DRM/KMS: Prerequisites

Hardware: Raspberry Pi 4

CGI Studio has been tested on **Raspberry Pi 4** Board.

CMake

In order to build Candera, the Meta build system CMake needs to be installed with at least version mentioned here.
CMake is able to create the cross compilation make files that can be used with GCC (cross-compile) compiler.

Linux Toolchain (BSP)

- Create an SD card image with Raspberry Pi Imager - Raspberry Pi OS 64 Legacy, 64-bit (Debian Bullseye). Make sure to activate ssh access. This can be done with the Raspberry Pi Imager advanced options (strg+shift+x).
- Start the target
- On Target install the *-dev packages needed for your application plus

```
apt-get -yqq update && \
    apt-get -yqq install libinput-dev libudev-dev libgles2-mesa-dev libdrm-dev libgbm-dev l
```

- If an image with display server is used please make sure to boot to cli.
- On host install a VM / WSL with Ubuntu 20.04 LTS (Focal Fossa)

```
apt-get -yqq update && \
    apt-get -yqq install python3 build-essential crossbuild-essential-armhf crossbuild-esse
```

  Install CMake
  Copy /usr/lib and /usr/include from target SD Card to /opt/raspberry/bullseye/sysroot or /opt/raspberry/bullseye/sysroot64 if you use the 64 bit version.

- Compiler/s used for this release is GCC (GNU 9.4.0).

> SD Card image, SDK and cross-compiler/s are not part of the delivery and have to be provided by the customer.

Hardware: iMX8QM

CGI Studio has been tested on Toradex Apalis **iMX8QM** Board.

CMake

In order to build Candera, the Meta build system CMake needs to be installed with at least version mentioned here.
CMake is able to create the cross compilation make files that can be used with GCC (cross-compile) compiler.

Linux Toolchain (BSP)

- Yocto 6.6.0 built at Candera according to Toradex manuals.
- Image and SDK were prepared by the Candera.
- The GCC compiler is not part of the delivery. It is contained in the SDK that has to be provided by the customer.
- Compiler/s used for this release is GCC (GNU 11.4.0).

> SD Card image, SDK and cross-compiler/s are not part of the delivery and have to be provided by the customer.

Hardware: R-Car E3

CGI Studio has been tested on **R-Car E3** System Evaluation Board.

CMake

In order to build Candera, the Meta build system CMake needs to be installed with at least version mentioned here.
CMake is able to create the cross compilation make files that can be used with GCC (cross-compile) compiler.

Linux Toolchain (BSP)

- The SDK used for this release is based on Yocto Poky 2.4.3.
- SD card image and SDK were prepared by according to the RCar-E3 user guide.
- The GCC compiler is not part of the delivery. It is contained in the SDK that has to be provided by the customer.
  Compiler/s used for this release is
- GCC (GNU 7.3.0)

>

> SD Card image, SDK and cross-compiler/s are not part of the delivery and have to be provided by the customer.

Hardware: R-Car M3N

CGI Studio has been tested on **R-Car M3N** Customer Board.

CMake

In order to build Candera, the Meta build system CMake needs to be installed with at least version mentioned here.
CMake is able to create the cross compilation make files that can be used with GCC (cross-compile) compiler.

Linux Toolchain (BSP)

- Yocto Poky 3.1.11 provided by the customer was used to test this release .
- Image and SDK were prepared by the customer.
- The GCC compiler is not part of the delivery. It is contained in the SDK that has to be provided by the customer.
- Compiler/s used for this release is GCC (GNU 9.3.0).

> SD Card image, SDK and cross-compiler/s are not part of the delivery and have to be provided by the customer.

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