

# ACQ1001Q+ACQ430-8-LFP

Quickstart: pgm 20161005

8 channel, 24 bit ADC  
NEW Front panel with  
inputs on LEMO-00 (SPL)

Optional External TRG (TTL)  
One shot or repeating trigger



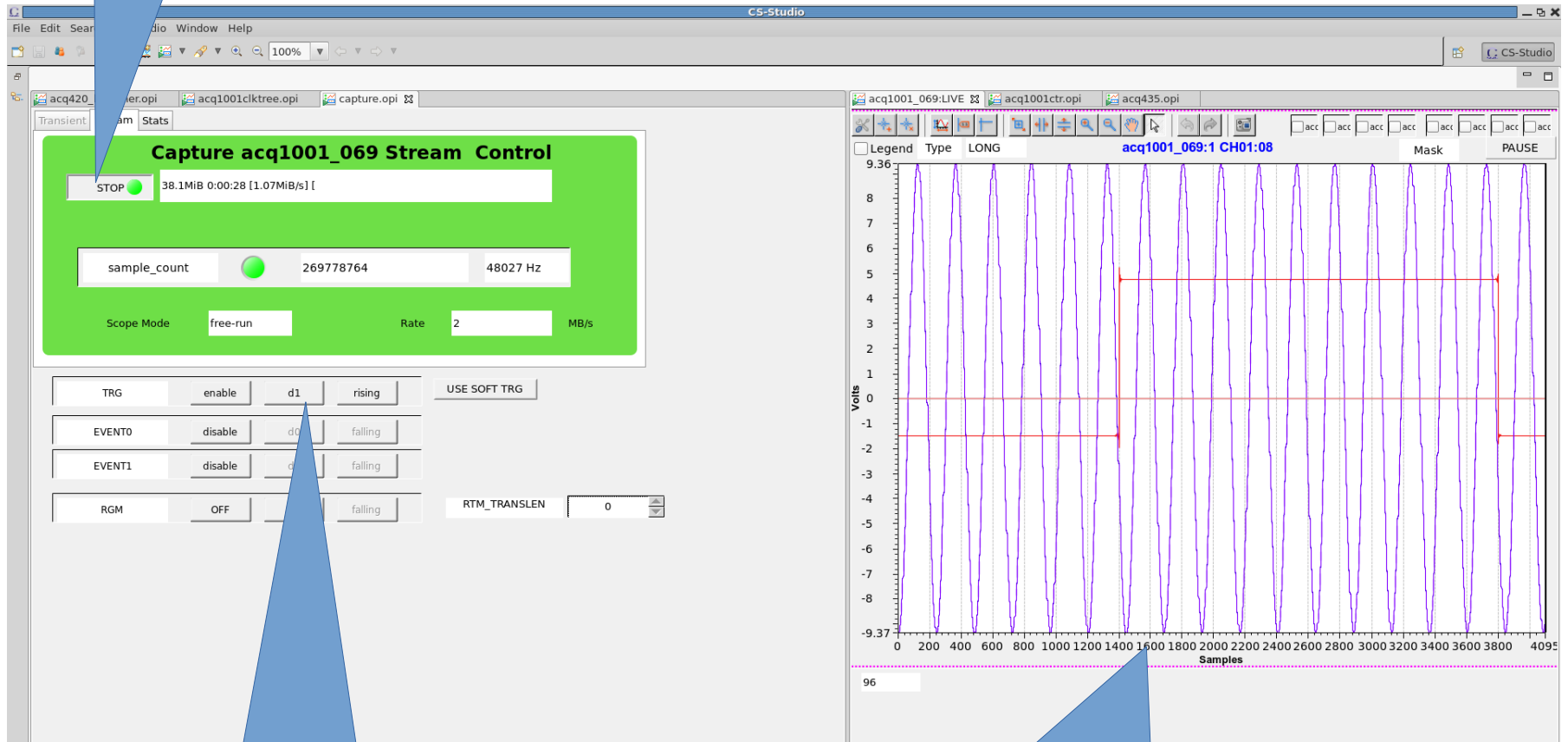
Optional External CLK  
(TTL, 2MHz .. 32MHz)  
delta-sigma modulator clock  
 $F_s = F_{clk} / 512$  (or 256)

# DAQ Appliance, turnkey boot

- Default Ethernet : dhcp
- Recommend: connect serial console on usb.
  - ... look for the password on printed sheet with shipment ..
- Use cs-studio OPI for control and viz
  - <https://github.com/petermilne/ACQ400CSS>
  - ... always run the launcher to start..
- Boot script /mnt/local/rc.user : defaults sample rate  
INTERNAL CLOCK, 48kHz
- Example for external clock provided, uncomment in rc.user.
- Please refer to 4GUG (briefly) :
  - <http://www.d-tacq.com/resources/d-tacq-4G-acq4xx-UserGuide-r13.pdf>

