* Flash SD card with Isaac-Ros Image
* Change workspaces/isaac\_ros-dev/ros\_ws/src/isaac\_ros\_common/scripts/.isaac\_ros\_commm-config to:

CONFIG\_IMAGE\_KEY=ros2\_humble.mine

CONFIG\_DOCKER\_SEARCH\_DIRS=(workspaces/isaac\_ros-dev/ros\_ws/docker)

* Create workspaces/isaac\_ros-dev/ros\_ws/docker/my\_requirements.txt file and workspaces/isaac\_ros-dev/ros\_ws/docker/Dockerfile.mine files:
  + my\_requirements.txt:

nano

spidev

etc…

* + Dockerfile.mine:

# Dockerfile for setting up environment (i.e. installing necessary python packages

ARG BASE\_IMAGE

FROM ${BASE\_IMAGE}

# Copy requirements file

COPY my\_requirements.txt ./

# Install necessary packages:

RUN pip3 install --no-cache-dir -r my\_requirements.txt

# Some commands to get the image to build properly

# https://github.com/NVIDIA-ISAAC-ROS/isaac\_ros\_common/issues/50

RUN wget -O - https://apt.kitware.com/keys/kitware-archive-latest.asc 2>/dev/null | gpg --dearmor - | tee /usr/share/keyrings/kitware-archive-keyring.gpg >/dev/null \

&& echo 'deb [signed-by=/usr/share/keyrings/kitware-archive-keyring.gpg] https://apt.kitware.com/ubuntu/ focal main' | tee /etc/apt/sources.list.d/kitware.list >/dev/null

* Copy ColconIgnore files to all packages we don’t care about
* Call bash run\_dev.sh to start docker container
* Call build colcon to build ros packages

Setting up SPI

* In opt/nvidia/io-config:
* Call sudo python3 io-config.py
  + Select options to activate spi1
* Verify by calling sudo python3 io-config-by-pins.py
* Call sudo modprobe spidev