

D-tacq DAQ

1. Connection Procedure

- (a) Connect the ACQ2106_372 (master UUT) with network switch (slow), function generator and trigger source.
- (b) Connect the ACQ2106_373 (slave UUT) with same network switch, and function generator or signal source.
- (c) Connect the SYNC OUT of ACQ2106_372 with SYNC IN ACQ2106_373.
- (d) Connect the host PC at same network switch.

2. IP allocation:

Use PuTTY (or any other open source software to get or allocate the IP you want) for device IP configuration or identify the allocated IP.

Right now the set static IP for

ACQ2106_372

192.168.0.116

ACQ2106_373

192.168.01.117

If connection established you will see the embedded web page like this,

The screenshot shows a web browser window with the URL 192.168.0.117/d-tacq/#id. The page has a navigation bar with links for Home, System, Firmware, FPGA, Temperature, Power, Status, Top, Interrupts, acq400.0, acq400.1, acq400.2, and adma0. Below the navigation bar, there are two main sections: CARRIER and MODULES.

CARRIER

SITE	MANUFACTURER	MODEL	PART	SERIAL
0	D-TACQ Solutions	acq2106	acq2106	CE4168373

build details: root@pi-009:~# Fri Jan 27 14:26:12 UTC 2023
eth0 macaddr: 00:21:54:13:01:75 eth0 ipaddr: 192.168.0.117
eth1 macaddr: 00:21:54:23:01:75 eth1 ipaddr:

MODULES

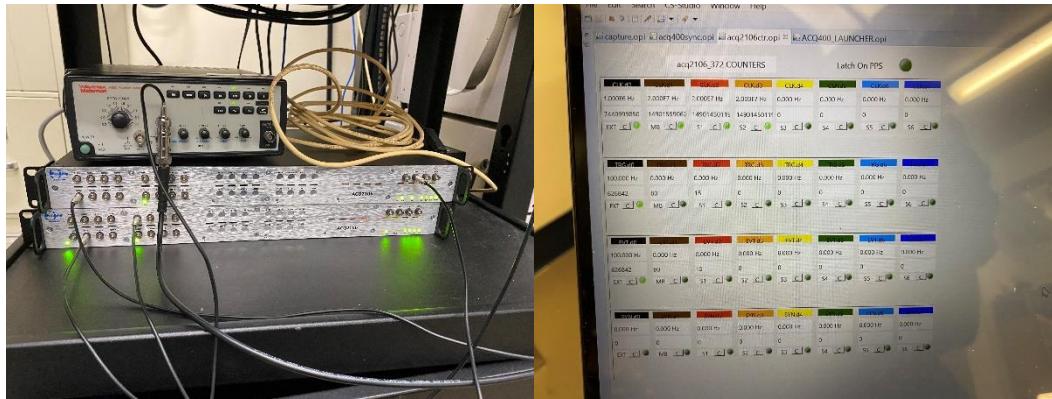
SITE	MANUFACTURER	MODEL	PART	SERIAL
1	D-TACQ Solutions	ACQ482ELF	ACQ482ELF-16-4V-H N=8 M=88	E48210181
2	D-TACQ Solutions	ACQ482ELF	ACQ482ELF-16-4V-H N=8 M=88	E48211181



3. Capture the shot using Control System Studio (CS-Studio):

Testing of DAQ with GUI called ACQ400CSS CS-Studio (Open source).

The link1 [GitHub - D-TACQ/ACQ400CSS: cs-studio OPI set for ACQ400 series DAQ Appliances](#)
Follow the quick start note link2 [ACQ400CSS/acq1001_acq430_quickstart.pdf at master · D-TACQ/ACQ400CSS · GitHub](#)



DAQ Trigger connection only

CS-Studio control

This testing will make sure that DAQ is on network and following the command you are giving. Please also see the FAT report you have.

4. Capture with HAPI (Host-API)

HAPI is programming interface provided by d-tacq that allow users to communicate with and control the ACQ2106 DAQ. It provides a set of functions and commands that enable users to perform various tasks, such as data acquisition, configuration, and control of the ACQ400 system. It supports various programming languages, including C/C++, Python, and LabVIEW. Follow the link to understand the HAPI

Link3 [GitHub - D-TACQ/acq400_hapi: Host App Python Interface : remote control connection layer via tcp/ip](#)

5. HAPI might needed for LabVIEW setup.