

# DM8168 DVR RDK QT INSTALLATION GUIDE



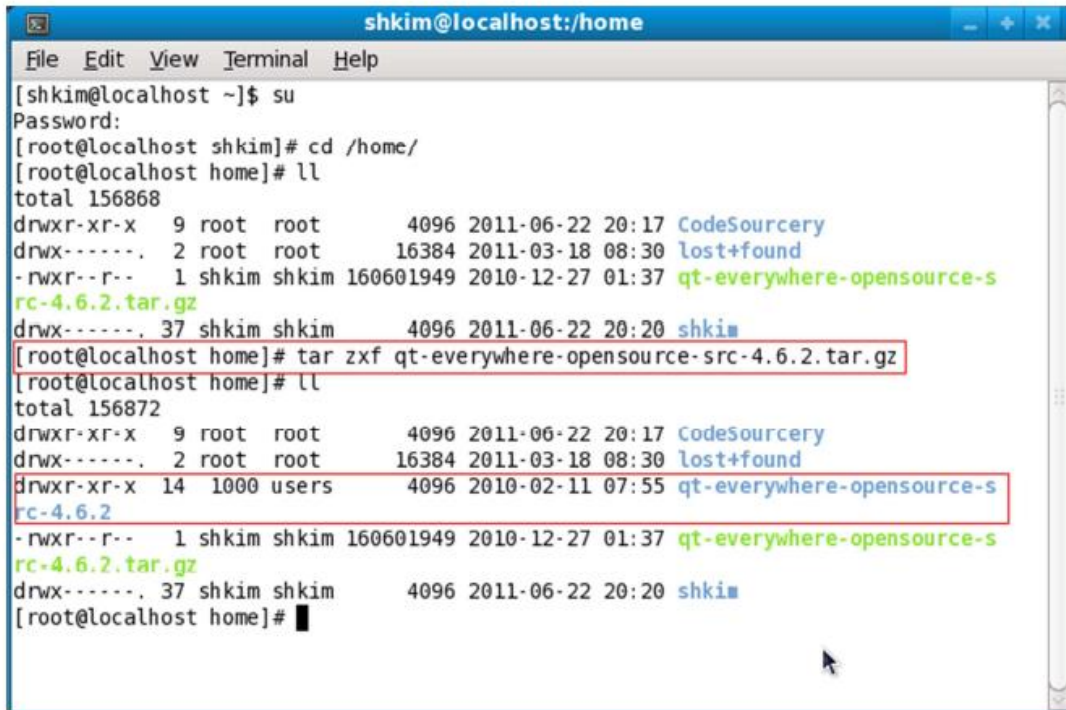
DVR RDK Version: 02.00.00.xx

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## Qt Installation

- Download the Open Source LGPL version of Qt libraries 4.6.2 (qt-everywhere-opensource-src-4.6.2.tar.gz) for embedded Linux on website <ftp://ftp.qt.nokia.com/qt/source/qt-everywhere-opensource-src-4.6.2.zip>
- Assume the installation(download) root directory is \$(ROOT\_DIR)and the source directory is \$( DVR\_RDK\_INSTALL\_DIR)
- Untar \$(ROOT\_DIR)/qt-everywhere-opensource-src-4.6.2.tar.gz as shown below



```
shkim@localhost:/home
File Edit View Terminal Help
[shkim@localhost ~]$ su
Password:
[root@localhost shkim]# cd /home/
[root@localhost home]# ll
total 156868
drwxr-xr-x  9 root  root      4096 2011-06-22 20:17 CodeSourcery
drwx-----  2 root  root     16384 2011-03-18 08:30 lost+found
-rwxr--r--  1 shkim shkim 160601949 2010-12-27 01:37 qt-everywhere-opensource-
rc-4.6.2.tar.gz
drwx-----, 37 shkim shkim      4096 2011-06-22 20:20 shkim
[root@localhost home]# tar zxf qt-everywhere-opensource-src-4.6.2.tar.gz
[root@localhost home]# ll
total 156872
drwxr-xr-x  9 root  root      4096 2011-06-22 20:17 CodeSourcery
drwx-----  2 root  root     16384 2011-03-18 08:30 lost+found
drwxr-xr-x 14 1000 users      4096 2010-02-11 07:55 qt-everywhere-opensource-
rc-4.6.2
-rwxr--r--  1 shkim shkim 160601949 2010-12-27 01:37 qt-everywhere-opensource-
rc-4.6.2.tar.gz
drwx-----, 37 shkim shkim      4096 2011-06-22 20:20 shkim
[root@localhost home]#
```

