# meta-debian

# Extension to build Debian-based embedded system



#### What is meta-debian?

meta-debian is a set of recipes (metadata) for the poky build system, which allows cross-building Linux images using Debian source packages. By enabling meta-debian, poky fetches required sources from Debian source repository and LTSI kernel repository. meta-debian is independent of OpenEmbedded-core recipes, so OE-Core recipes are still available after meta-debian is enabled. meta-debian is mainly intended to be used for embedded products which needs long-term support.

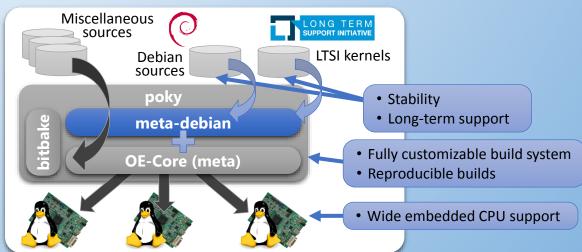
### **Purpose**

The purpose is to provide the following things

- Stability and long-term support
- Wide embedded CPU support
- Fully customizable embedded Linux

## **Development policies**

meta-debian recipes follow Debian's build rules by default, but sometimes customize them for embedded systems if necessary (e.g. remove dependencies). Also they re-use essential patches from OE-Core to support cross-building.



#### **Quick start**

### Setup build tools

| \$<br>git clone git://git.yoctoproject.org/poky.git |  |  |
|---|--|--|
| \$<br>cd poky                                       |  |  |
| \$<br>git checkout daisy                            |  |  |
| \$<br>git clone ¥                                   |  |  |
| https://github.com/meta-debian/meta-debian.git      |  |  |
| \$<br>cd meta-debian                                |  |  |
| \$<br>git checkout daisy                            |  |  |

### **Build tiny Linux image**

| \$ | export TEMPLATECONF=meta-debian/conf   |
|----|--|
| \$ | source /path/to/poky/oe-init-build-env |
| \$ | bitbake core-image-minimal             |

### Run tiny Linux image on QEMU

\$ runqemu qemux86 nographic ¥
bootparams="init=/init root=/dev/sda"

See README in meta-debian for more details.

# **Current state and future goals**

|                | Current           | Future (stable)   |
|----------------|-------------------|-------------------|
| poky version   | 1.6 daisy         | (the latest)      |
| Debian version | 8.0 jessie        | 8.0 jessie        |
| Kernel         | LTSI              | LTSI, RT          |
| Architectures  | x86, ARM, PowerPC | x86, ARM, PowerPC |
| BSPs           | 4 (QEMU)          | over 10           |
| Packages       | 80                | over 200          |

#### **Contact us**

Please send us your feedback. We would like to know about the embedded Linux features that you need and reflect them into our framework.

Yoshitake Kobayashi <u>yoshitake.kobayashi@toshiba.co.jp</u> Kazuhiro Hayashi <u>kazuhiro3.hayashi@toshiba.co.jp</u>