

meta-rz-demo-lvgl

yocto meta layer for lvgl demo
Referenced source: [lv_port_linux_frame_buffer](#)
Some patches will be add to the package to adapt the functionality and user interface for the supported RZ EVK kits

Dependencies

The following meta packages are required:
poky
meta-renesas
meta-openembedded
meta-rz-pmod0-ili9341 [option] add SPI-display plus touch device

Application tested on following boards:

- Renesas RZFive-EVK [rzfive_vlp_v3.0.2]
- Renesas RZG2L-EVK [rzg_bsp_v3.0.1]
- Renesas RZG2UL-EVK [rzg_bsp_v3.0.1]
- Renesas RZG2VL-EVK [rzv_bsp_v3.0.2]

Patches

To contribute to this layer you should email patches to renesas-rz@renesas.com.
Please send .patch files as email attachments, not embedded in the email body.

Table of Contents

- I. Adding the meta-rz-demo-lvgl layer
- II. Usage of the lvgl demo
- III. Misc

I. Adding the meta-rz-demo-lvgl layer

Please add the configuration lines at the end of the related configuration files

```
local.conf

IMAGE_INSTALL_append = " lvgl demo "

bblayers.conf

BBLAYERS += " ${TOPDIR}/../meta-rz-demo-lvgl "
```

II. Usage

```
$ lvgl demo -h

usage: lvgl demo

        --primary, -p run the demo on the primary display connected to LCD (fbdev or weston)
        --secondary, -s run the demo on SPI connected frame buffer display
        --window, -w run the demo in a window instead of full screen (weston required)
        --music, -m run optional Music-demo
        --stress, -t run optional Stress-demo
        --benchmark, -b run optional Benchmark-demo

        --help, -h print usage
```

Note:

lvgl widget demo is the default except --music, --stress and --benchmark options are used.
In case the program will be started without options it tries to use the secondary display first, before switching to the primary one.
Supported color formats are RGB565 and ARGB8888 by auto detection.

III. Misc

A secondary display is supported by the lvgl demo too.
The following are the output device assignments:

EVK	meta-rz-pmod0-ili9341	primary display	secondary display
RZG2L	not used	/dev/fb0	N/A
RZG2L	used	/dev/fb1	/dev/fb0
RZV2L	not used	/dev/fb0	N/A
RZV2L	used	/dev/fb1	/dev/fb0
RZG2UL	not used	N/A	N/A
RZG2UL	used	N/A	/dev/fb0
RZFIVE	not used	N/A	N/A
RZFIVE	used	N/A	/dev/fb0

The lvgl demo supports the following devices for output:

EVK	build	/dev/fb0	/dev/fb1	Weston	Weston window
RZG2L, RZV2L	minimal	YES	YES	N/A	N/A
RZG2L, RZV2L	bsp	YES	YES	N/A	N/A
RZG2L, RZV2L	weston	YES	YES	YES(primary)	YES(primary)
RZG2L, RZV2L	qt	YES	YES	YES(primary)	YES(primary)
RZG2UL, RZVFIVE	minimal	YES	N/A	N/A	N/A
RZG2UL, RZVFIVE	bsp	YES	N/A	N/A	N/A

Note:

It is possible to run the demo on primary and secondary display independently
Touch support is possible for both devices.

Known issues:

In Weston mode moving parts may show pixel errors.
This can not be fixed in this wrapper packet.