

LineAmp+Ethernet Firmware Upgrade Guide

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Table of Contents

Purpose	3
Scope	3
Flowchart: How to upgrade the firmware of the LAE	3
Before you Begin: Parts Description	4
Before you Begin: Software Required	6
1. Upgrade the Main Board Firmware	8
1.1 Set up the physical connection and open the Tera Term Application	8
1.2 Determine the current firmware version	12
1.3 Apply the upgrade	12
2. Upgrade the 'Left-Side' Networking Board Firmware (EoC-B)	21
2.1 Determine the flash size	21
2.2 Determine the current firmware version	22
2.3 Apply the Upgrade	24
3. Upgrade the 'Right-Side' Networking Board Firmware (EoC-A)	26
3.1 Determine the current firmware version	26
3.2 Apply the Upgrade	27



Purpose

This guide describes the steps to upgrade the firmware for the LineAmp+Ethernet (LAE) using physical connections from the LAE to a PC/laptop.

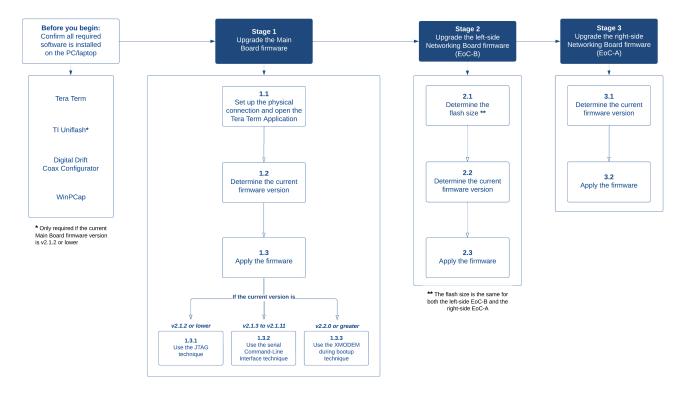
Scope

This guide applies to anyone responsible for upgrading the firmware for the LAE.

This guide does not include instructions for updating the firmware via Bluetooth, using the **Digital Drift Connect** mobile application.

Flowchart: How to upgrade the firmware of the LAE

The flowchart illustrates the steps required to upgrade the firmware for all three processors in a LAE.



Before you Begin: Parts Description

The following parts are required to upgrade the firmware.

Par	t Description		Required in
1.	LAE		Sections 1, 2 and 3 of this guide
2.	LAE Main Board, located in the base. This circuit board is responsible for RF splitting/combining VHF signal amplification, narrowband VHF diagnostics and all power related functions. Note : The image is an example only and may vary, depending on the hardware variant.		Section 1 of this guide
3.	 LAE Networking Board, also known as the Ethernet board, located in the lid. This circuit board is responsible for the Ethernet over Coax (EoC) signal processing, and the Layer 2 Ethernet switching. Notes: The LAE Networking Board is made up of the 'left-side' (EoC-B) and 'right-side' (EoC-A). The image is an example only and may vary, depending on the hardware variant. 	Left-side (EoC-B) Right-side (EoC	Sections 2 and 3 of this guide C-A)
4.	A USB to TTL serial cable. Either: RFI DD-CONSOLE-USB FTDI TTL-232R-RPI		Section 1 of this guide



Ра	rt Description	Required in
5.	TI JTAG programmer Note : Only required if the Main Board firmware is currently V2.1.2 or lower	Section 1 of this guide
6.	Ethernet cable	Sections 2 and 3 of this guide



Before you Begin: Software Required

Softw	vare Name	Required in	Install Instructions
• T	era Term	Section 1: Upgrade the Main Board Firmware	 Install Tera Term. To do this: a. Copy and paste the following link into an internet browser: https://ttssh2.osdn.jp/index.html.en b. Click [Download]. Tera Term Home Page Project page] [License [Download] Changehol [Document] (Lisers ML) c. Click the latest .exe file from the Download Package List. Image and the latest .exe file from the latest .exe file Select the latest .exe file d. Follow/accept the prompts to install Tera Term.
N re C V	I Uniflash lote: Only equired if the urrent firmware ersion is v2.1.2 r lower	Section 1.3.1 – Apply upgrade using the JTAG technique	Install TI Uniflash on the PC/laptop. To do this: a. Copy and paste the following link into an internet browser: https://www.ti.com/tool/UNIFLASH b. Click Downloads. UNIFLASH UniFlash flash programming tool Overview Download Related design resources Support & training c. Select Download options. Downloads UNIFLASH - UniFlash for most Timicrocontrollers (MCUs) and mmWave sensory Download sector design resources (MCUs) and mmWave sensory Download sector (MCUs) and mmWave sensory (MCUs) and mmWave

The following software must be installed on the PC/laptop to perform the firmware upgrade.



