away from PCB



# Hardware Setup

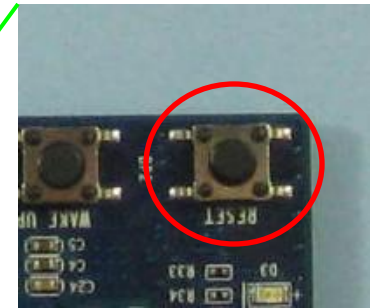
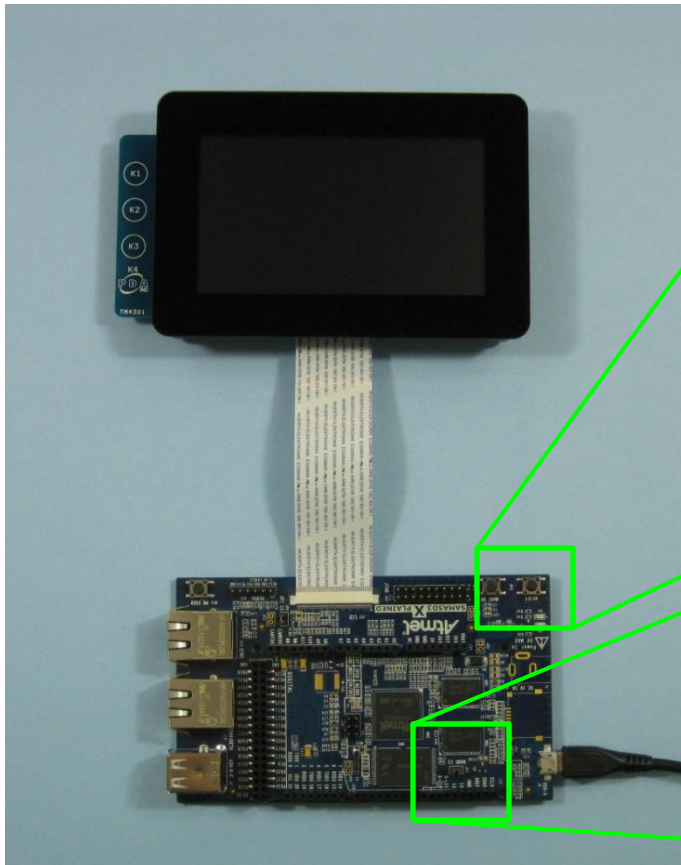
4. Re-position the setup with Touch Module oriented as shown below



