

Getting started with installing Linux Driver under Ubuntu

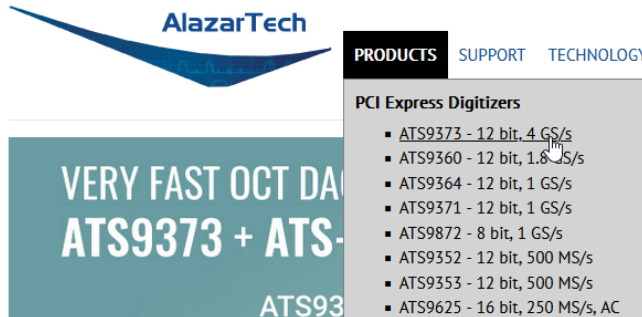
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1. Download your AlazarTech Product Linux Driver and Alazar-Front-Panel

- Go to AlazarTech's website and choose your board from the PRODUCTS drop-down menu



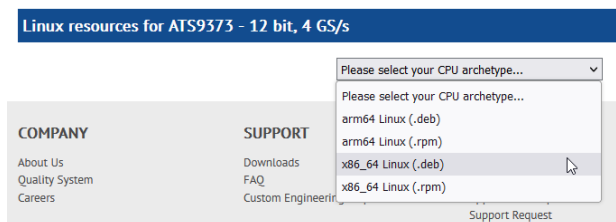
- Scroll down on the product's page to find the Drivers section:

Drivers

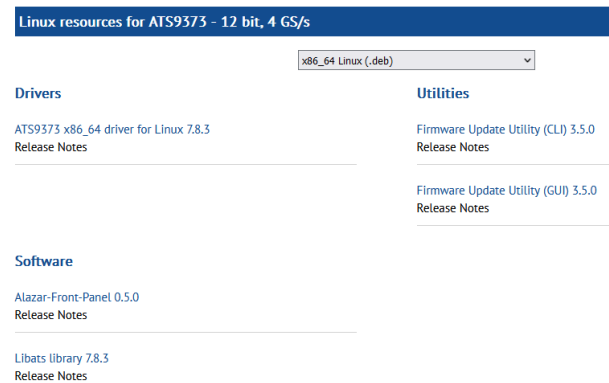
ATS9373 x86_64 driver for Windows
Version: 7.8.3
[Release Notes](#)

[Linux Resources](#)
[Linux ReadMe](#)

- Click on **Linux Resources** and you will be brought to the Linux resource page for your product. From here, select your CPU archetype.



- After selecting your CPU archetype, click on **xxxxx x86_64 driver for Linux x.x.x** in the Drivers section to download your product's Linux Driver




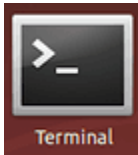
- Click on **Alazar-Front-Panel x.x.x** to download the oscilloscope GUI for Linux.

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2. Install your AlazarTech Product Linux Driver and Alazar-Front-Panel

Note: From this point going forward, we assume you have installed Linux O/S and are familiar with Linux operating system.

- 2.1) Open a Terminal Window or click on the Applications icon  in the bottom left corner to open one.



- 2.2) Type the following command in the open terminal at the prompt:

- a. `sudo apt-get install dkms1,2`

```
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  menu
The following NEW packages will be installed:
  dkms
0 upgraded, 1 newly installed, 0 to remove and 96 not upgraded.
Need to get 41.4 kB of archives.
After this operation, 190 kB of additional disk space will be used.
Get:1 http://ca.archive.ubuntu.com/ubuntu kinetic-updates/main amd64 dkms all 3.0.6-2ubuntu2 [41.4 kB]
Fetched 41.4 kB in 0s (150 kB/s)
Selecting previously unselected package dkms.
(Reading database ... 189030 files and directories currently installed.)
Preparing to unpack .../dkms_3.0.6-2ubuntu2_all.deb ...
Unpacking dkms (3.0.6-2ubuntu2) ...
Setting up dkms (3.0.6-2ubuntu2) ...
Processing triggers for man-db (2.10.2-2) ...
```

- b. `sudo dpkg -i libats_7.8.7_amd64.deb`

```
oem@oem-HP-Z4-G4-Workstation:~/Downloads$ sudo dpkg -i libats_7.8.7_amd64.deb
[sudo] password for oem:
Selecting previously unselected package libats.
(Reading database ... 189243 files and directories currently installed.)
Preparing to unpack libats_7.8.7_amd64.deb ...
Unpacking libats (7.8.7) ...
Setting up libats (7.8.7) ...
oem@oem-HP-Z4-G4-Workstation:~/Downloads$
```