So	ftware Name	Required in	Install Instructions
•	Digital Drift Coax Configurator	 Section 2: Upgrade the 'Left-Side' Networking Board (EoC-B) Section 3: Upgrade the 'Right-Side' Networking Board (EoC-A) 	 Install Digital Drift Coax Configurator. To do this: a. Copy and paste the following link into an internet browser: https://products.rfi.com.au/en-au/digital-drift-industrial b. Scroll down to locate and click on the Software tab. General Configuration c. Select Digital Drift Coax Configurator. d. Follow and accept the prompts to install the Digital Drift Coax Configurator. Output Digital Drift Coax Configurator Setup Welcome to the Digital Drift Coax Configurator on Setup Wizard The Setup Wizard will install Drift Coax Configurator on Setup Wizard Digital Drift Coax Configurator Digital Drift Coax Configurator Dig
•	WinPCap	 Section 2: Upgrade the 'Left-Side' Networking Board (EoC-B) Section 3: Upgrade the 'Right-Side' Networking Board (EoC-A) 	 Install WinPCap. To do this: a. Copy and paste the following link into an internet browser: <u>https://www.winpcap.org/install/bin/WinPcap_4_1_3.exe</u> b. Follow and accept the prompts to install WinPCap.



1. Upgrade the Main Board Firmware

1.1 Set up the physical connection and open the Tera Term Application

Step Action 1. Loosen the four screws of the LAE to open the enclosure. Image: Comparison of the table of table

Applying DC power to the P800 connector; or





Drawing DC power from the coaxial backbone cable.

Note: A green LED light displays on the Main Board when on.

3. Connect the **USB to TTL serial cable** from the LAE **SERVICE** port to the **USB port** in the PC/laptop, as shown in the image below.





Step	Action
4.	 Identify the COM port being used by the USB to TTL serial cable in the PC/laptop. To do this: a. In the search field of your PC/laptop, enter Device Manager and press Enter. Result: The Device Manager Device Manager box displays. b. Click Ports (COM & LPT) c. Take note of the COM port that displays for the USB Serial Port entry, as this information is required for a later step. Example: Device Manager Device Manager
5.	Open Tera Term in the PC/laptop and from the top menu bar, select File and select New connection . Note : See section <u>Before you Begin: Software Required</u> for instructions on how to install Tera Term.
6.	Select Serial and select the correct serial COM port from the Port field drop-down box, identified in step 4 above.
7.	Click OK . Result : The Tera Term New connection dialog box closes.
8.	From the top menu bar, select Setup and select Serial port. COM3 - Tera Term VT File Edit Setup Control Window Window Font Keyboard Serial port Result: The Tera Term: Serial port setup and connection dialog box displays.

Uncontrolled when printed



Step	Action
9.	Enter the following values in the corresponding fields:
	• Speed: 115200
	Data: 8 bit
	Parity: none
	Stop bits: 1 bit
	Flow control: none
	Tera Term: Serial port setup X
	Port: COM6 V OK
	Speed: 115200 ~
	Data: 8 bit Cancel Parity: none
	Stop bits: 1 bit - Help
	Flow control: none ~
	Transmit delay 0 msec/char 0 msec/line
	Tera Term: Serial port setup × Port: COM6 V OK
	Speed: 115200 V Note: New setting may display instead of OK. In this case, click New setting.
	Tera Terri: Serial port setup and connection
	Port: COM3 Vew setting
	Port: COM3 New setting Speed: 115200
	Port: COM3 Vew setting
11.	Port: COM3 New setting Speed: 115200
11.	Port: COM3 New setting Speed: 115200 New setting Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal. <u>M</u> COM3 - Tera Term VT
11.	Port: COM3 New setting Speed: 115200 New setting Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal. M COM3 - Tera Term VT File Edit Setup Control Window
11.	Port: COM3 New setting Speed: 115200 New setting Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal.
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	Port: COM3 New setting Speed: 115200 New setting Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal.
	Port: COM3 New setting Speed: 115200 New setting Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal. Image: Comparison of the term vision of tera Term: Terminal setup dialog box displays. Result: The Tera Term: Terminal setup dialog box displays.
11.	Port: COM3 Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal. Image: Comparison of tera Term VT File Edit Setup Control Window Result: The Tera Term: Terminal setup dialog box displays. In the New-line section, select the following settings:
	Port: Devise setting Speed: Devise setting Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal. Image: Comparison of the term of the term of terminal. Image: Comparison of terminal. Image: Comparison of terminal. Result: The Tera Term: Terminal setup dialog box displays. In the New-line section, select the following settings: Image:
	Port: Devised: Speed: Devised: Result: The Tera Term: Serial port setup and connection dialog box closes. From the menu bar, select Setup and select Terminal. Image: COM3 - Tera Term VT File Edit Setup Control Window Terminal Result: The Tera Term: Terminal setup dialog box displays. In the New-line section, select the following settings: In the Receive field, select AUTO from the drop down. In the Transmit field, select CR from the drop down.