# Free-running Capture

Press "Start"

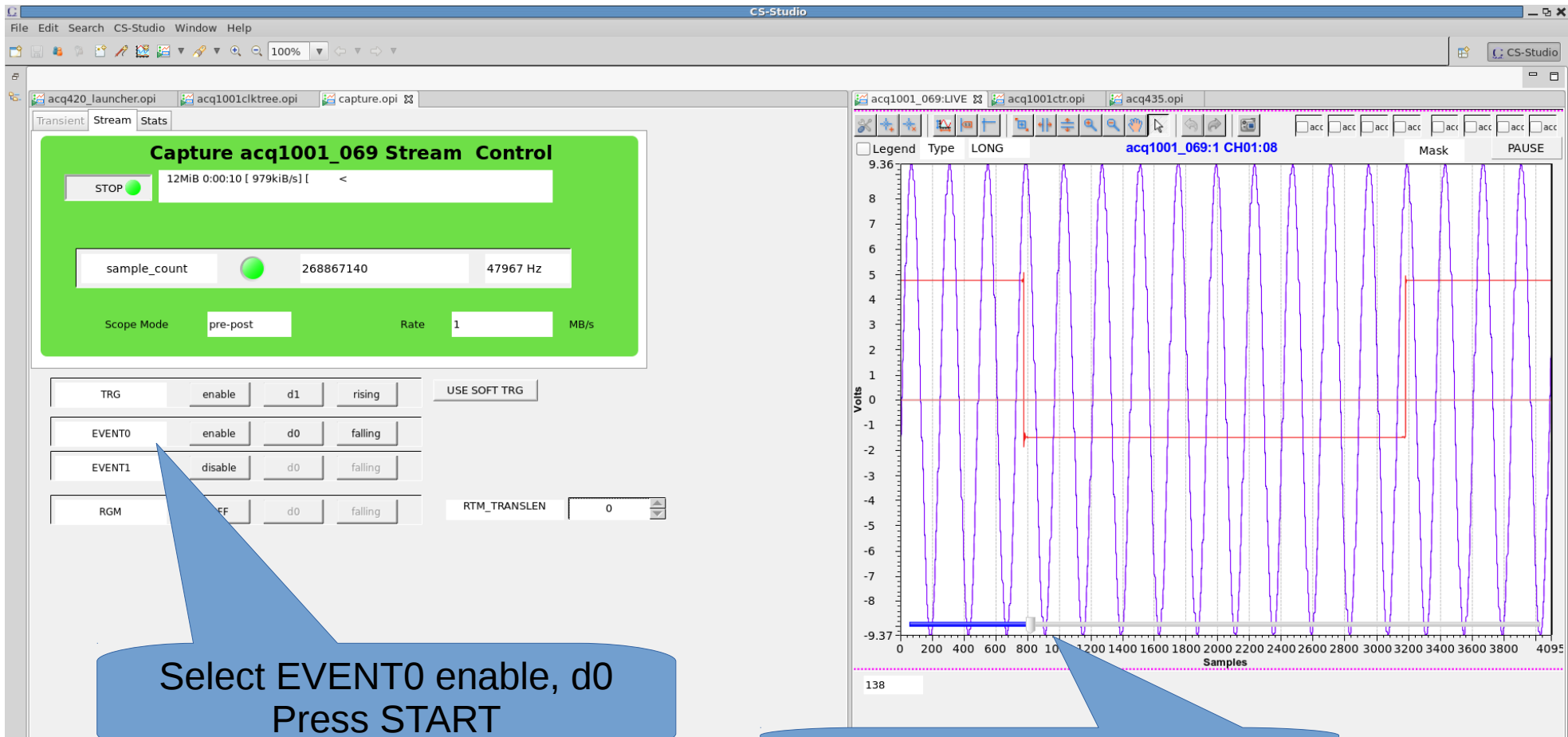


Soft Trigger default (d1)

