ALP-4.1 Controller Suite – Switching Vendor ID's

This Set USB ID tool is **ONLY** needed for users who wish to switch between the ViALUX ALP-4.1 High-Speed Software Suite and the TI DLP® Discovery™ 4100 Explorer software. This kind of use is not typical as the ALP-4.1 GUI (Graphical User Interface) provides all the functionality of the Explorer software with the advantage of higher speed.

The step-by-step instructions below explain how to switch the Vendor ID from the ALP-4.1 High-Speed Suite to the Explorer software. The process for switching from the Explorer software to the ALP-4.1 High-Speed Suite is a similar process and is explained later in this guide.

INTRODUCTION TO SET USB ID TOOL

The Set USB ID application allows you to change the USB Vendor ID (VID). The VID controls how a D4100 Starter Kit board is identified when connected to a computer via USB. The VID is stored in a persistent on-board memory (EEPROM).

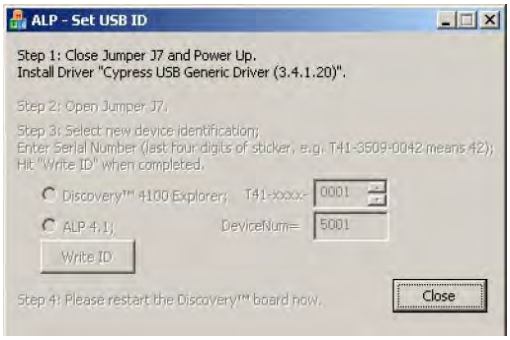
Two VID settings are supported by Set USB ID:

- DLP® Discovery™ Explorer VID
- ALP-4.1 VID

Set USB ID guides the user step-by-step through the complete process of switching the Vendor ID from the ALP-4.1 to the Explorer software, and vice versa. The completion of a
is recognized automatically in most cases and the next task is highlighted.

STEP-BY-STEP: HOW TO SWITCH THE VENDOR ID

The main tool you will use to switch the Vendor ID is called the "ALP – Set USB ID" screen.



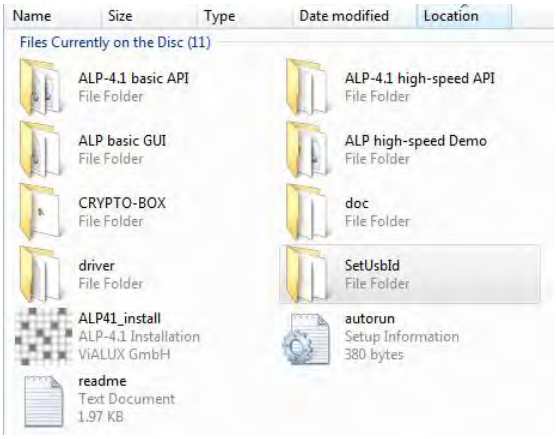
Follow the steps below in order to navigate to this tool.

GETTING STARTED

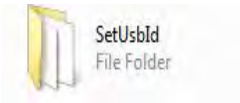
- Before you start the step-by-step process of switching the Vendor ID, insert the ALP-4.1 Installation CD and the "AutoPlay" window will pop up.
- Click on the folder that says, "Open Folder to View Files." This is the location where all the main ALP Folders, Documents, Install, and ReadMe files are found.

ALP-4.1 Controller Suite – Switching Vendor ID's

- Once inside the main ALP folder, you will see about eight folders and a few other ALP files.



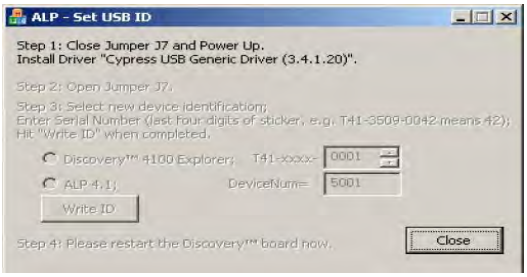
- Click on the folder that says, "SetUsbId"



- Once inside the "SetUsbId" folder, click on the file that says, "SetUsbId (ViALUX GmbH)."

Before you open the Set USB ID tool, make sure the power to the D4100 Controller Board is **OFF** and that **Jumper J7** is closed.

- After you click on the SetUsbId (ViALUX GmbH) file, the ALP – Set USB ID tool will pop up.

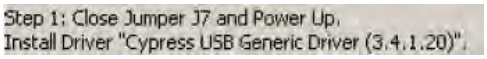


POWER UP

ALP-4.1 Controller Suite – Switching Vendor ID's

Before Powering up, make sure the Set USB ID window is pulled up and that it says:

- Close **Jumper J7** and Power Up.
- Install Driver "**Cypress USB Generic Driver (3.4.1.20).**"



- To close Jumper J7, make sure the jumper cap fits over both prongs, as shown in the pictures below. Jumper J7 can be found directly to the left of the USB.
- Once Jumper J7 is closed, switch on the power supply to the D4100 Controller Board. It is the tiny, white switch directly to the right of Jumper J7. Refer to the picture below to see the exact location of the jumper.

- As the red arrow shows, the power switch is located directly to the left of the on-board USB interface, in between the two yellow caps.
- Once you turn on the power switch, the Device Manager will ask to install new drivers for the new device.

