



Navigation

[Main Page](#)
[All pages](#)
[All categories](#)
[Popular pages](#)
[Popular authors](#)
[Popular categories](#)
[Category stats](#)
[Recent changes](#)
[Random page](#)
[Help](#)
[Google Search](#)

Print/export

[Create a book](#)
[Download as PDF](#)
[Printable version](#)

Toolbox

[What links here](#)
[Related changes](#)
[Special pages](#)
[Permanent link](#)
[Browse properties](#)

Page [Discussion](#) [ce](#) [View history](#)

AM335x Touchscreen Driver's Guide

AM335x

[Touchscreen](#)

[Driver's Guide](#)

Translate this page to [cs](#) - [Česky](#)

Google™ Custom Search



AM335x Touchscreen Driver's Guide

Linux PSP

Contents [\[hide\]](#)

- [1 Introduction](#)
- [2 Driver Usage](#)
 - [2.1 Tslib](#)
 - [2.2 Environment variables](#)
 - [2.3 Execution](#)
- [3 Driver Configuration](#)
 - [3.1 Building as Loadable Kernel Module](#)

Introduction

Touchscreen controller on AM335x is an 8 channel general purpose ADC, with support for interleaving Touch Screen conversions for a 4-wire resistive panel. A resistive touchscreen operates by applying a voltage across a resistive network and measuring the change in resistance at a given point on the matrix where the screen is touched by an input (stylus or finger). The change in the resistance ratio marks the location on the touchscreen.

Driver Usage

Tslib

Test the working of touchscreen by using the Tslib utility. Tslib is an abstraction layer for touchscreen panel events, as well as a filter stack for the manipulation of those events. Tslib is generally used on embedded devices to provide a common user space interface to touchscreen functionality.

Environment variables

Make sure you have the following settings right.

- `export TSLIB_FBDEVICE=/dev/fb0`
This is for the Fbdev device node to be used for display.
- `export TSLIB_TSDEVICE=/dev/input/touchscreen0`

Execution

- First run `ts_calibrate` to calibrate the touch screen.
- You can now run `ts_test` application. This application helps in moving a cross-hair pattern around the LCD touchscreen. The pattern moves with your stylus movements. Also there is a draw option supported. Using your stylus you can write/draw on touchscreen.

Driver Configuration

You can enable touchscreen driver as in the kernel as follows.

```
Device Drivers --->
  Input device support --->
    [*] Touchscreens --->
      <*> TI Touchscreen Interface
```

Building as Loadable Kernel Module

- Incase if you want to build the drivers as modules, use `<M>` instead of `<*>` during menuconfig while selecting the drivers (as shown below). For more information on loadable modules refer [Loadable Module HOWTO](#)

```
Device Drivers --->
  Input device support --->
    [*] Touchscreens --->
      <M> TI Touchscreen Interface
```


- This step applies if the driver is built as module
 1. Do "make modules" to build the Touchscreen driver as module. The module should be present in "drivers/input/touchscreen/ti_tscadc.ko".
 2. Load the driver using "ti_tscadc.ko".



Engage in the
TI E2E Community
Ask questions, share knowledge, explore ideas
and help solve problems with fellow engineers

For technical support please
post your questions at
<http://e2e.ti.com>. Please post
only comments about the article
**AM335x Touchscreen Driver's
Guide** here.

Links



ARM Microcontroller MCU	ARM Processor	Digital Media Processor	Digital Signal Processing	Microcontroller MCU	Multi Core Processor
Ultra Low Power DSP	8 bit Microcontroller MCU	16 bit Microcontroller MCU	32 bit Microcontroller MCU		

Categories: [AM335x](#) | [PSP](#) | [Linux](#)

[Leave a Comment](#)

This page was last modified on 22 February 2012, at 06:34.

This page has been accessed 2,878 times.

Content is available under [Creative Commons Attribution-Share Alike 3.0 license](#).

[Privacy policy](#) [About Texas Instruments Embedded Processors Wiki](#) [Disclaimers](#)