Live Waveform, unsynchronized

# Live Scope, variable delay

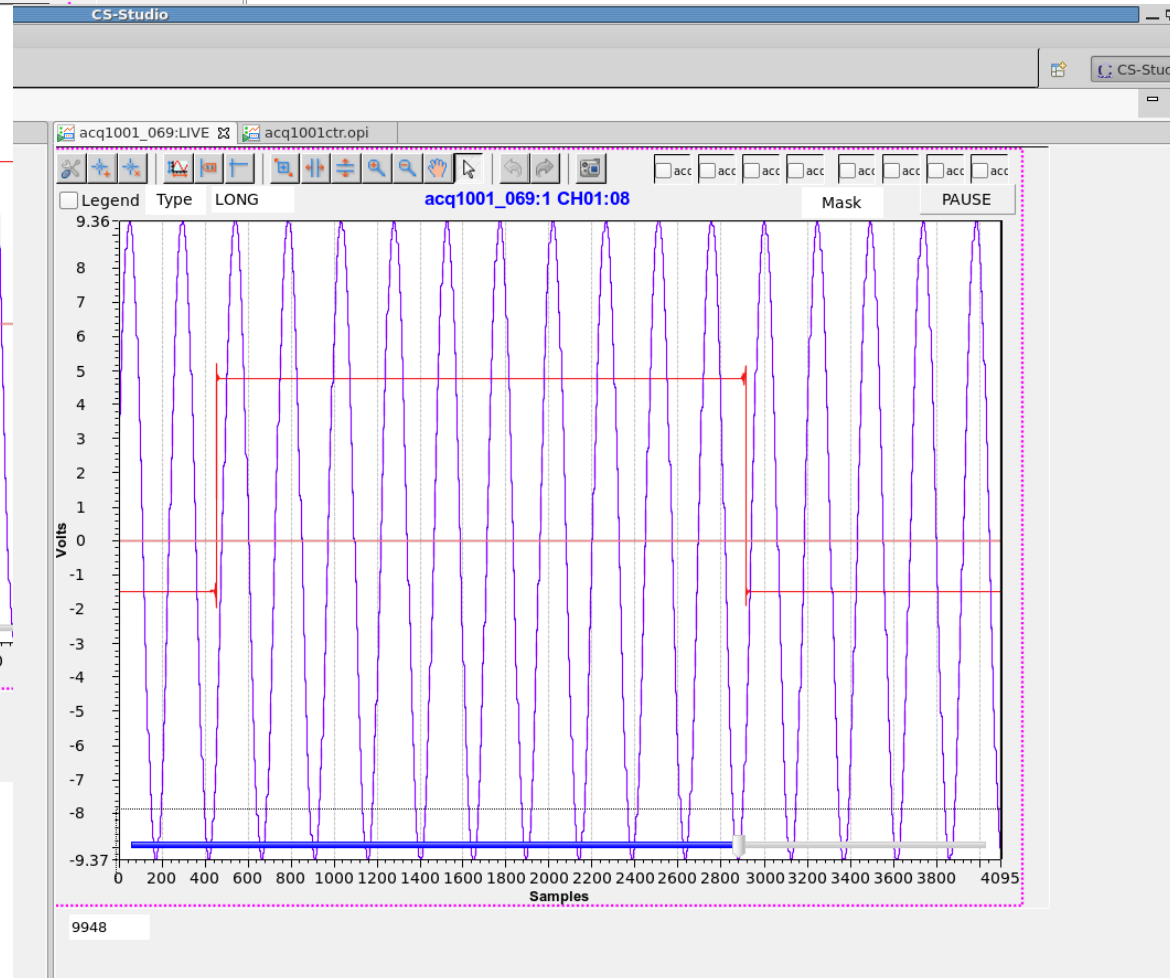
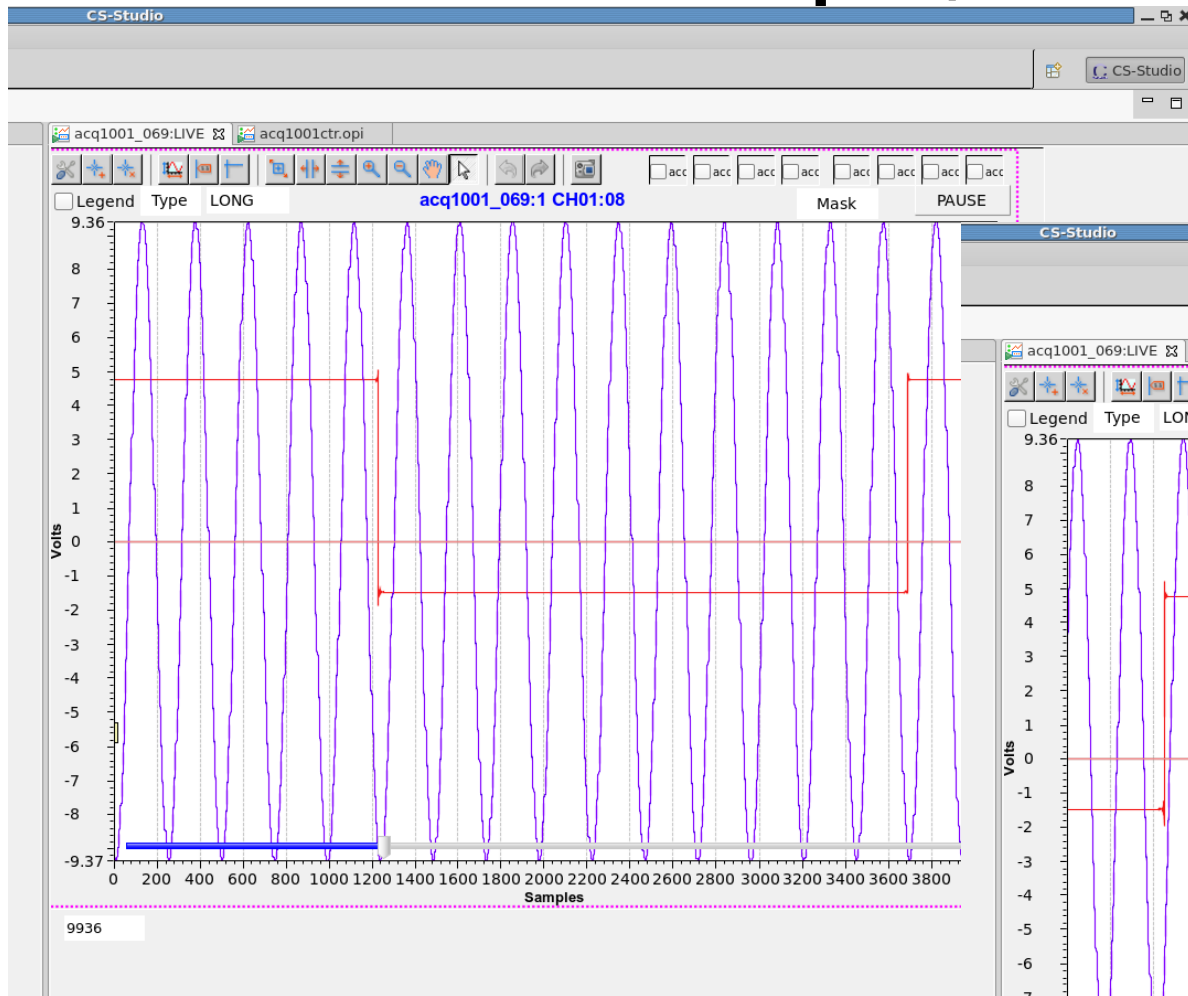
Stop previous capture,  
connect up TRG on front panel



