

Step 1: Download the latest SDK from the following link: <https://www.ti.com/tool/PROCESSOR-SDK-J721E?keyMatch=&tisearch=search-everything&usecase=partmatches>

Step 2: Run the bin file and download the SDK. Next, navigate to the SDK “cd <sdk_dir>/ti-processor-sdk-linux-j7-evm-08_02_00_03”

Step 3: Build the Kernel because GPU driver needs it and run the command “make linux”

Step 4: Create a SD card using the following command “sudo ./bin/mksdboot.sh --device /dev/<sdd> --sdk /<sdk_dir>/ti-processor-sdk-linux-j7-evm-08_02_00_03” (Replace sdd with your entry). Also, leave the SD card plugged into your machine.

Step 5: Go to the following directory “<sdk_dir>/ti-processor-sdk-linux-j7-evm-08_02_00_03/board-support/extra-drivers/”

Step 6: Run “git clone <https://git.ti.com/git/graphics/ti-img-rogue-driver.git>” and git checkout “linuxws/dunfell/k5.10/1.15.6133109”

Step 7: Build the driver using the following commands:

1. export PATH=<sdk_dir>/ti-processor-sdk-linux-j7-evm-08_02_00_03/linux-devkit/sysroots/x86_64-arago-linux/usr/bin:\$PATH
2. export CROSS_COMPILE=aarch64-none-linux-gnu-
3. export SYSROOT=/media/\${USER}/rootfs/ (SD card that was created in step 4)
4. make ARCH=arm64 KERNELDIR=<sdk_dir>/ti-processor-sdk-linux-j7-evm-08_02_00_03/board-support/linux-5.10.100+gitAUTOINC+7a7a3af903-g7a7a3af903 RGX_BVNC="22.104.208.318" BUILD=release PVR_BUILD_DIR=j721e_linux WINDOW_SYSTEM=wayland

Step 8: Copy the KM module to SD card “sudo cp <sdk_dir>/ti-processor-sdk-linux-j7-evm-08_02_00_03/board-support/extra-drivers/ti-img-rogue-driver/binary_j721e_linux_wayland_release/target_aarch64/kbuild/pvrsrvkm.ko /media/\${USER}/rootfs/lib/modules/5.10.100-g7a7a3af903/extra/”

Step 9: Run “git clone <https://git.ti.com/git/graphics/ti-img-rogue-umlibs.git> gpu_umlibs” command

Step 10: Go into the gpu_umlibs directory and run git checkout “linuxws/dunfell/k5.10/1.15.6133109”

Step 11: Go to the directory “gpu_umlibs/targetfs/j721e_linux/wayland/release” and copy all the contents to SD card (sudo cp -r * /media/\${USER}/rootfs/)

Note: Do not run the pvruntime that comes with filesystem because it is specific for SGX. Please download the latest version from IMG website: <https://developer.imaginationtech.com/pvruntime/>