Step Action

- 14. Save the selected Tera Term configuration. To do this:
 - a. From the top menu bar, select **Setup** and select **Save Setup**.



Result: The Tera Term: Save setup dialog box displays.

b. Click Save to over-write the default setup.

Result: The Tera Term Save setup dialog box closes.



1.2 Determine the current firmware version

Step	Action
1.	Press the RESET button on the LAE's Main Board.
	Result: The Tera Term bootup banner displays, stating the current firmware version for the Main Board.
	Example:
	File Edit Setup Control Window Help
	FW Target : BDA Version : 2.1.3 Deleasel Vate : 19-FeD-2022 15:04 HW Detect : Line Amplifier

1.3 Apply the upgrade

Press ENTER to begin

Step	Action	
1.	Proceed as follows:	
	If the current firmware version is	Then go to
	v2.1.2 or lower	Section 1.3.1: Apply an upgrade using the JTAG technique.
	v2.1.3 to v2.1.11	Section 1.3.2: Apply an upgrade using the serial Command-Line Interface (CLI) technique.
	v2.2.0 or greater	Section 1.3.3: Apply an upgrade using the XMODEM during bootup technique.



1.3.1 How to apply an upgrade to the Main Board using the JTAG technique

Step	Act	ion
1.	Do	wnload the latest Main Board production flash image. To do this:
	a.	Copy and paste the following link into an internet browser:
		https://products.rfi.com.au/en-au/digital-drift-industrial
	b.	Scroll down to locate and click on, the Software tab.
		Guides & Service Bulletins Software Training
		BDA 2.1.11 Upgrade
	c.	Select the latest LAE upgrade file.
		Guides & Service Bulletins Software Training
		QP2.2.2.0 Upgrade
		BDA 2.2.0 Upgrade
	d.	Follow the prompts to download and save the upgrade file.
		Note: The file will be named: BDA_ <version>_ prod_jtag.txt</version>
		Example: BDA_2.2.0_ prod_jtag.txt
		BDA_2.2.0_prod_jtag
		BDA_2.2.0_upgrade.bin
2.	Ор	en TI UniFlash on the PC/laptop.
	No	te: See section <u>Before you Begin: Software Required</u> for instructions on how to install.
3.	Со	nfigure TI UniFlash. To do this:
	a.	Connect the TI JTAG programmer's USB port to the PC/laptop .
	b.	Connect the TI JTAG programmer's 14-way connector to the black rectangular boxed connector in the
		top right area of the Main Board.
	c.	Ensure the Main Board is on.
	d.	Start TI Uniflash on the PC/laptop.
	e.	From the Detected Devices section, click Detect.
		Note: Start may display instead of Detect. In this case, click Start.
		UniFlash Session - About O
		Detected Devices
		Status: e Inactive - Click 'Detect' to detect devices . Setting: Manual - Detect



4.

Step Action

- Update the default settings. To do this:
 - a. Click the Settings & Utilities menu option.

UniFlash	Session 👻	About
Configured Device : TI MSP430 USB1 > MSP430F5438A [more info] [download ccxml]		
Program		Find and Configure Settings and Utilities
Settings & Utilit	ies	Q Search: Enter Property ID Or Name To Search For Sea

b. Click the following:

- Allow Read/Write access to BSL memory
- Erase main, information and protected information memory.