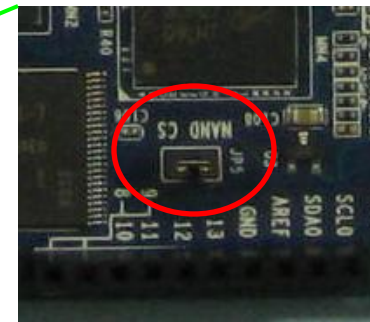


# Hardware Setup

5. Note the location of the NAND\_CS jumper (J5) and RESET button (BP2)



RESET  
button



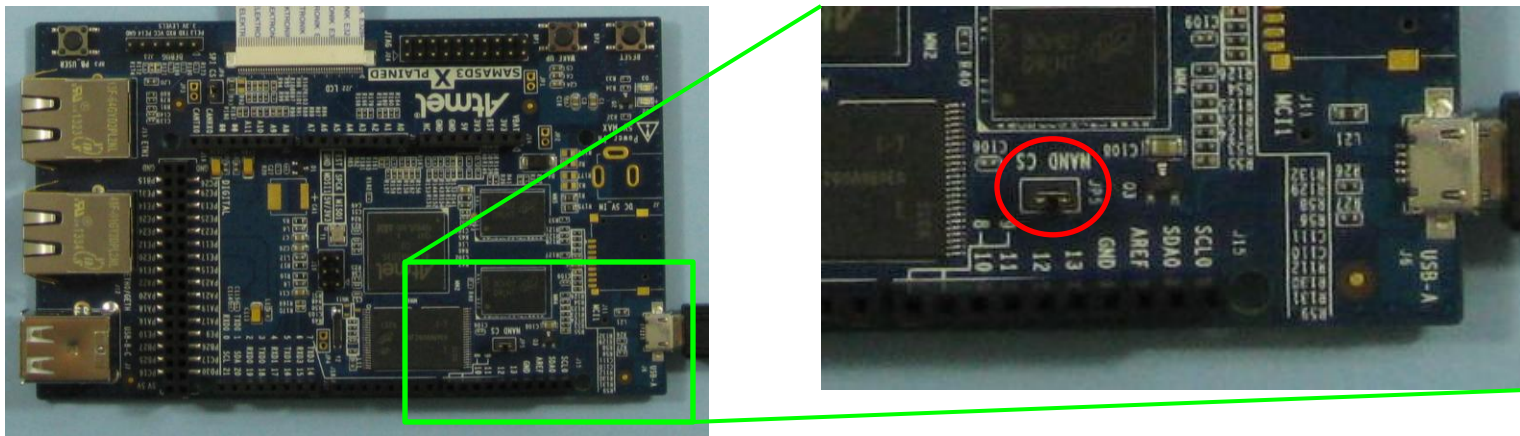
NAND\_CS  
jumper



# Loading an Image to NAND Flash

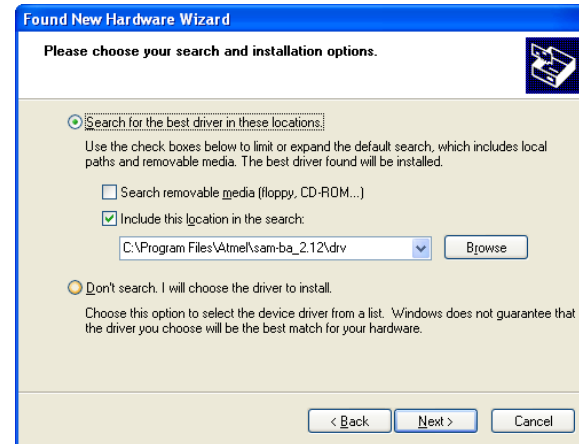
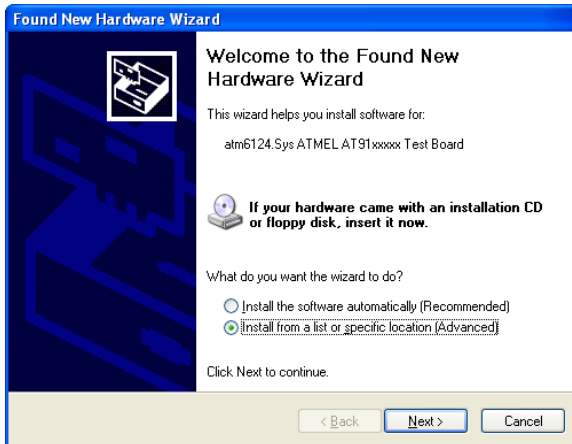
# Load Image

1. If the Atmel SAM-BA software is not already installed, visit <http://www.atmel.com/tools/ATMELSAM-BAIN-SYSTEMPROGRAMMER.aspx> download and install SAM-BA and any patches.
2. Remove shorting block from the NAND\_CS jumper JP5 on the Xplained PCB



# Load Image

3. Connect USB cable to computer (or press RESET button is already connected).
4. If the “Found New Hardware Wizard” is displayed:
  - choose to install drivers automatically if the Xplained hardware has previously been flashed using SAM-BA on the computer.
  - otherwise (or if automatic install fails) choose to install from a specific location and point to the ‘drv’ sub-folder where SAM-BA was installed (for example, “C:\Program Files\Atmel\sam-ba\_2.12\drv”)

