LP-8x4x

OS_Image Update Guide

(v1.6)



The OS image parameters are specified as follows:



Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

1. 【Required Software Versions】

Before updating OS image, check the shipment date for your device. This is important as there are two versions of the OS image update depending on the shipment date:

- ☑ If the shipment date is **earlier than** 2013/03/25, you will only need to download the latest version of the **OS image** file and the **boot.ini** file.
  (file name: lp8x4x_os_image_later_than_2013.zip)

- ☑ If the shipment date is **later than** 2013/03/25, you will need to download the latest version of **/boot/** directory, which includes the **OS image** file, and the **boot.ini** file, etc.
  (file name: lp8x4x_os_image_later_than_2013.zip)

For details, refer to the following web pages:
https://www.icpdas.com/en/download/show.php?num=990&model=LP-8841-EN

In addition, user can download full content of microSD Card (sd_card.7z), and visit to
https://www.icpdas.com/en/download/show.php?num=991&model=LP-8841-EN

Please note:
The flash and microSD disk have a finite number of program-erase cycles. Important information should always be backed up on other media or storage device for long-term safekeeping.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

2.【Preparation】

(1) Preparation tools as below：

- ✓ Power Supply: +10 to +30V_{DC} (E.g., DP-665)

  See https://www.icpdas.com/en/product/guide+Accessories+Power__Supplies+Power__Supply for a full list of the available accessories.
- ✓ USB card reader for microSD card × 1 (Fig. 1)
- ✓ microSD card × 1 (Fig. 2)



Fig.1 USB card reader



Fig.2 microSD card

< **Important notes regarding microSD cards** >

1. Ensure that the microSD card is properly dismounted before unplugging it.
2. Do not power off or reboot the LinPAC while data is being written to or read from the microSD card.
3. The microSD card must be formatted with a VFAT, EXT2, or EXT3 file system.
4. Scan and repair the microSD card if necessary.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

(2) Insert the microSD card into the USB microSD card reader, and then make a copy of the directories indicated below, including all the subdirectories, for backup purposes. The directories that should be copied depend on your shipment date:

☑ If the shipment date is **earlier than 2013/3/25**, copy the files from the **/os_image/** directory of CD or FTP site into the /boot/ directory of microSD card via Windows / Linux PC. The following figures show the contents of the /boot/ directory (Fig. 3):



Fig.3 LP-8x41 /boot/ directory

☑ If the shipment date is **later than 2013/3/25**, copy the files from the **/boot/** directory on the CD or FTP site into the /boot/ directory of microSD card via Windows / Linux PC. The following figures show the contents of the subdirectories (Fig. 4):

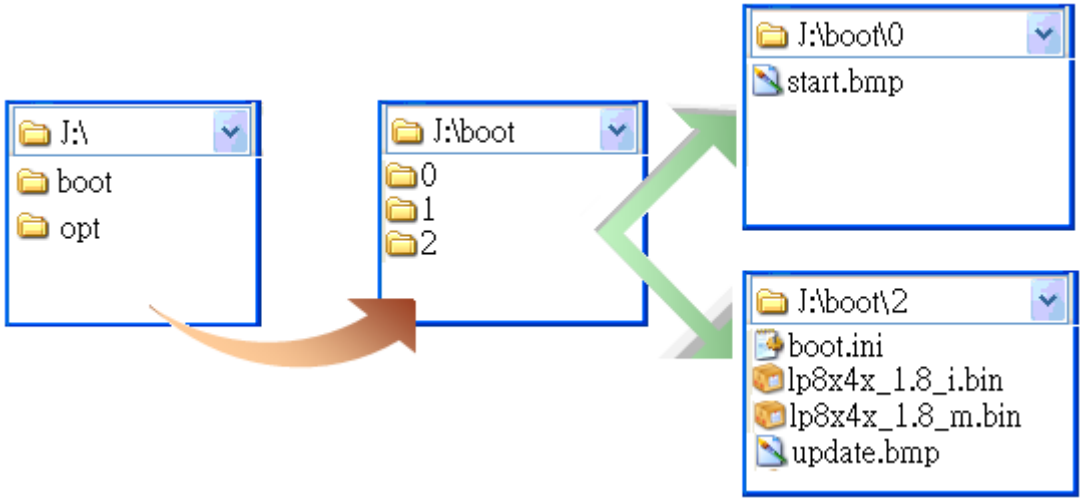


Fig.4 LP-8x41 /boot/ subdirectories

(3) **Turn off the power** to the LP-8x41, and connect **Ethernet cable**, **VGA cable** and **microSD card** to the LP-8x4x.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

(4) Move the rotary switch to position **2**, as shown in Fig. 5.

