

USB FX2LP based logic analyzers

- <http://www.triplespark.net/elec/periph/USB-FX2/EEPROM/>

Saleae / USBEE AX MINI

```
dpavlin@blue:~$ lsusb -d 0925:3881
Bus 001 Device 022: ID 0925:3881 Lakeview Research Saleae Logic
```

<http://dx.com/p/logic-analyzer-w-dupont-lines-and-usb-cable-for-scm-black-148945>

<http://www.epanorama.net/blog/2012/10/02/usbee-ax-clone/>

<http://www.jwandrews.co.uk/2011/12/saleae-logic-analyser-clone-teardown-and-reprogramming/>

<http://tubbutec.de/blog/adding-output-capability-to-a-10e-logic-analyser/>

Linux software

<https://bitbucket.org/wump/usbee>

<https://blog.visucore.com/2010/5/27/usbee-sx-protocol-description>

<http://sigrok.org/wiki/Fx2lafw>

<http://www.drdoobbs.com/embedded-systems/rocking-with-sigrok/240147198>

USBeE AX Pro

<http://dx.com/p/usb-oscilloscope-and-logic-analyzer-93518>

- <https://blog.visucore.com/tags/usbee>
- <http://www.eeelec.com/xla/>

CY7C68013 datasheets

- <http://www.datasheetsite.com/datasheet/CY7C68013>

Change usb id under Linux

<http://gronlier.fr/blog/2014/07/usbee-ax-pro-reprogramming/>

```
root@x200:/rest/cvs/fx2EEPROM# apt-get install fxload

root@x200:/rest/cvs/fx2EEPROM# git remote -v
origin https://github.com/ribalda/fx2EEPROM.git (fetch)
origin https://github.com/ribalda/fx2EEPROM.git (push)

root@x200:/rest/cvs/fx2EEPROM# lsusb -d 08a9:0014
```

Bus 007 Device 010: ID 08a9:0014 CWAV Inc. USBee AX-Pro

```
root@x200:/rest/cvs/fx2eeprom# fxload -D /dev/bus/usb/007/010 -t fx2lp -I vend_ax.hex
```

```
root@x200:/rest/cvs/fx2eeprom# sudo ./fx2eeprom r 0x08a9 0x0014 8 > eeprom.dat  
Readed 8 bytes
```

```
root@x200:/rest/cvs/fx2eeprom# hexdump -C eeprom.dat  
00000000 c0 a9 08 14 00 00 1b 00
```

```
# edit usb id
```

```
root@x200:/rest/cvs/fx2eeprom# hexdump -C saleae.dat  
00000000 c0 25 09 81 38 00 1b 00
```

```
root@x200:/rest/cvs/fx2eeprom# sudo ./fx2eeprom w 0x08a9 0x0014 8 < saleae.dat  
Written 8 bytes
```

```
# unplug, re-plug usb dongle
```

```
root@x200:/rest/cvs/fx2eeprom# lsusb -d 0925:3881  
Bus 007 Device 013: ID 0925:3881 Lakeview Research Saleae Logic
```