GPIB on Raspberry Pi

1. Open the Raspi Desktop. Install Linux Gpib und Raspi Gpib. (Version 4.3.3 with Patch 4.3.0 are installed.)

https://github.com/elektronomikon/raspi gpib driver

https://sourceforge.net/projects/linux-gpib/files/

2. Change the gpib_config und gpib.conf files.

- >>> sudo nano /etc/gpib.conf (content in file gpib.config.txt)
- >>> sudo nano /etc/init.d/gpib_config (content in file gpib_config.txt)
- >>> sudo cp /etc/gpib.conf /usr/local/etc/gpib.conf
- >>> sudo modprobe gpib_common
- >>> sudo modprobe raspi_gpib
- >>> sudo ldconfig
- >>> sudo gpib_config

3. use ibterm and ibtest to send GPIB commands and get the results. GPIB address of keithley 2000 is set as 19.

>>> ibterm -d 19 -N (Enter)
Enter
"Keithley"
>>> ibtest
d
19
W
*IDN?
R
100
"Keithley"

4. After restarting the system, the following must be done each time to connect with GPIB.

- >>> sudo modprobe gpib_common
- >>> sudo modprobe raspi_gpib
- >>> sudo ldconfig
- >>> sudo gpib_config