Memory	▼ Download
Standalone Command Line	Target Voltage (mV): 3300
	Allow Read/Write/Erase access to BSL memory
	Erase Options:
	O Erase main memory only
	O Erase main and information memory
	Erase main, information and protected information memory
	O Erase and download necessary segments only (Differential Download)

c. Click the **Program** menu option to return to the main programming screen.

Program	Find and Configure Settings and Utilities	
Settings & Utilities	Q. Search: Enter Property ID Or Name To Search For Se	
Memory	- Download	

d. Click Browse

Select and Load Images	
Flash Image(s)	
	Erowse

e. Navigate to and select, the upgrade file (BDA_<version>_prod_jtag.txt) downloaded in step 1 and click **Open**.

BDA_2.2.0_prod_jtag	23/05/2023 11:30 AM	Text Document	390 KB
BDA_2.2.0_upgrade.bin	23/05/2023 11:30 AM	BIN File	126 KB
ccm320a_8M8_p2mp_flash_profile_81@3.11.bin	28/06/2023 12:00 PM	BIN File	8,192 KB
ccm320b_8MB_p2mp_flash_profile_81@3.11.bin	28/06/2023 11:47 AM	BIN File	8,192 KB
BDA_2.2.0_prod_jtag			

f. Click Load Image.

Select and Load Images		
Flash Image(s)		
BDA_2.2.0_prod_jtag.txt		
\oplus		
Available Action(s) - 1 Image Selected		
Load Image Verify Image		

Note: If a dialog box pops up with a warning about the version of firmware in the JTAG programmer, select the option to **upgrade the firmware** in the JTAG programmer to avoid this dialog box from popping up each time a JTAG file is programmed.



ер	Action
	Verify the upgrade was successfully programmed. To do this:
	a. Wait for the firmware to be completely and successfully uploaded.
	Console
	[5/24/2023, 12:01:09 PM] [INFO] <u>MSP430: There were 120602 bytes written</u> . [5/24/2023, 12:01:09 PM_[SUCCESS] Program Load completed successfull)
	b. Remove the JTAG programmer from the device's 14-way black rectangular boxed connector .
	c. Press the RESET button on the LAE's Main Board.
	Result: In the Tera Term session, the upgraded firmware version displays in the bootup banner.
6.	Disconnect the USB to TTL serial cable and JTAG programmer from the LAE.
	Go to <u>section 2: to upgrade the networking board.</u>

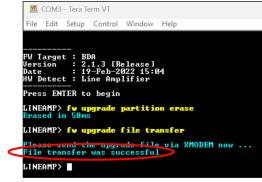


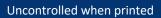
1.3.2 How to apply an upgrade the Main Board using the serial Command-Line Interface (CLI)

Step	Action				
1.	Download the latest Main Board upgrade file. To do this:				
	a. Copy and paste the following link into an internet browser:				
	https://products.rfi.com.au/en-au/digital-drift-industrial				
	b. Scroll down to locate and click on, the Software tab.				
	Guides & Service Bulletins Software Training BDA 2.1.11 Upgrade				
	c. Select the latest LAE upgrade file.				
	Guides & Service Bulletins Software Training QP2.2.2.0 Upgrade BDA 2.2.0 Upgrade Software BDA 2.2.0 Upgrade Software Software CCM210 RF1XX Role Flash @ 2.8 Software Software				
	d. Follow the prompts to download and save the upgrade file.				
	Note : The file will be named: BDA_< <i>version>_</i> upgrade.bin				
	Example: BDA_2.2.0_upgrade.bin				
	BDA_2.2.0_prod_jtag				
2.	Press Enter, type the command fw upgrade partition erase and press Enter.				
	FW Target : BDA Version : 2.1.3 [Release] Date : 19-Feb-2022 15:04 HW Detect : Line Amplifier Press ENIER to begin LINEAMP> fw upgrade partition erase Erased in 58ms				
	Note : This command erases the temporary flash storage area used to hold firmware upgrades.				
3.	Type the command fw upgrade file transfer and press Enter. FW Target : BDA Version : 2.1.3 [Release]				
	Date : 19-Feb-2022 15:04 HW Detect : Line Amplifier Press ENTER to begin LINEAMP> fw upgrade partition erase Erased in 58ms				
	LINEAMP> fw upgrade file transfer				