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c. `sudo dpkg -i drivers-ats9373-dkms_x.x.x_amd64.deb2`

```
oem@oem-HP-Z4-G4-Workstation:~/Downloads$ sudo dpkg -i drivers-ats9373-dkms_7.8.7_amd64.deb
Selecting previously unselected package drivers-ats9373-dkms.
(Reading database ... 189252 files and directories currently installed.)
Preparing to unpack drivers-ats9373-dkms_7.8.7_amd64.deb ...
Unpacking drivers-ats9373-dkms (7.8.7) ...
Setting up drivers-ats9373-dkms (7.8.7) ...
Init system: systemd
Creating symlink /var/lib/dkms/ats9373/7.8.7/source -> /usr/src/ats9373-7.8.7
Sign command: /usr/bin/kmodsign
Signing key: /var/lib/shim-signed/mok/MOK.priv
Public certificate (MOK): /var/lib/shim-signed/mok/MOK.der

Building module:
Cleaning build area...
make -j8 KERNELRELEASE=5.19.0-31-generic -C /lib/modules/5.19.0-31-generic/build M=/var/lib/dkms/ats9373/7.8.7/build.
..
Signing module /var/lib/dkms/ats9373/7.8.7/build/ats9373.ko

Running the post_build script:
Cleaning build area...

ats9373.ko:
Running module version sanity check.
- Original module
- No original module exists within this kernel
- Installation
- Installing to /lib/modules/5.19.0-31-generic/updates/dkms/
depmod...
Created symlink /etc/systemd/system/multi-user.target.wants/ats9373.service -> /lib/systemd/system/ats9373.service.
```

d. `sudo dpkg -i alazar-front-panel-x.x.x.deb1,2`

```
oem@oem-HP-Z4-G4-Workstation:~/Downloads$ sudo dpkg -i alazar-front-panel-0.5.0.deb
[sudo] password for oem:
Selecting previously unselected package alazar-front-panel.
(Reading database ... 189325 files and directories currently installed.)
Preparing to unpack alazar-front-panel-0.5.0.deb ...
Unpacking alazar-front-panel (0.5.0) ...
Setting up alazar-front-panel (0.5.0) ...
Processing triggers for mailcap (3.70+nmu1ubuntu1) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for desktop-file-utils (0.26-1ubuntu4) ...
```

Note:

¹You may be prompted for a password request; this is a security measure to prevent malware from getting automatically installed on the computer.

²Output screen content may differ on other Linux distributions.

3. Verify the Installation of your AlazarTech Linux Driver and Alazar-Front-Panel

- 3.1) Type the following command in the open terminal at the prompt to verify the packages have been installed:

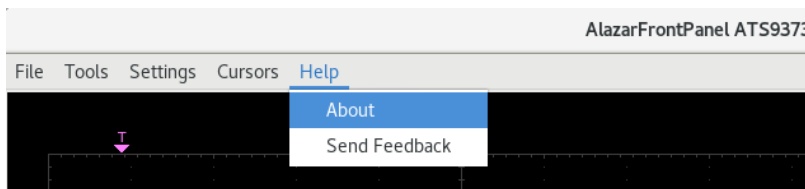
grep installed /var/log/dpkg.log

```
2023-05-09 15:01:36 status half-installed libats:amd64 7.8.7
2023-05-09 15:01:36 status installed libats:amd64 7.8.7
2023-05-09 15:01:46 startup archives install
2023-05-09 15:01:52 status half-installed drivers-ats9373-dkms:amd64 7.8.7
2023-05-09 15:01:58 status installed drivers-ats9373-dkms:amd64 7.8.7
2023-05-09 15:02:02 startup archives install
2023-05-09 15:02:02 status half-installed alazar-front-panel:amd64 0.5.0
2023-05-09 15:02:02 status installed alazar-front-panel:amd64 0.5.0
2023-05-09 15:02:02 status installed mailcap:all 3.70+nmu1ubuntu1
2023-05-09 15:02:02 status installed gnome-menus:amd64 3.36.0-1ubuntu3
2023-05-09 15:02:02 status installed desktop-file-utils:amd64 0.26-1ubuntu4
```

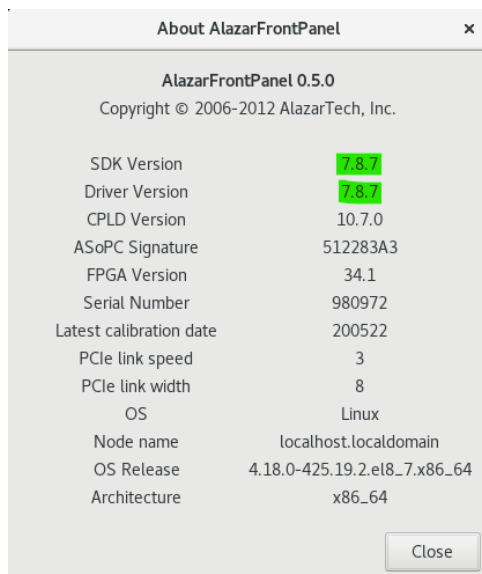
This will output the above list of packages by installation date.

- 3.2) Navigate to the folder /usr/local/AlazarTech/bin where AlazarFrontPanel is located and run the application.

Click on Help → About



This will display the Board Properties to verify that you have successfully installed the version of the Library and Drivers for your product under Ubuntu



4. Revision History

This is the first edition of this guide.