

0x0183b000 [0,0]

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Very old capacitive touch for EeePC 701

usb

```
dpavlin@brokeee:~$ lsusb -t -v
/: Bus 05.Port 1: Dev 1, Class=root_hub, Driver=uhci_hcd/2p, 12M
   ID 1d6b:0001 Linux Foundation 1.1 root hub
/: Bus 04.Port 1: Dev 1, Class=root_hub, Driver=uhci_hcd/2p, 12M
   ID 1d6b:0001 Linux Foundation 1.1 root hub
/: Bus 03.Port 1: Dev 1, Class=root_hub, Driver=uhci_hcd/2p, 12M
   ID 1d6b:0001 Linux Foundation 1.1 root hub
/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=uhci_hcd/2p, 12M
   ID 1d6b:0001 Linux Foundation 1.1 root hub
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/8p, 480M
   ID 1d6b:0002 Linux Foundation 2.0 root hub
    |__ Port 5: Dev 2, If 0, Class=Mass Storage, Driver=usb-storage, 480M
       ID 0cf2:6225 ENE Technology, Inc. SD card reader (UB6225)
    |__ Port 8: Dev 3, If 0, Class=Hub, Driver=hub/4p, 480M
       ID 05e3:0608 Genesys Logic, Inc. Hub
       |__ Port 3: Dev 5, If 1, Class=Video, Driver=uvcvideo, 480M
          ID ebla:2761 eMPIA Technology, Inc. EeePC 701 integrated Webcam
       |__ Port 3: Dev 5, If 0, Class=Video, Driver=uvcvideo, 480M
          ID ebla:2761 eMPIA Technology, Inc. EeePC 701 integrated Webcam
       |__ Port 1: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
          ID 0eef:0001 D-WAV Scientific Co., Ltd eGalax TouchScreen
```

<https://forum.odroid.com/viewtopic.php?t=15239#p127773>

xorg error

```
[ 39.523] (II) event14 - eGalax Inc. Touch Touchscreen: is tagged by udev as: Tablet
[ 39.719] (EE) event14 - eGalax Inc. Touch Touchscreen: libinput bug: missing tablet capabilities
[ 39.719] (II) event14 - eGalax Inc. Touch Touchscreen: device is a tablet
[ 39.720] (II) event14 - failed to create input device '/dev/input/event14'.
[ 39.720] (EE) libinput: eGalax Inc. Touch Touchscreen: Failed to create a device for /dev/input/event14
[ 39.720] (EE) PreInit returned 2 for "eGalax Inc. Touch Touchscreen"
```

fix from https://www.embedded-engineer.de/dokuwiki/doku.php?id=start:egalax_touchscreen

```
apt install xserver-xorg-input-evdev
```

```
dpavlin@brokeeee:~$ cat /usr/lib/udev/hwdb.d/61-evdev-local.hwdb
evdev:name:eGalax Inc. Touch Touchscreen*
    EVDEV_ABS_00=::300
    EVDEV_ABS_01=::300

systemd-hwdb update
udevadm trigger /dev/input/eventXX

root@brokeeee:/etc/X11/xorg.conf.d# apt install xserver-xorg-input-evdev

root@brokeeee:/etc/X11/xorg.conf.d# cat evdev-touch.conf
Section "InputClass"
    Identifier "eGalax Inc. Touch Touchscreen"
    MatchUSBID "0eef:0001"
    Driver "evdev"
    # https://www.x.org/releases/X11R7.5/doc/man/man4/evdev.4.html
    Option "InvertX" "true"
EndSection
```

On my touchscreen with touch flex exiting on bottom left, I have to swap X axis

calibration

```
dpavlin@brokeeee:~$ xinput_calibrator --output-type xorg.conf.d
Warning: multiple calibratable devices found, calibrating last one (eGalax Inc. Touch Touchscreen)
        use --device to select another one.
Calibrating EVDEV driver for "eGalax Inc. Touch Touchscreen" id=11
        current calibration values (from XInput): min_x=0, max_x=2047 and min_y=0, max_y=2047

Doing dynamic recalibration:
    Inverting X and/or Y axis...
    Setting calibration data: 1997, 73, 120, 1835
    --> Making the calibration permanent <--
    copy the snippet below into '/etc/X11/xorg.conf.d/99-calibration.conf' (/usr/share/X11/xorg.conf.d)
Section "InputClass"
    Identifier                "calibration"
    MatchProduct              "eGalax Inc. Touch Touchscreen"
    Option "Calibration"      "1997 73 120 1835"
    Option "SwapAxes"         "0"
EndSection
```

userspace driver for newer chip

<https://github.com/twoerner/hdmi-usb-touch>

```
dpavlin@brokeeee:~/hdmi-usb-touch$ git remote -v
origin https://github.com/twoerner/hdmi-usb-touch (fetch)
origin https://github.com/twoerner/hdmi-usb-touch (push)

dpavlin@brokeeee:~/hdmi-usb-touch$ autoreconf -i

dpavlin@brokeeee:~/hdmi-usb-touch$ sudo apt install libudev-dev

dpavlin@brokeeee:~/hdmi-usb-touch$ ./configure
```