has been encountered, go back to step 2.	Ac	tion
 c. Select XMODEM from the drop-down menu. d. Select Send The send of the send of the	a.	Click File.
<image/>	b.	Select Transfer from the drop-down menu.
a. select send Figure 1 Figure 1	c.	Select XMODEM from the drop-down menu.
Security Control Window Hap Window Hap Window Hap Windows Hap 	d.	
New constant At-A Opposite session At-A Opposite session At-A Processing of the constant to top- The constant to top- View Log The constant to top- Sector the upgrade file downloaded/saved in step 1 and click Open. Image dectory The constant of top- Image dectory Image dectory Image dectory Image dectory <td></td> <td>💆 COM3 - Tera Term VT</td>		💆 COM3 - Tera Term VT
Puperties compared in connection with the puperties compared in t		
Specific connection A to 6 View 10g Specific connection Specific connection Image: Connection Connection <td></td> <td></td>		
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See tagging () I I I I I I I I I I I I I I I I I I		
sendite: image directory. whote the upgrade file downloaded/saved in step 1 and click Open. a. Select the upgrade file downloaded/saved in step 1 and click Open. iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		
Image directory. Ima		
I was a second of the secon		
 e. Select the upgrade file downloaded/saved in step 1 and click Open. Important and the upgrade file downloaded/saved in step 1 and click Open. Important and the upgrade file download bar displays, while the file transfers. Important and the upgrade file to be transferred to the LAE. In Wait for the file to be transferred to the LAE. Note: At the conclusion of the file transfer, the message File transfer was successful displays. If an has been encountered, go back to step 2. 		
f. Wait for the file to be transferred to the LAE. Note: At the conclusion of the file transfer, the message File transfer was successful displays. If an has been encountered, go back to step 2.		Name Date modified BDA_2.13_prod_itag 28/06/2023 10:04 AM BDA_2.13_prograde.bin 28/06/2023 10:04 AM BDA_2.2.0_prod_itag 23/05/2023 10:30 AM BDA_2.2.0_prograde.bin 28/06/2023 10:30 AM BDA_2.2.0_prograde.bin 28/06/2023 10:30 AM BDA_2.2.0_prograde.bin 28/06/2023 10:30 AM BDA_2.2.0_prograde.bin 28/06/2023 10:37 AM BDA_2.2.0_prograde.givide 28/06/2023 0:77 AM BDA_2.2.0_prograde.givide 28/06/2023 9:40 AM BDA_2.2.0_prograde 28/06/2023 9:40 AM BDA_2.2.0_prograde 28/06/2023 9:40 AM BDA_2.2.0_prograde Copen File name: BDA_2.2.0_prograde BDA_2.2.0_prograde Open Files of type: A(".")
Filename: BDA_22.0_upgrade.bit Protocol: XMODEM (checksum) Packet#: 98 Bytes transferred: 12544 Elapsed Bine: 0.05 (2.09KB/s) 9.8%f. Wait for the file to be transferred to the LAE. Note: At the conclusion of the file transfer, the message File transfer was successful displays. If an of has been encountered, go back to step 2.		Result : A green download bar displays, while the file transfers.
Note : At the conclusion of the file transfer, the message File transfer was successful displays. If an a has been encountered, go back to step 2.		Filename: BDA_2.2.0_upgrade.bit Protocol: XMODEM (checksum) Packet#: 98 Bytes transferred: 12544 Elapsed time: 0:06 (2.09KB/s) 9.8%
Note: At the conclusion of the file transfer, the message File transfer was successful displays. If an has been encountered, go back to step 2.	£	Wait for the file to be transferred to the LAE
has been encountered, go back to step 2.	t.	wait for the file to be transferred to the LAE.
		Note : At the conclusion of the file transfer, the message File transfer was successful displays. If an thas been encountered, go back to step 2.
COM3 - Tera Term VT		







Step	Action
5.	Type the command fw upgrade apply and press Enter.
	FW Target : BDA Version : 2.1.3 [Release] Date : 19-Feb-2022 15:04 HW Detect : Line Amplifier Press ENTER to begin LINEAMP> fw upgrade partition erase Erased in 58ms LINEAMP> fw upgrade file transfer Please send the upgrade file via XMODEM now File transfer was successful LINEAMP> fw upgrade .apply Important Do not turn off the LAE or the Tera Term App until the upgrade is complete
	Result : When the upgrade is complete, the Main Board restarts and the bootup banner displays the upgraded firmware version.
	Example : New version 2.2.0 displays in bootup banner in the screenshot below.
	LINEAMP> fv upgrade apply Valid upgrade file detected. HW target : BDA Run modes : User FW version : 2.2.0
	HW Detect : Line Amplifier
6.	HW Detect : Line Amplifier Disconnect the USB to TTL serial cable from the LAE.



