LinCon-8x3x OS_Image Update Manual

(v1.2)



1. [Software Required]:

(1) **OS_Image : linuxnk.bin**

Download Path: http://ftp.icpdas.com/pub/cd/linconcd/napdos/linux/os_image/

(2) TFTP/BOOTP :

Download Path:

http://secure.enterasys.com/download/ -- "Enterasys Software – Other Software Products" Item

2. [Preparation Steps] :

- (1) Install TFTP/BOOTP.
- (2) Connect the first and the fifth pins of the middle row in any slot of the LinCon.Please refer to the Fig.1 (The left side in Fig.1 is the down side of LinCon slot)



(3) Burning Wire :

(i) Connect to the debug port of the LinCon and connect to the COM Port of

PC. This is used to see the process of OS burning(Refer to Fig. $2 \cdot 3$).



Fig. 2 The debug port position Fig. 3: The wire of debug port to COM port of PC

(4) Open "Hyper Terminal" of PC to monitor the process of update and the default COM port setting is 115200, 8, N, 1. (Refer to Fig. 4, 5).

Connection Description ? 🔀	COM1 Properties	? 🗙	
New Connection	Part Settings		
Enter a name and choose an icon for the connection:	Bits per second: 115200		
Name:	Data bite: 9 😽		
lest	Parity: None 💌		
🔊 🚖 💩 🚾 졣 🔂 🎅	Stop bits: 1		
	Flaw control: None		
OK Cancel	Restore Defaults	s	
OK Cancel	OK Cancel Ap	ply	
Fig.4	Fig. 5		

[Note] The debug port of LinCon is for monitor the boot status or the status of downloading OS from Ethernet. It is not necessary when downloading the OS from Ethernet.

(5) Put the linuxnk.bin file is in the bin directory of TFTP/BOOTP.

3. [Update Steps] :

3.1 Update OS_Image :

(i)Open TFTP/BOOTP and input IP Address of PC in the IP Address field of the **Start Download** page, refer to Fig. 6.

a Cabletron IFTP/BootP Services		- 🗆 ×
File Help		
Hardware: x86 Family 15 Model 2 Steppin	ng 4 AT/AT COMPATIBLE -	
Lat Image		
TFTP Server IP Address; File <u>N</u> ame	Bro	wse
DownLoad		
Start Download TFTP Server Bi Download MIB not supported.	Active: 0 Outst	tics Xie anding: O

Fig. 6

(ii) In BootP Server page,Set MAC Address => 02:03:04:05:06:07 (fixed), IPAddress => IP Address of the LinCon ' File Name => linuxnk.bin (Refer to the Fig.7). When the the message of "Sending bootp request " shows in the "Hyper terminal", click the "Set Arp" button and then the linuxnk.bin file will be downloaded to the LinCon through the Ethernet. (Refer to Fig.8). In the mean while, the percent of download process will be showed in TFTP Server page. (Refer to Fig.9)

🚰 Cabletron TFTP/BootP Serv	ices		_ 🗆 🗙
<u>File H</u> elp			
85 8 8			
		-	
MAC Address: IP Addr	ess: File Nam	ne:	
02-03-04-05-06-07 192.16	8.0.135 linuxnk.	bin	
02-03-04-05-06-07 192.160	8.0.135 linuxnk.	bin	1
Browse New	<u>U</u> pdate	Delete	<u>S</u> et Arp
Bootp Reply Method			
1.6 1.6 4			
Direct Reply to Bootp Re			
C Broadcast Reply to Boot	o Hequests		
1941			
			and the second
Start Download TFTP S	Server BootP	Server	Statistics Xiev
Download MIB not supporte	ed.	Active: 0	Outstanding: 0

Fig. 7

Service# ID Addres		
Session# [PAddres 2 A 192,168.0		-32768
	wnload initiated by clie	nt. Client type unknown,
Filename:	1	
File Length:	28,482,992 bytes	Download Initiated
Bytes Transferred:	1,670,144 bytes	Transfer Start Time: 04:55:56 PM
Block:	3,262	Transfer End Time:
Retransmissions:	0	Duration: Throughput:
		miougripu.
	5% cor	nplete
and the second se		

Fig. 8

🦔 Hyper Terminal	
Sending bootp request. Our IP : 0a.01.74.6f Server IP: 0a.01.00.17 TFTP file: E:\ICPDAS~1\LINCON~1\0S-SRC\0S_SRC\L-8X3X\20090527\LINUXNK.BIN TFTP File: 'E:\ICPDAS~1\LINCON~1\0S-SRC\0S_SRC\L-8X3X\20090527\LINUXNK.BIN' TFTPing linuxnk.bin*	
received 63026 blocks (32268288 bytes) tdownload_cmd: file 'linuxnk.bin' loaded via tftp to address 0xc+400000.	
erasing dirty block at 0x00080000	
erasing dirty block at 0x01f00000 erasing dirty block at 0x01f40000	
Saving ramdisk to flash	
	,

Fig. 9

(iii) After download process is finished, the OS_Image of the LinCon will be updated automatically. After the update process is finished, the LinCon will reboot automatically. Then remove the part of short in the first and fifth pin, and the total process is completed.

[Note]

 If you don't have the "Burning Wire", then you need to wait about one hour to finish the whole process from kernel downloading to kernel burning completion. At last, the LinCon will reboot automatically after it finished all the process. So users can connect the VGA cable to LinCon and wait the boot up screen to show up.