- Copy "linux-TIarmv7-g++" from  
<DVR\_RDK\_INSTALL\_DIR>/dvr\_rdk/dvrapp/dvrgui/ to \$(ROOT\_DIR)/qt-  
everywhere-opensource-src-4.6.2 as shown below

```
$ cp -r <DVR_RDK_INSTALL_DIR>/dvr_rdk/dvrapp/dvrgui/linux-
TIarmv7-g++ $(ROOT_DIR)/ qt-everywhere-opensource-src-4.6.2/
```

- Copy qmake.conf found in "linux-TIarmv7-g++" to \$(ROOT\_DIR)/qt-everywhere-opensource-src-4.6.2/mkspecs/qws/
- Install Code Sourcery Tool chain as mentioned in DM8168\_DVR\_RDK\_InstallGuide and set the path for the tool chain as below

```
shkim@localhost:/home/qt-everywhere-opensource-src-4.6.2
File Edit View Terminal Help
[shkim@localhost ~]$ su
Password:
[root@localhost shkim]# cd /home/qt-everywhere-opensource-src-4.6.2
[root@localhost qt-everywhere-opensource-src-4.6.2]# echo $PATH
/usr/lib/qt-3.3/bin:/usr/kerberos/sbin:/usr/kerberos/bin:/usr/lib/ccache:/usr/local/bin:/usr/bin:/bin:/usr/local/sbin:/usr/sbin:/sbin:/home/shkim/bin
[root@localhost qt-everywhere-opensource-src-4.6.2]# export PATH=/home/CodeSourcery/bin:$PATH
[root@localhost qt-everywhere-opensource-src-4.6.2]# echo $PATH
/home/CodeSourcery/bin:/usr/lib/qt-3.3/bin:/usr/kerberos/sbin:/usr/kerberos/bin:/usr/lib/ccache:/usr/local/bin:/usr/bin:/bin:/usr/local/sbin:/usr/sbin:/sbin:/home/shkim/bin
[root@localhost qt-everywhere-opensource-src-4.6.2]#
```

- Run ./configure at \$(ROOT\_DIR)/qt-everywhere-opensource-src-4.6.2 with the following options

```
$ ./configure -embedded arm -platform /qws/linux-x86-g++ -
xplatform /qws/linux-TIarmv7-g++ -depths 16,24,32 -little-endian
-no-mmx -no-3dnow -no-sse -no-sse2 -no-glib -no-cups -no-
largefile -no-accessibility -no-openssl -no-gtkstyle -qt-freetype
-qt-mouse-pc -qt-mouse-linuxtp -qt-mouse-linuxinput -plugin-
mouse-linuxtp -plugin-mouse-pc -fast -qt-gfx-transformed -
opensource
```

```
shkim@localhost:/home/qt-everywhere-opensource-src-4.6.2
File Edit View Terminal Help
[shkim@localhost ~]$ su
Password:
[root@localhost shkim]# cd /home/qt-everywhere-opensource-src-4.6.2
[root@localhost qt-everywhere-opensource-src-4.6.2]# echo $PATH
/usr/lib/qt-3.3/bin:/usr/kerberos/sbin:/usr/kerberos/bin:/usr/lib/ccache:/usr/local/bin:/usr/bin:/bin:/usr/local/sbin:/usr/sbin:/sbin:/home/shkim/bin
[root@localhost qt-everywhere-opensource-src-4.6.2]# export PATH=/home/CodeSourceery/bin/:$PATH
[root@localhost qt-everywhere-opensource-src-4.6.2]# echo $PATH
/home/CodeSourceery/bin:/usr/lib/qt-3.3/bin:/usr/kerberos/sbin:/usr/kerberos/bin:/usr/lib/ccache:/usr/local/bin:/usr/bin:/bin:/usr/local/sbin:/usr/sbin:/sbin:/home/shkim/bin
[root@localhost qt-everywhere-opensource-src-4.6.2]# ./configure -embedded arm -platform /qws/linux-x86-g++ -xplatform /qws/linux-TIarmv7-g++ -depths 16,24,32 -little-endian -no-mmx -no-3dnow -no-sse -no-sse2 -no-glib -no-cups -no-largefile -no-accessibility -no-openssl -qt-freetype -fast -qt-gfx-transformed -opensource
```

