ROI RPi400

Downloaded May 2021 Raspberry PI OS image
Flashed to 128GB sd card
Boot
Tick use English language Next
New password Next
Set Up Screen tick this screen shows a black border Next
Select wifi network
Update software Skip
Setup Complete Restart
Raspberry > Preferences > Raspberry Pi Configuration> Interfaces enable SSH and VNC
In terminal
sudo apt-get update
sudo apt-get full-upgrade
sudo reboot
python3 -V shows Python 3.7.3
mkdir Developer
cd Developer
python3 -m venv rp373
source rp373/bin/activate
which python shows python in rp373 path
sudo apt install libffi-dev
sudo pip install cffi
pip install jupyterlab
jupyter lab - - notebook-dir=~/Developer
File Shutdown Shutdown
jupyter notebook --generate-config
jupyter notebook password
sudo apt-get install libatlas-base-dev
sudo apt-get install liblzma-dev
sudo apt-get install gfortran
sudo apt-get install libjpeg-dev
pip install sympy pandas plotly bokeh scipy seaborn statsmodels scikit-learn

sudo apt-get install octave
sudo apt-get install gnuplot

sudo apt-get install scilab

```
sudo apt install r-base
R
install.packages('IRkernel')
yes
yes
IRkernel::installspec()
quit()

From julialang.org/downloads downloaded 32bit ARMv7 hardfloat of v1.6.1
Unzipped tar to /home/pi/julia
ln -s /home/pi/julia/julia-1.6.1/bin/julia /home/pi/Developer/rp373/bin/julia
julia
using Pkg
Pkg.add("IJulia")
exit()

pip install octave-kernel

pip install scilab-kernel

sudo apt install code

From nodejs.org downloaded node v16.4.2 armv7
Extracted to /home/pi/node
ln -s /home/pi/node/node16.4.2/bin/node /home/pi/Developer/rp373/bin/
node
jupyter lab build

pip install ipywidgets
Installed Ipywidgets jupyter notebook extension enables sliders etc

pip install ipympl
pip install matplotlib==3.3.1
Installed jupyter-matplotlib extension enables matplotlib animation
```