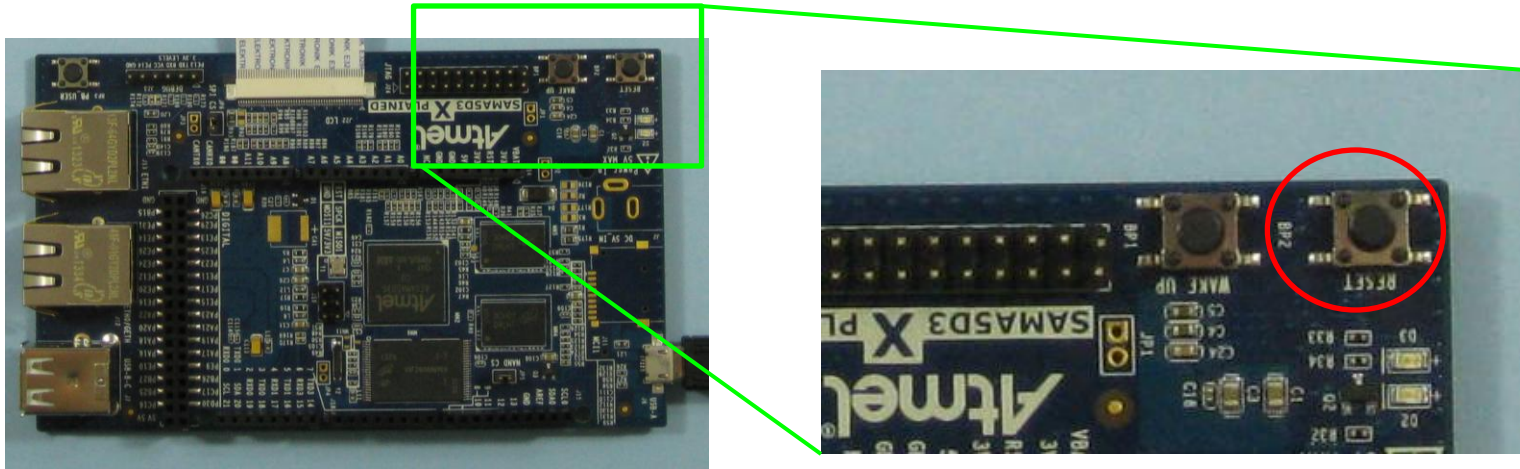


# Load Image

5. Replace the shorting block on NAND\_CS jumper JP5
6. Locate the folder containing SAMA5D3 Xplained image files  
( visit <http://www.at91.com/linux4sam/bin/view/Linux4SAM/GettingStarted#DemoArchiveBinaries> )
7. Run the batch file appropriate for this touch module  
(for the TM4301 touch module, use “demo\_linux\_nandflash\_pda4.bat”)
8. After a minute Notepad should launch with log output from SAM-BA
  - scroll to the end of the file and verify SAM-BA reported:  
-I- === DONE. ===
  - if Notepad launches within only a few second an error likely occurred.
  - if the flash process resulted in any errors they will be identified by lines which begin with:  
-E-