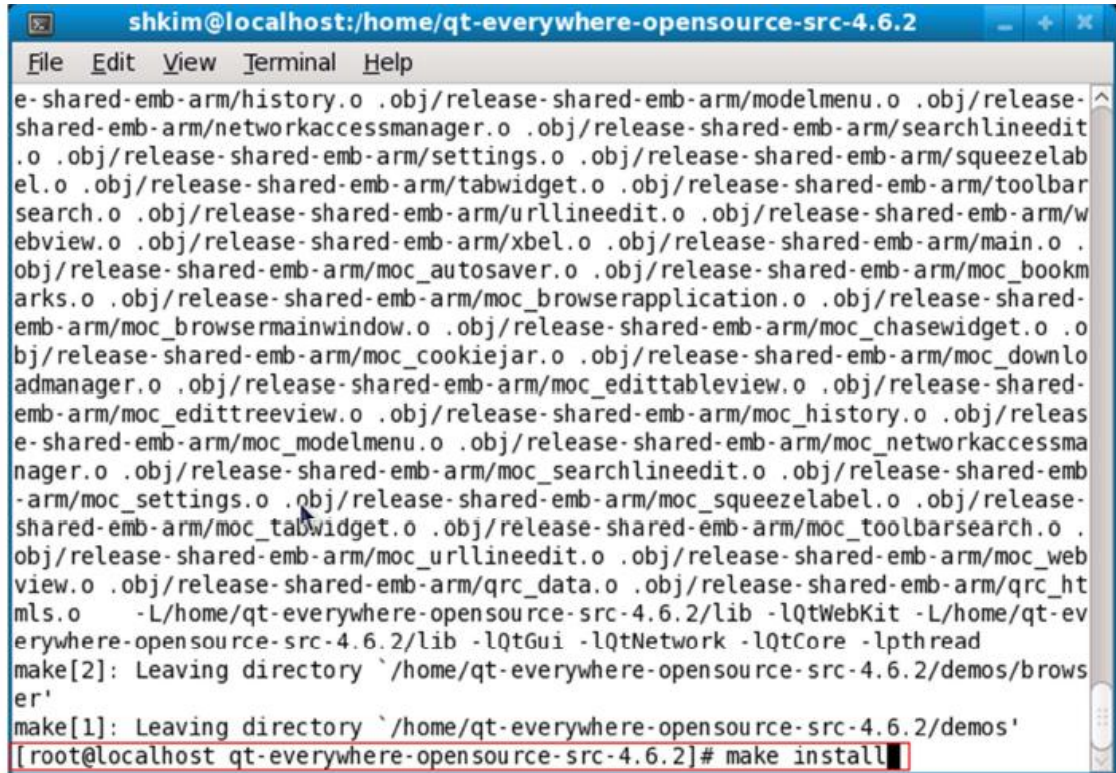
- Run "make"

```
shkim@localhost:/home/qt-everywhere-opensource-src-4.6.2
File Edit View Terminal Help
for /home/qt-everywhere-opensource-src-4.6.2/demos/sub-attaq/sub-attaq.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/affine/affine.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/gradients/gradients.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/browser/browser.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/books/books.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/pathstroke/pathstroke.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/arthurplugin/arthurplugin.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/boxes/boxes.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/qmediaplayer/qmediaplayer.pro (fast)
for /home/qt-everywhere-opensource-src-4.6.2/demos/sqlbrowser/sqlbrowser.pro (fast)

Qt is now configured for building. Just run 'gmake'.
Once everything is built, you must run 'gmake install'.
Qt will be installed into /usr/local/Trolltech/QtEmbedded-4.6.2-arm

To reconfigure, run 'gmake confclean' and 'configure'.
[root@localhost qt-everywhere-opensource-src-4.6.2]# make
```

