

# How To Install QT-Embedded on Omap3Evm

v.1.1

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## About

This is a compact step by step list which might help you to install QT-Embedded on Mistral's Omap3EVM Board. It assumes that you have a linux-kernel running on your board. (in my case: **Linux OMAP3EVM 2.6.22.18-omap3**). Here I'm working with a NFS Root-File System running on my Linux-Host. However, there shouldn't be any problems with using a JFFS2 File system, MMC or whatever.

*note:*

*if touchscreen-support shall be enabled make sure that the ts-libs are installed correctly.  
For more information have a look at my HowTo 'Install TS-Libraries on Omap3EVM'*

1. Download Qt-Embedded  
(<http://www.qtsoftware.com/downloads/embedded-linux-cpp>)
2. Unpack the archive on host  
**gzip qt-embedded-linux-opensource-src-4.5.2.tar.gz**  
**tar xvf qt-embedded-linux-opensource-src-4.5.2.tar**
3. Adapt 'mkspecs'  
go to /mkspecs/qws/  
copy folder **linux-arm-g++** and rename it to **linux-omap3-g++**  
edit **qmake.conf** so that it looks like that (paths might be differ)

```
#
# qmake configuration for building with arm-linux-g++
#

include(../common/g++.conf)
include(../common/linux.conf)
include(../common/qws.conf)

QMAKE_INCDIR      += /home/administrator/omap3evm_nfs/usr/share/include
QMAKE_LIBDIR      += /home/administrator/omap3evm_nfs/lib

# modifications to g++.conf
QMAKE_CC          = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-gcc
QMAKE_CXX         = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-g++
QMAKE_LINK        = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-g++
QMAKE_LINK_SHLIB  = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-g++

# modifications to linux.conf
QMAKE_AR          = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-ar cqs
QMAKE_OBJCOPY    = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-objcopy
QMAKE_STRIP      = /opt/omap3evm/toolchain/arm-2007q3/bin/arm-none-linux-gnueabi-strip

load(qt_config)
```

note:

QMAKE\_INCDIR and QMAKE\_LIBDIR should be added behind the includes!  
(since they reset QMAKE\_INCDIR and QMAKE\_LIBDIR)

4. run ./configure

```
sudo ./configure -prefix /opt/qt/ -platform /qws/linux-x86-g++ -  
xplatform /qws/linux-omap3-g++ -embedded arm -no-openssl -no-cups -  
qt-mouse-pc -no-qt3support -qt-mouse-tslib -qt-libjpeg -no-phonon -  
no-largefile
```

note:

this should run through without any error messages. Make sure that the tslib functionality test does not fail.

The option "**-plugin-mouse-tslib**" did not work for me. That always resulted in a "ts\_config() directory/file not found" error when starting qt-applications on the target.

5. compile

```
sudo make
```

(took about 3 hours...)

6. copy

```
sudo make install
```

this creates a new directory **/opt/qt**

copy this to **/opt/qt** on the target

7. export the following

```
QWS_MOUSE_PROTO='Tslib:/dev/input/event1'  
TSLIB_CALIBFILE='/etc/pointercal'  
TSLIB_CONFFILE='/etc/ts.conf'  
TSLIB_CONSOLEDEVICE='none'  
TSLIB_FBDEVICE='/dev/fb0'  
TSLIB_PLUGINDIR='/lib/ts'  
TSLIB_TSDEVICE='/dev/input/event1'
```

You can automatically set these environment variables in "**/etc/profile**" so they will be available after each startup.

useful links:

[http://tiexpressdsp.com/index.php/Building\\_Qt](http://tiexpressdsp.com/index.php/Building_Qt)

[http://tiexpressdsp.com/index.php/Qt\\_Tips](http://tiexpressdsp.com/index.php/Qt_Tips)