Select EVENT0 enable, d0  
Press START

Live plot, variable delay

# Live Scope, Variable Delay



# Boot Customization Detail

- /mnt/local/rc.user
- comment out lines for INT or EXT CLK.

```
acq1001_069> cat /mnt/local/rc.user
cp /usr/local/CARE/acq480_streamd.0.conf /etc/sysconfig/acq400_streamd.0.conf

# CLOCKING. Internal clock, 48kHz SR
/mnt/local/acq1001\+acq430.init 48000
# or EXT Clock, 12.5MHz => 25kHz SR
#/mnt/local/set-acq430-external-clock
```

# Webpage diagnostics

acq1001\_069 - Google Chrome

Agilent 33210A\_2 (M x) acq1001\_069 x

acq1001\_069/d-tacq/#id

Apps D-TACQ Solutions Top 10 Mistakes in Live Wind Power Other bookmarks

Home System Firmware FPGA Temperature Power Top Interrupts acq400.0 acq400.1 acq400.1.atd

```
CARRIER
SITE           MANUFACTURER      MODEL              PART              SERIAL
0             D-TACQ Solutions  acq1001           dtb.d/acq1001    CF4010069
-----
build detail: root@neon R1005 Wed Sep 28 14:51:33 BST 2016
eth0 macaddr: 00:21:54:12:00:45  eth0 ipaddr: 10.12.196.202
eth1 macaddr:   eth1 ipaddr:
-----

MODULES
SITE           MANUFACTURER      MODEL              PART              SERIAL
1             D-TACQ Solutions  ACQ430FMC         ACQ430FMC-8-LFP N=8 M=03  F43010017
```

acq1001\_069 Fri Oct 7 10:33:35 UTC 2016  Refresh? Done

# Power spectrum display included..