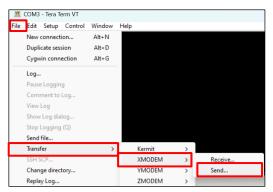
1.3.3 How to apply an upgrade to the Main Board using the XMODEM during bootup technique

Step	Action				
1.	Download the latest Main Board upgrade file. To do this: a. Copy and paste the following link into an internet browser:				
	https://products.rfi.com.au/en-au/digital-drift-industrial				
	b. Scroll down to locate and click on, the Software tab.				
	Guides & Service Bulletins Software Training BDA 2.1.11 Upgrade				
	c. Select the latest LAE upgrade file.				
	Guides & Service Bulletins Software Training QP2.2.2.0 Upgrade BDA 2.2.0 Upgrade				
	CCM210 RFI XX Role Flash @ 2.8				
	d. Follow the prompts to download and save the upgrade file.				
	Note: The file will be named: BDA_ <version>_ upgrade.bin</version>				
	Example: BDA_2.2.0_upgrade.bin				
	Name Type				
	BDA_2.2.0_prod_jtag Text Document BDA_2.2.0_upgrade.bin BIN File				
2.	Press and release the RESET button on the Main Board. First and release the RESET button on the Main Board. First and the Main Board. First and the Main Board. First and the Main Board.				
3.	Press the DEL key within 3 seconds of the prompt appearing to enter firmware upgrade mode.				
	Note: If a TIMEOUT message displays in Tera Term: Press DEL to enter firmware upgrade mode TIMEOUT Modbus RTU slave has started a. Press the RESET button on the Main Board again.				
	b. Press the DEL key within 3 seconds of the prompt appearing.				



Step Action 4. a. In Tera Term, perform the following: • Click File. • Select Transfer from the drop-down menu. • Select XMODEM from the drop-down menu.

Select Send...



b. Select the upgrade file downloaded/saved in step 1 and click **Open**.

Example:

🔟 Tera Term: XMODEM Send	×
Look in: 🔁 LAE 🧹 🎯 🎓 📂	
BDA 2.2.0 prod itag BDA_2.2.0_upgrade.bin Flowchart LAE – Firmware upgrade guide Archive	
File name: BDA_2.2.0_upgrade	Open
Files of type: All(*.*)	Cancel

Result: A green download bar displays, while the upgrade file transfers.

Tera Term: XMODEM S	and X		
Filename:	BDA_2.2.0_upgrade.bir		
Protocol:	XMODEM (checksum)		
Packet#:	454		
Bytes trans	ferred: 58112		
Elepsed unit	e: 0:24 (2.36KB/s)		
	5.3%		
	Cancel		

5. Wait for the file to be transferred to the LAE.

Note: At the conclusion of the file transfer, the message **File transfer was successful** displays. If an error has been encountered, go back to step 2.

Result: If the file transfer was successful, the new firmware applies immediately, the Main Board restarts and the bootup banner displays the upgraded firmware version.

Important Do not turn off the LAE or the Tera Term App until the upgrade is complete

6. Disconnect the USB to TTL serial cable from the LAE.
7. Go to section 2: to upgrade the networking board.



2. Upgrade the 'Left-Side' Networking Board Firmware (EoC-B)

2.1 Determine the flash size

Step	Action			
1.	Locate the networking board, in the lid of the LAE and visually check the following: Note : Knowing whether the hardware is 4MB or 8MB is required in this section and section 3.			
	If the hardware version is	Then the current		
	 Labelled as C; and 	Hardware is 4MB		
	The flash chips are unlabelled			
	 Labelled as D or E; and 	Hardware is 8MB		
	<image/>			
2.	Close the LAE.			



2.2 Determine the current firmware version

Note: WinPCap must be installed on your PC/laptop to perform these steps. See section <u>Before you Begin: Software</u> <u>Required</u> for instructions on how to install.

