

RZ/G Verified Linux Package V2.1.7

R01TU0271EJ0106

Rev. 1.06

Patch application guide

Sep. 30, 2020

Introduction

This document describes the contents of the “diff” files of RZ/G Verified Linux Package V2.1.7 (hereinafter referred to as “VLP v2.1.7”) and instructions to use them.

Please read the “Release Note” of VLP v2.1.7 carefully before using this document.

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1. Release Items

VLP v2.1.7 is delivered by the files listed in **Table 1**. A develop environment of RZ/G Verified Linux Package V2.1.5 (hereinafter referred to as “VLP v2.1.5”) can be changed to that of VLP v2.1.7 by applying the patch files included in diff files without downloading basic packages.

Table 1. RZ/G Verified Linux Package

For VLP v2.1.5 users

File	Explanation
r01tu0271ej0106-rz-g.pdf	This document
v215-to-v217.patch.tar.gz	Diff files of Yocto recipes compared with VLP v2.1.5
v215-to-v217.oss_packages.7z	Diff files of OSS packages compared with VLP v2.1.5

Basic packages

File	Explanation
rzg_bsp_eva_v217.tar.gz (Evaluation version)	Yocto recipe packages
rzg_bsp_pro_v217.tar.gz (Product version)	
rzg_bsp_gecko_v217.tar.gz	Yocto recipe packages for HTML5
oss_pkg_v217.7z.001 (500MB) oss_pkg_v217.7z.006 (500MB)	Open source packages
oss_pkg_v217.7z.002 (500MB) oss_pkg_v217.7z.007 (500MB)	
oss_pkg_v217.7z.003 (500MB) oss_pkg_v217.7z.008 (500MB)	
oss_pkg_v217.7z.004 (500MB) oss_pkg_v217.7z.009 (500MB)	
oss_pkg_v217.7z.005 (500MB) oss_pkg_v217.7z.010 (495MB)	
oss_pkg_gecko_v217.7z.001 (500MB)	Open source packages for HTML5
oss_pkg_gecko_v217.7z.002 (325MB)	
setup_env_script_v217.py	Script for setting up a build environment

Documents

File	Explanation
r01tu0269ej0106-rz-g.pdf	Release Note
r01tu0270ej0106-rz-g.pdf	Component list

2. Patch Application Guide

This section explains how to prepare a clean environment of VLP v2.1.5 and update it to VLP v2.1.7. It is recommended to prepare and use a clean new environment, but if the environment prepared with VLP v2.1.5 are being used, it can also be updated with the steps (2) and (4) below. In this case, it is highly recommended to backup whole environment before updating them.

Copy all files obtained from Renesas into your home directory prior to the steps below.

(1) Make a working directory (user_work), and decompress Yocto recipe package of VLP v2.1.5

Run the commands below. Please replace “type” to “pro” or “eva”. Copy compressed Yocto recipe package files (rzg_bsp_<type>_v215.tar.gz for product version, rzg_bsp_<type>_v215.tar.gz for evaluation version) to current directory prior to this step.

```
$ mkdir ~/user_work
$ tar xvzf ./rzg_bsp_<type>_v215.tar.gz -C user_work
```

Additionally, in case to use HTML5, run the commands below to decompress Yocto recipe package for building Gecko.

```
$ mkdir user_work
$ tar xvzf ./rzg_bsp_gecko_v215.tar.gz -C user_work
```

(2) Apply patch files to Yocto recipes

Run the commands below. Copy the compressed patch file to “user_work” directory prior to this step.

```
$ cd user_work
$ tar xvzf v215-to-v217.patch.tar.gz
$ patch -p1 < v215-to-v217.patch
```

Note) In case to use HTML5 on iWave board for RZ/G1E and RZ/G1C, please apply a patch to the meta-renesas directory.

```
$ cd $WORK/meta-renesas
$ patch -p1 < ../extra/0001-mmngr-iwg22m-iwg23s-reducing-CMA-reserved-for-MMP-\
to.patch
```

(3) Decompress OSS files of VLP v2.1.5 to “build” directory

Copy the compressed Yocto recipe package files (oss_pkg_v215.7z.001 - oss_pkg_v215.7z.010, oss_pkg_gecko_v215.7z.001 - oss_pkg_gecko_v215.7z.002) into the “user_work” directory prior to these steps. All OSS packages will be decompressed at the step marked (*1) and (*2). 7zipped files are not able to decompress individually. All oss_pkg.7z files must be placed at the same directory before running 7z command.

Run the commands below.

```
$ cd user_work
$ mkdir build
$ cd build
$ 7z x ../oss_pkg_v215.7z.001    (*1)
```

Additionally, in case to use HTML5, run the command below to decompress OSS files for building Gecko.

```
$ cd user_work/build
$ 7z x ./oss_pkg_gecko_v215.7z.001 (*2)
```

(4) Add OSS files

Remove old files.

```
$ cd user_work/build/oss_packages
$ rm -rf git2/github.com.ystk.debian-busybox.git \
git2/github.com.ystk.debian-openssl.git
```

Add new OSS files of VLP v2.1.7. Copy the compressed OSS diff file to “user_work” directory and decompress new files.

```
$ cd user_work/build
$ 7z x ../v215-to-v217.oss_packages.7z
```

Note) OSS packages for HTML5 are the same with VLP v2.1.5 in this release, so there is not a diff file for building an image of VLP v2.1.7 including Gecko.

(5) Replace proprietary software

Run the commands below.

```
$ cd user_work/
$ rm -rf ./MMP
$ tar xvf ./rzg_bsp_type_v217.tar.gz MMP
$ rm ./rzg_bsp_type_v217.tar.gz
```

Please replace “type” by “pro” or “eva”. Copy the compressed Yocto recipe package files (rzg_bsp_pro_v217.tar.gz for product version, rzg_bsp_eva_v217.tar.gz for evaluation version) into the working directory prior to this step.

(6) Build new BSP

Now it is ready to build BSP. Please build it according to the Release Note **section 3.1**. Note that the below steps in the section 3.1 of the Release Note is not necessary. These steps overwrite your environment.

(2) Create the working directory, and decompress Yocto recipe package

(6) Decompress OSS files to “build” directory

Note) The source code of the linux kernel is not included in oss_packages.7z. The step (7) of the building procedure obtains the source code from CIP’s Git repository.

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