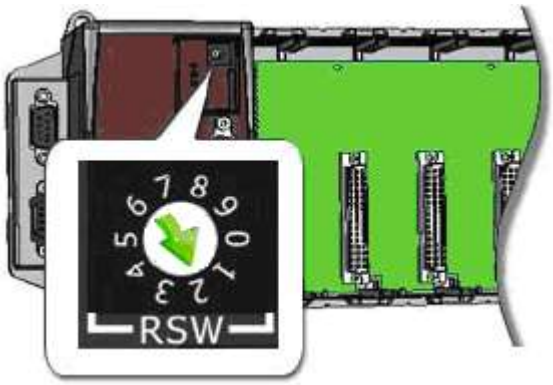


Fig.5 Move the rotary switch to position 2

By the way, user can try '**wget**' command to download files served with ftp over a network in LP-8x4x.

Command: wget ftp://ftp.icpdas.com/pub/cd/linpac/napdos/lp-8x4x/SD_Card/boot/2/lp8x4x_1.16_m.bin

Command: wget ftp://ftp.icpdas.com/pub/cd/linpac/napdos/lp-8x4x/SD_Card/boot/2/boot.ini

If download completely, copy files into default directory.

```
10.1.0.79
# cd /mnt/ hda
# ls
boot
System Volume Information    opt
#
# wget  ftp://ftp.icpdas.com/pub/cd/linpac/napdos/lp-8x4x/SD_Card/boot/2/lp8x4x_1.16_m.bin
Connecting to ftp.icpdas.com (10.0.0.111:80)
lp8x4x_1.16_m.bin    100% |*******************************************| 65024k 00:00:00 ETA
# ls -al
drwxr-xr-x    5 root     root         4096 Jan  1 00:17 .
drwxr-xr-x    7 root     root            0 Mar 18  2008 ..
drwxr-xr-x    2 root     root         4096 Jun 25  2018 System Volume Information
drwxr-xr-x    6 root     root         4096 Sep 15  2017 boot
-rwxr-xr-x    1 root     root     66584576 Jan  1 00:18 lp8x4x_1.16_m.bin
drwxr-xr-x    9 root     root         4096 Dec 11  2012 opt
#
```


Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

3.【Update Procedure】

< Important Notes >

1. Ensure that you perform a backup of any important files, before attempting to update the OS image.
2. DO NOT power off or reboot the controller while the OS image is being updated, as this may result in the OS image becoming corrupted, which may cause the controller to malfunction.

(1) **Turn on the power** to the LP-8x4x, and the screen illustrated in Fig. 6 will be displayed.

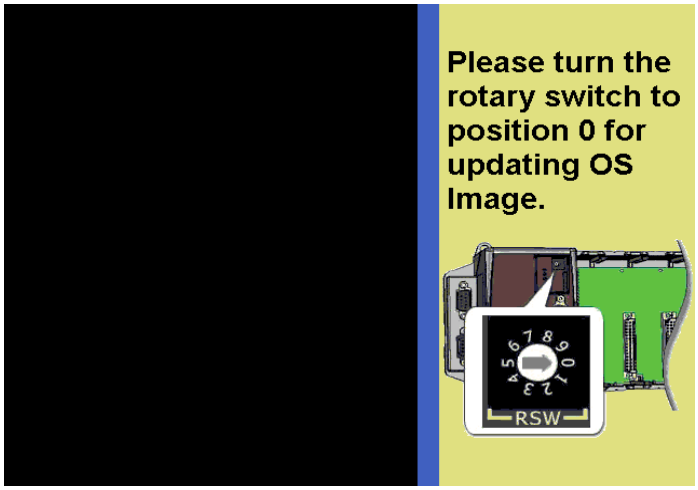


Fig. 6 Burning screen

(2) Move the rotary switch to position **0**, as show in Fig. 7, and the OS Image will begin loading from the SD card, as illustrated in Fig. 8, then monitor the upload process.