Step	Action
1.	Connect an Ethernet cable from the LAE's left-side RJ45 port to the PC/laptop.
	Note: This guide assumes the ETHERNET PASS-THRU switch on the networking board is in the PASS position.
2.	Open the Digital Drift Coax Configurator application on the PC/laptop.
	Notes:
	 See section Before you Begin: Software Required for instructions on how to install Digital Drift Coax Configurator.
	 WinPCap is required to run Digital Drift Coax Configurator. See section <u>Before you Begin: Software</u> <u>Required</u> for instructions on how to install.
	Result : A dialog box displays, requesting which coax segment to connect to.
3.	Select the device with a MAC address starting with BC:22:FB:C6:XX:XX with type LINEAMP_LEFT and click OK .
	Note: This is the left-side EoC processor.
	MAC Type Name IRC227810:001:00C LINEAND_LET contramedo IRC227810:01:00C LINEAND_RIGHT (ond namedo
	Result: The Digital Drift Coax Configurator displays the unit information on the left hand side of the screen.
	A concentration Const a concentration



Step	Action			
4.	Navigate the Firmv		onfig tab (if no	already there) and note the current Firmware version that display
	Basic Config Coax Connect	ons HW Config IPv4 Config		
	Node basic configuration			
	Node Name:		Apply	
	Node Role:	Automatic (now DOMAIN_MASTER)	Change	
	Domain Name:	DigitalDrift	Apply	
	Discovery pass-thro	agh: Disabled ~	Apply & Reboot	
	Device Type:	LineAmp (Left)		
	Coax status:	COAX 100MHz - No connection	Change Profile	
		ccm320b (ver: 3.7)	Upgrade	



2.3 Apply the Upgrade

Step	p Action				
1.	Download the latest upgrade file. To do this:				
	a. Copy and paste the following link into an internet browser:				
	https://products.rfi.com.au/en-au/digital-drift-industrial				
b. Scroll down to locate, and click on the Software tab.					
	Guides & Service Bulletins Software Training				
	BDA 2.1.11 Upgrade CCM210 RFI XX Role Flash @ 2.8				
CCM210 RFI XX Role Flash @ 2.8					
	c. Select the latest upgrade files for the CCM320B hardware platform.				
	Guides & Service Bulletins Software Training				
	QP2 2.2.0 Upgrade				
	BDA 2.2.0 Upgrade				
	CCM210 RFI XX Role Flash @ 2.8				
	CCM220 P2MP Upgrade @ 3.11				
	CCM320A xMB P2MP Upgrade @ 3.11 CCM320B xMB P2MP Upgrade @ 3.11				
	d. Follow the prompts to download and save the file.				
	e. Unzip the downloaded archive, which extracts the 4MB and 8MB firmware upgrade files.				
2.	Click Upgrade in Coax Configurator.				
	Device Type: LineAmp (Left) Coax status: COAX 200MHz - No connection Change Profile				
	Firmware: ccm320b_08H8_p2mp - ver: 3.7 Upgrade Factory Profile Id: 81				
	Result: The Coax Configurator – OSUP Upgrade dialog box displays.				
3.	From the New firmware field, click Browse .				
	OSUP Upgrade node BC:22:FB:C6:01:9C				
	Current firmware: ccm320b_BMB_p2mp - ver: 3.7 New firmware: Browse				
4.	Navigate to the relevant upgrade file extracted in step 1 e. and select the upgrade file that matches the LAE EOC-B processor's flash size (i.e. 4MB or 8MB).				
	Note: The file names are:				
	 CCM320b_4MB_p2mp_upgrade@<version>.bin</version> 				
	CCM320b_8MB_p2mp_upgrade@ <version>.bin</version>				
	◆ Open × Look in: ccm320b_xMB_p2mp_upgrade@3.11				
	Ccm320b4MBp2mp_upgrade@3.11.bin				
	Recent I Ccm320b(3MB)p2mp_upgrade@3.11.bin				



Step	Action			
5.	Click Open.			
	 Open Open Combany C			
	This PC The name: 120b_8MB_p2mp_upgrade@3.11.bin Network Files of type: All Files Cancel			
6.	Click Start Upgrade.			
7.	Wait for the percentage bar to reach 100% and an Upgrade done! message to display.			
8.	Click Reboot and wait for the Rebooting node. Please wait dialog box to close.			
	Basic Config Connections HW Config IPv4 Config Node basic configuration Node Name: Apply Node Role: Always END_POINT Change Domain Name: DigitalDrift Apply Discovery pass-through: Enabled Apply & Reboot Device Type: LineAmp (Left) Coax status: Con320b_BMB_p2mp(ver: 3.11) Upgrade			
9.	Close Digital Drift Coax Configurator and disconnect the Ethernet cable.			