If you already have the ALP installed on your computer, skip the Cypress Drivers Installation step. The Cypress Drivers are already installed on your computer. Instead skip to the step titled, "**Open Jumper J7**."

In other words, power up the D4100 Controller Board with Jumper J7 closed. Once you see the Set USB ID tool pop up (the window will be completely grayed out to where you can't select an option) move to the "Open Jumper J7" step.

If the Device Manager does not automatically install the drivers, or if you already have them installed, you need to manually navigate to the Device Manager page and look under "USB-Controller" to verify which drivers are installed.

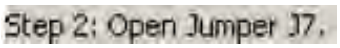
- To manually navigate to the Device Manager tool, go to your computer's Control Panel.

- From there, click on the Device Manager icon and you will then see the "Universal Serial Bus controllers" at the bottom.

- Click on USB Connectors to see if the Cypress USB Generic Driver (3.4.1.20) shows up. If you don't see it, the drivers are not installed.

REMOVE JUMPER J7

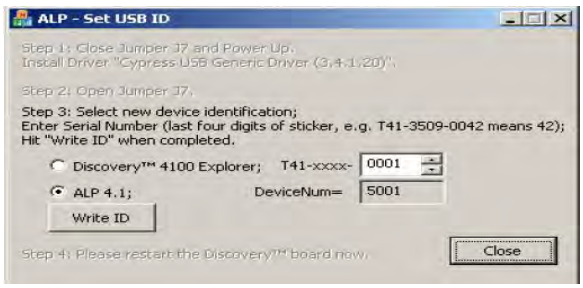
- Once the Cypress USB Generic Driver (3.4.1.20) is installed, the Set USB ID tool will show, "Step 2: Open Jumper J7."



Do **NOT** switch off the device right now!

- Once you remove the cap off Jumper J7, the two prongs should be exposed (as shown in the picture below)

- Once you remove the jumper cap, the Set USB ID window's gray shade will go away to where you can select between the ALP and Explorer software. As you can see in the picture below, the ALP-4.1 is already selected.



SELECT ID AND ENTER SERIAL NUMBER

Now that you can select between ALP and Explorer software, the Set USB ID tool should say:

- Step 3: Select new device identification;
- Enter Serial Number (last four digits of sticker, e.g., T41-3509-0042 means 42);

- Hit "Write ID" when completed.

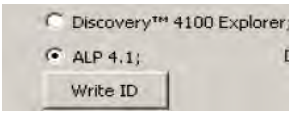
This means the D4100 Controller Board is ready for EEPROM access.

- Use the radio buttons to select the USB VID
- In case of ALP-4.1 enter the Serial Number printed on the board.

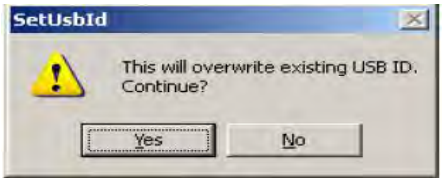
The logical ALP DeviceNum as used in the AlpDevAlloc API functions is different from the D4100 board's serial number. This is shown for your information in another text box.

WRITE AND VERIFY

- To change to from the ALP to the Explorer software, select Discovery™ 4100 Explorer and enter the last four digits of the sticker with the TI Serial Number.
- Once Explorer is selected and the last four-digits of the sticker are entered, hit the "Write ID" button.



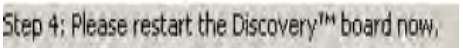
- Once the Write ID button is pressed, a mini Set USB ID screen will pop up asking, "This will overwrite USB ID. Continue?"



- Confirm the EEPROM write operation by selecting "Yes."

CYCLE POWER

- Once you have confirmed the EEPROM write operation, restart the D4100 Controller Board in order to make the change effective.



- If you look at the bottom left side of the Set USB ID box, it gives you the instructions to "Restart the Discovery™ board now."
- Switch the power supply off and on again.
- If not done yet, the operating system will install the device driver for the new identified device.

The Set USB ID is now completed. To switch back to the ALP-4.1 VID, access the Set USB ID tool window and select the ALP option. Enter the four-digit "Device Number" found on the D4100 Controller Board and verify you have the correct drivers installed.

ERROR MESSAGES

One of the following message boxes below will be displayed if the write operation has failed.

ALP-4.1 Controller Suite – Switching Vendor ID's

- **Action**: Try procedure again please ("Verification Failed!" Error)
- **Action**: Check that the EEPROM write protection is enabled. Refer to the D4100 Documentation on TI's Extranet for assistance.

Please feel free to contact DLi for access to this Extranet.

For assistance with Switching Vendor IDs, please feel free to contact our Technical Support Consultant at DLi:

Justin Lemon
Technical Sales and Support Consultant
(512) 615-4630 x4630
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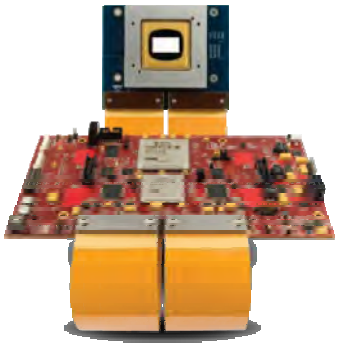

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