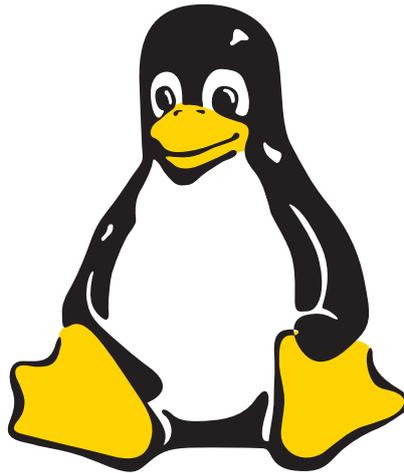


## OE-LITE LINUX – HOW TO START DEVELOPMENT

### - Quick Start Guide Example

*This is an example of how easy it should be to start development with OE-lite Linux on some of the free and open-source board support packages, please visit <http://www.oe-lite.org> (oe-lite.org) for the most current and update Quick Start Guide. The Quick Start Guide is targeting OE-lite Linux work on Ubuntu Linux (10.04 and newer). For other Linux distributions see the GenericDistroQuickStart on [oe-lite.org](http://oe-lite.org).*



#### FIX /BIN/SH SYMLINK

OE-lite does not work with /bin/sh symlinked to dash, it must be bash. If you haven't already done this, then the following should be done:

```
sudo rm /bin/sh && sudo ln -s bash /bin/sh
```

Alternatively, you can do this interactively using "sudo dpkg-reconfigure dash" and answer "no".

#### INSTALL REQUIRED SOFTWARE

Simple aptitude installation ensures you the correct OE-lite Linux tools on your Ubuntu Linux desktop machine.

```
sudo apt-get install -y python-software-properties
```

```
sudo add-apt-repository ppa:git-core/ppa
```

```
sudo add-apt-repository ppa:esben-haabendal/oe-lite
```

```
sudo apt-get update
```

```
sudo apt-get install -y git-core
```

```
sudo apt-get install -y oe-lite
```

#### SETUP OE-LITE LINUX DEVELOPMENT ENVIRONMENT

OE-lite Linux uses git as version control system.

```
oe clone git://gitorious.org/oe-lite/oe-lite.git
```

```
cd oe-lite
```

#### CONFIGURE AND BUILD FOR THE I.MX53 QSB

For building images for the i.MX53 QSB set the desired distro and machine configuration :

```
echo 'MACHINE="imx53qsb"' >> conf/local.conf  
echo 'DISTRO="base"' >> conf/local.conf
```

Build U-Boot, Linux kernel and example rootfs with:

```
oe bake rootfs kernel u-boot-imx
```

If (when) all goes well, you can find all the image files built in tmp/images/

## OE-LITE LINUX IS AND USES OPEN-SOURCE

### - Know the licenses of your platform

With OE-lite Linux the overview of used licenses on the used source code is easy as OE-lite Linux generates an overview list with each build of an image. The list is placed in the root filesystem image at `/bom.txt` and contains information as the example shown below.

PACKAGE	LICENSE	DESCRIPTION
<code>alsa-lib</code>	LGPL-2.1 LGPL-2.0+	Alsa sound library
<code>alsa-utils</code>	GPL-2.0+	ALSA Utilities
<code>amd-gpu-x11-bin-mx51</code>	MIT	GPU driver and apps for x11 on mx51
<code>appliance-watchdog</code>	MIT	<code>appliance-watchdog</code>
<code>automount</code>	LGPL-2.1+	Busybox mdev script, automount of <code>sd*</code> and <code>mmcblk*</code> devices
<code>base-files</code>	GPL-2.0	Miscellaneous files for the base system.
<code>base-hostname</code>	GPL-2.0	Hostname script for the base system.
<code>base-passwd</code>	GPL	OE-lite Linux minimal base <code>passwd/group</code> files
<code>base-version</code>	N/A	Distroversion and build-time file creation.
<code>busybox</code>	GPLv2	BusyBox: The Swiss Army Knife of Embedded Linux
<code>dosfstools</code>	GPLv3	DOS FAT Filesystem Utilities
<code>dropbear</code>	MIT	Dropbear is a lightweight SSH and SCP Implementation
<code>dropbear-host-key</code>	MIT	Pregenerated dropbear rsa host key

..... and so it continues for all used packages .....

The identifiers used, is from The Linux Foundation license list <http://spdx.org/licenses>, where the full license text is also present.