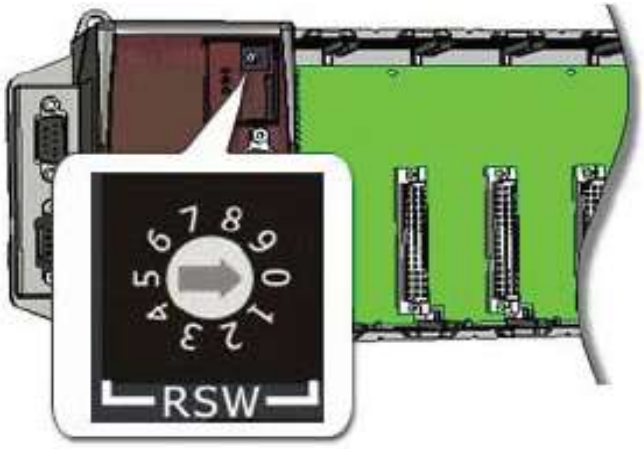


Fig. 7 Move the rotary switch to position 0

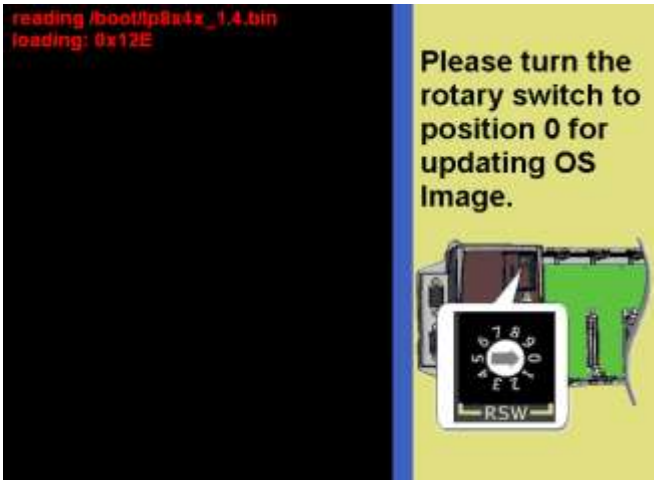


Fig. 8 Loading the OS Image

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

(3) Being uploading the OS Image to the Flash memory on the LP-8x4x, as show in Fig. 9.

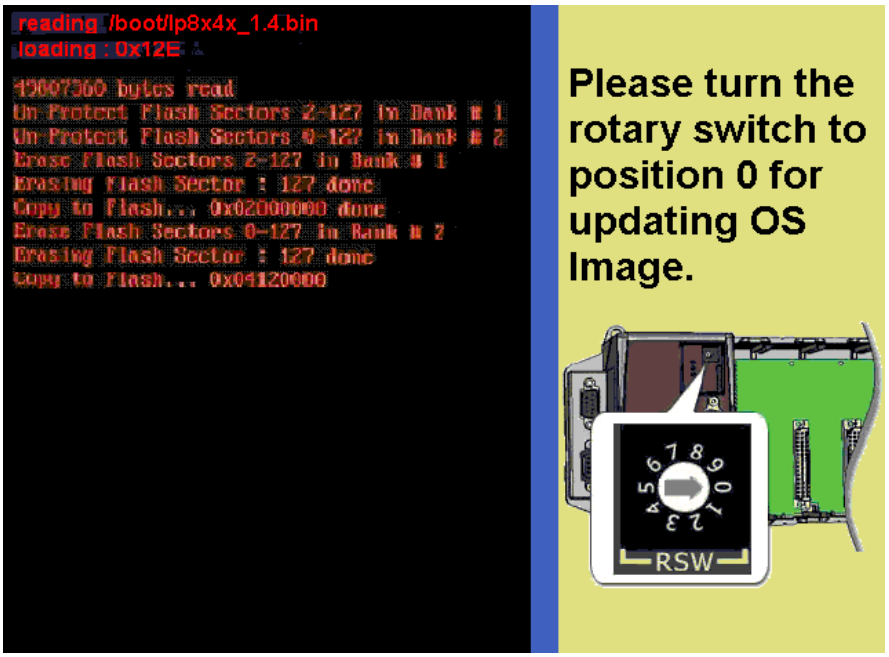


Fig. 9 Uploading the OS Image to the Flash memory

(4) After the upload process is complete, the LP-8x4x will automatically reboot to finalize the update process, as show in Fig. 10. Once the boot sequence is complete, the XWindows screen will appear, as show in Fig. 11.



Fig. 10 Starting screen



Fig. 11 Boot sequence completely

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000