

GStreamer

Overview

The gst-sh-mobile package contains GStreamer plugins that provide accelerated video encode and decode, scale and blend for SH-Mobile.

This library has been primarily developed and tested on the SH-MobileR2R (SH7724) device using the MS7724 development board.

This page also includes information on how to build GStreamer for SH-Mobile.

<http://gstreamer.net/>

Download

gst-sh-mobile-0.10.4.tar.gz

Source

The source archive is available via git at github.com/pedwo/gst-sh-mobile:

```
git clone git://github.com/pedwo/gst-sh-mobile.git
```

Dependencies

Install dependencies: libuiomux, libshveu, libshcodecs, glib2.0, libxml2. For gst-plugins-base you will also need liboil

Cross-compilation

In general, we do not advise that you should cross-compile directly from the command line. Tools such as Scratchbox can provide a simulated SH-Mobile environment, or alternatively tools such as Buildroot or OpenEmbedded provide a better environment for cross-compilation. However, if you do cross-compile directly, below are some useful notes.

Refer to these notes about cross-compiling glib:

- <http://library.gnome.org/devel/glib/unstable/glib-cross-compiling.html>
- http://www.stlinux.com/docs/getting_started-1.0/gtk2_cross_compile.php3
- <http://www.gentoo.org/proj/en/base/embedded/handbook/index.xml?full=1>

```
$ export glib_cv_uscore=no glib_cv_stack_grows=no \  
  glib_cv_stack_grows=no glib_cv_has_inline=yes \  
  glib_cv_has_inline=yes glib_cv_hasinline=yes \  
  glib_cv_sane_realloc=yes glib_cv_va_copy=yes \  
  glib_cv_va_copy=yes glib_cv_va_val_copy=no \  
  glib_cv_rtldglobal_broken=no glib_cv_uscore=no \  
  ac_cv_func_posix_getpwuid_r=yes \  
  ac_cv_func_posix_getgrgid_r=yes \  
  ac_cv_header_pwd_h=yes \  
  ac_cv_func_getpwuid_r=yes \  
  glib_cv_sizeof_gmutex=40
```

```
$ ./configure ...
```

Step 1

- Checkout GStreamer core

```
$ git clone git://gstreamer.freedesktop.org/gstreamer/gstreamer
$ cd gstreamer
$ ./autogen.sh
$ ./configure --enable-maintainer-mode --enable-failing-tests --enable-poisoning ...
```

Output should look like:

```
Configuration
  Version                : 0.10.22.1
  Source code location   : /home/conrad/src/gstreamer/gstreamer
  Prefix                 : /home/conrad/usr-sh3/
  Compiler               : sh3-linux-gcc
  Package name          : GStreamer CVS/prerelease
  Package origin        : Unknown package origin
  Documentation (manuals) : no
  Documentation (API)   : no
  Pipeline XML load/save : yes
  Command-line parser   : yes
  Option parsing in gst_init : yes
  Tracing subsystem     : yes
  Allocation tracing    : yes
  Plugin registry       : yes
  Plugin support        : yes
  Network support       : yes
  Debug                 : yes
  Profiling              : no
  Building examples     : yes
  Building test apps    : yes
  Building tests that fail : yes
```

```
$ make
```

Step 2

You will need liboil. You probably want to explicitly disable some features:

```
$ ./configure --without-x --disable-gnome_vfs --disable-pango
```

License

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