3.1 Determine the current firmware version

Step	Action
1.	Connect the Ethernet cable from the LAE's right-side RJ45 port to the PC/laptop.
2.	Open the Digital Drift Coax Configurator application on the PC/laptop. Result : A dialog box displays, requesting which coax segment to connect to.
3.	Select the device with a MAC address starting BC:22:FB.C7:XX:XX with type LINEAMP_RIGHT and click OK. Note: This is the right-side of the EoC processor.
4.	Navigate to the Basic Config tab (if not already there) and note the current Firmware version that displays in the Firmware field.



3.2 Apply the Upgrade

Step	Action				
1.	Download the latest upgrade file. To do this:				
	a. Copy and paste the following link into an internet browser:				
	https://products.rfi.com.au/en-au/digital-drift-industrial				
	b. Scroll down to locate, and click on the Software tab.				
	Guides & Service Bulletins Software Training				
	BDA 2.1.11 Upgrade				
	CCM210 RFI XX Role Flash @ 2.8				
	c. Select the latest upgrade files for the CCM320A hardware platform.				
	Guides & Service Bulletins Software Training				
	BDA 2.1.11 Upgrade				
	CCM210 RFI XX Role Flash @ 2.8				
	CCM220 P2MP Upgrade @ 3.11				
	CCM320A xMB P2MP Upgrade @ 3.11				
	d. Follow the prompts to download and save the file.				
	e. Unzip the downloaded archive, which extracts the 4MB and 8MB firmware upgrade files.				
2.	Click Upgrade in Coax Configurator.				
	Device Type: LineAmp (Right)				
	Coax status: COAX 200Htz - No connection Change Profile				
	Firmware: ccm320e, 8MB_p2mp - ver: 3.7 Upgrade Factory Profile Id: 81				
	Result: The Coax Configurator – OSUP Upgrade dialog box displays.				
3.	From the New firmware field, click Browse .				
4.	Navigate to the relevant upgrade file extracted step 1 e. and select the upgrade file that matches the LAE				
	EOC-A processor's flash size (i.e. 4MB or 8MB). Note: The file names are:				
	 CCM320a_4MB_p2mp_upgrade@<version>.bin</version> 				
	 CCM320a_8MB_p2mp_upgrade@<version>.bin</version> 				
	Open				
	Look in:cm320a_xMB_p2mp_upgrade@3.11 / / / / / / / / / / / / / / /				
	Recent Items				



Step	Action			
5.	Click Open.			
	Lookin: <u>com320a_1MB_p2mp_upgrade@3.11</u>			
	Recent Items Desitop			
	Documents			
	This PC			
	File name: Consistent of the second			
6.	Click Start Upgrade.			
	New firmware: Browse ccm320a_4MB_p2mp_upgrade@3.11.bin			
	Look for the new firmware file and press Start Upgrade			
	Start Upgrade Cancel			
	Result: If a compatible upgrade file was selected, the upgrade will commence.			
7.	Wait for the percentage bar to reach 100% and an Upgrade done! message to display.			
	New firmware: Browse ccm320a_4MB_p2mp_upgrade@3.11.bin			
	Upgrade done: Now press Reboot.			
	Reboot Cancel			



Step	Action			
8.	Click Reboot and wait for the Rebooting node. Please wait dialog box to close.			
	Upgrade done! Now press Reboot.			
	Reboot Cancel			
				-
	Rebooting node. Please	wait		
	Result: The n	ew firmware ve	rsion displays un	der the Basic Config tab, in the Firmware field.
	Example:			
	Basic Config Coax Connections HW Config IPv4 Config VLAN			
	Node basic configuration			
	Node Name: Node Role:	Always END POINT	Apply Change	
	Domain Name:	DigitalDrift	Apply	
	Discovery pass-through		Apply & Reboot	
Device Type: LineAmp (Right)				
	Coax status:	COAX 200MHz - No connection	Change Profile	
	Firmware:	ccm320a_4MB_p2mp.ver: 3.11	Upgrade	
9.		Drift Coax Confi	gurator	
	Close Digital		guiator.	
	Discourse tel		- f	
10.	Disconnect th	ne Ethernet cabl	e from the LAE.	
	The firmware	e upgrade is con	nplete.	