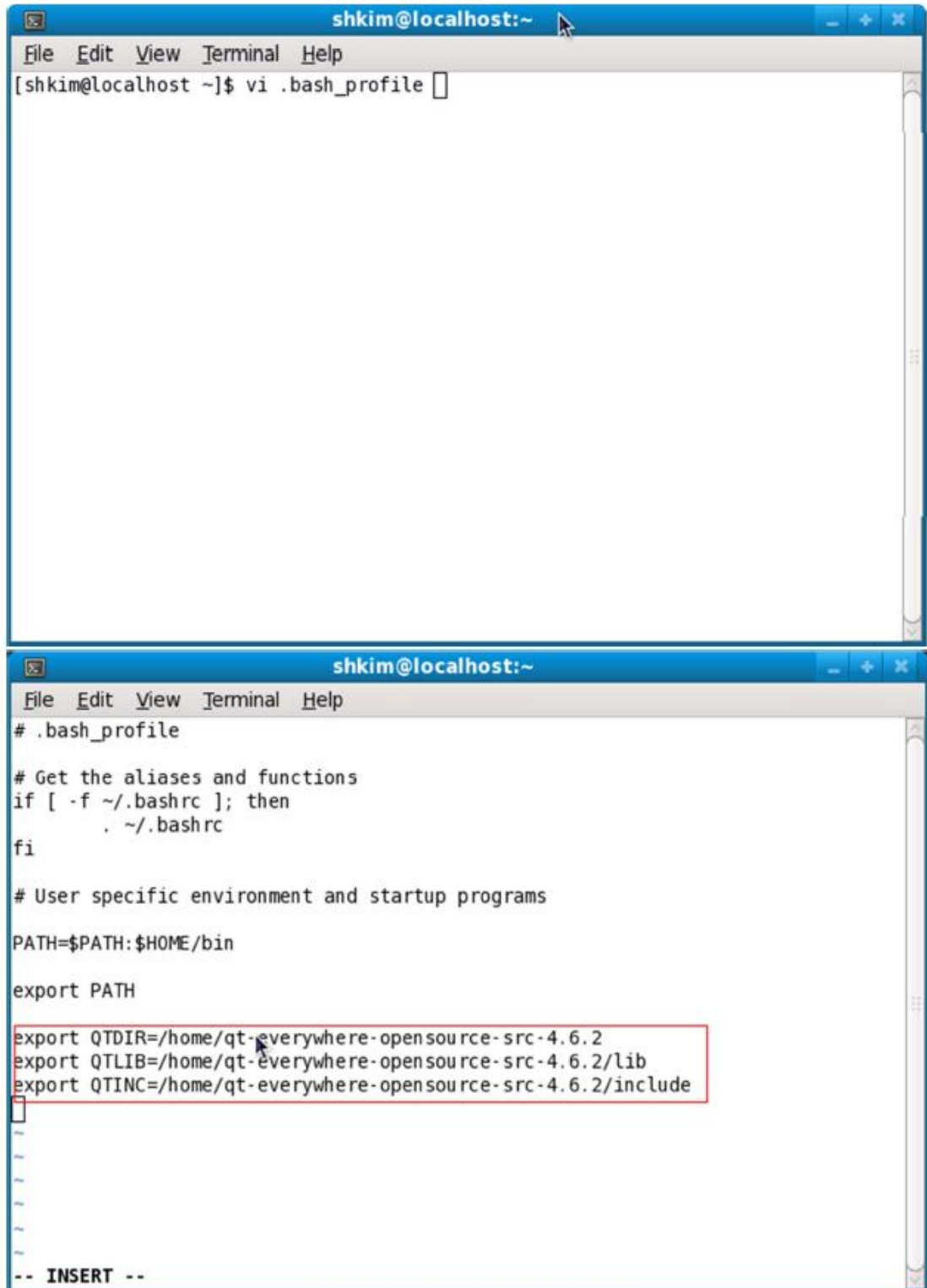
- Run "make install"



```
shkim@localhost:/home/qt-everywhere-opensource-src-4.6.2
File Edit View Terminal Help
e-shared-emb-arm/history.o .obj/release-shared-emb-arm/modelmenu.o .obj/release-
shared-emb-arm/networkaccessmanager.o .obj/release-shared-emb-arm/searchlineedit
.o .obj/release-shared-emb-arm/settings.o .obj/release-shared-emb-arm/squeezelab
el.o .obj/release-shared-emb-arm/tabwidget.o .obj/release-shared-emb-arm/toolbar
search.o .obj/release-shared-emb-arm/urllineedit.o .obj/release-shared-emb-arm/w
ebview.o .obj/release-shared-emb-arm/xbel.o .obj/release-shared-emb-arm/main.o .
obj/release-shared-emb-arm/moc_autosaver.o .obj/release-shared-emb-arm/moc_bookm
arks.o .obj/release-shared-emb-arm/moc_browserapplication.o .obj/release-shared-
emb-arm/moc_browsermainwindow.o .obj/release-shared-emb-arm/moc_chasewidget.o .o
bj/release-shared-emb-arm/moc_cookiejar.o .obj/release-shared-emb-arm/moc_downlo
admanager.o .obj/release-shared-emb-arm/moc_edittableview.o .obj/release-shared-
emb-arm/moc_edittreeview.o .obj/release-shared-emb-arm/moc_history.o .obj/releas
e-shared-emb-arm/moc_modelmenu.o .obj/release-shared-emb-arm/moc_networkaccessma
nager.o .obj/release-shared-emb-arm/moc_searchlineedit.o .obj/release-shared-emb
-arm/moc_settings.o .obj/release-shared-emb-arm/moc_squeezelabel.o .obj/release-
shared-emb-arm/moc_tabwidget.o .obj/release-shared-emb-arm/moc_toolbarsearch.o .
obj/release-shared-emb-arm/moc_urllineedit.o .obj/release-shared-emb-arm/moc_web