# Load Image

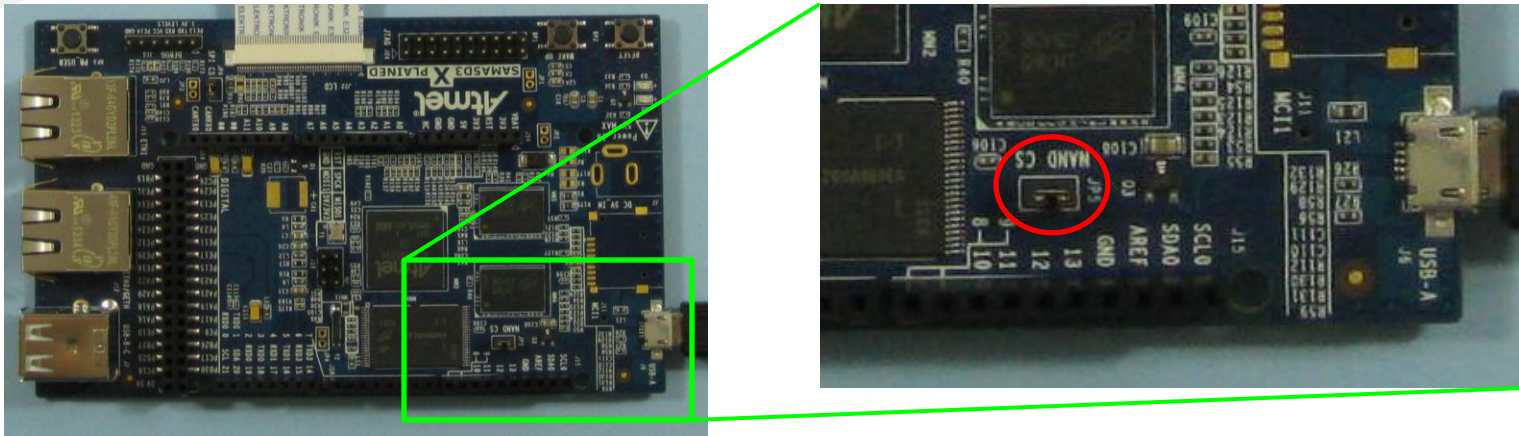
9. Press the RESET button BP2 to reset the Xplained hardware and launch the installed image.



# Running an Image from NAND Flash

# Run Image

1. Verify shorting block is installed on NAND\_CS jumper JP5 on the Xplained PCB

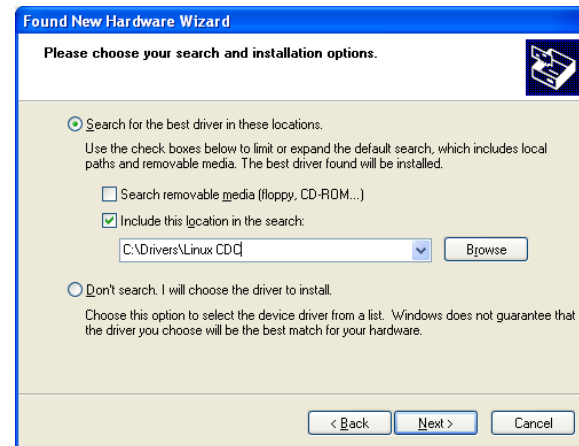
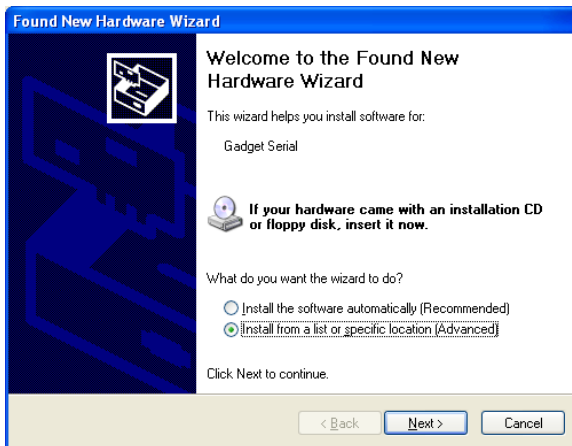


2. Connect USB cable to computer (or press RESET button if already connected).
3. After several seconds, the computer may indicate the connection of a USB device. This is a virtual COM port which can be used to access the Linux shell console (if applicable).



# Run Image

4. If the “Found New Hardware Wizard” is displayed:
- choose to install drivers automatically if the Xplained hardware has previously been used on the computer.
  - otherwise (or if automatic install fails) choose to install from a specific location and point to the folder containing the Gadget Linux USB-CDC driver information file.  
( download from <https://www.kernel.org/doc/Documentation/usb/linux-cdc-acm.inf> )



5. After an additional delay (depending on the image loaded into NAND flash) the image will be running