view.o .obj/release-shared-emb-arm/qrc_data.o .obj/release-shared-emb-arm/qrc_ht
mls.o -L/home/qt-everywhere-opensource-src-4.6.2/lib -lQtWebKit -L/home/qt-ev
erywhere-opensource-src-4.6.2/lib -lQtGui -lQtNetwork -lQtCore -lpthread
make[2]: Leaving directory `'/home/qt-everywhere-opensource-src-4.6.2/demos/brows
er'
make[1]: Leaving directory `'/home/qt-everywhere-opensource-src-4.6.2/demos'
[root@localhost qt-everywhere-opensource-src-4.6.2]# make install
```

- Add path of QT for on the shell profile (like .bash\_profile) as follows
  - export QTDIR=\$(ROOT\_DIR)
  - export QTLIB=\$(ROOT\_DIR)/lib
  - export QTINC=\$(ROOT\_DIR)/include





The image shows two terminal windows from a user named 'shkim' on a 'localhost' machine. The top window shows the command to open the '.bash\_profile' file in the 'vi' editor. The bottom window shows the contents of the file being edited. The file contains comments and environment variable settings. A red box highlights the Qt-related export statements.

```
shkim@localhost:~
File Edit View Terminal Help
[shkim@localhost ~]$ vi .bash_profile

shkim@localhost:~
File Edit View Terminal Help
# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi

# User specific environment and startup programs

PATH=$PATH:$HOME/bin

export PATH

export QTDIR=/home/qt-everywhere-opensource-src-4.6.2
export QTLIB=/home/qt-everywhere-opensource-src-4.6.2/lib
export QTINC=/home/qt-everywhere-opensource-src-4.6.2/include

-- INSERT --
```