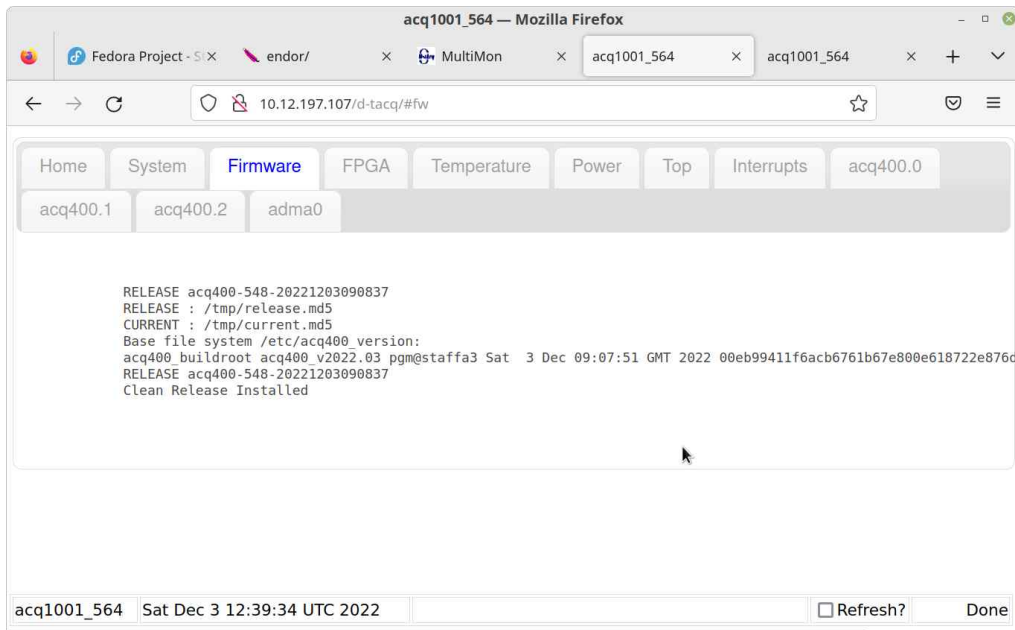


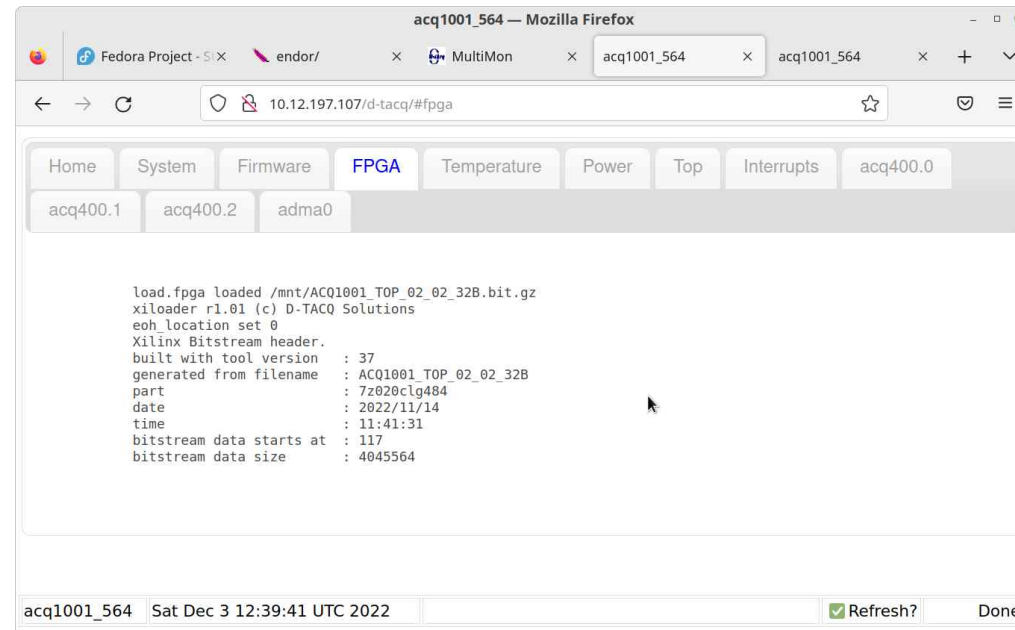
64 CH Scope, 50Hz trigger



```
acq1001_564 — Mozilla Firefox
Fedora Project - S x endor/ MultiMon acq1001_564 acq1001_564
10.12.197.107/d-tacq/#fw
Home System Firmware FPGA Temperature Power Top Interrupts acq400.0
acq400.1 acq400.2 adma0
RELEASE acq400-548-20221203090837
RELEASE : /tmp/release.md5
CURRENT : /tmp/current.md5
Base file system /etc/acq400_version:
acq400_buildroot acq400_v2022.03 pgm@staffa3 Sat 3 Dec 09:07:51 GMT 2022 00eb99411f6acb6761b67e800e618722e876d
RELEASE acq400-548-20221203090837
Clean Release Installed
acq1001_564 Sat Dec 3 12:39:34 UTC 2022 Refresh? Done
```

Enable judgement on EPICS:
/mnt/local/sysconfig/epics.sh:

```
judgement() {
export SIZE=128
export IOC_PREINIT=./scripts/load.judgement
export acq400_Judgement_FIRST_SAM=1
export acq400JudgementImpl_VERBOSE=0
export acq400JudgementImpl_CBCUTOFF=64
}
judgement
```



```
acq1001_564 — Mozilla Firefox
Fedora Project - S x endor/ MultiMon acq1001_564 acq1001_564
10.12.197.107/d-tacq/#fpga
Home System Firmware FPGA Temperature Power Top Interrupts acq400.0
acq400.1 acq400.2 adma0
load.fpga loaded /mnt/ACQ1001_TOP_02_02_32B.bit.gz
xiloader r1.01 (c) D-TACQ Solutions
eoh_location set 0
Xilinx Bitstream header.
built with tool version : 37
generated from filename : ACQ1001_TOP_02_02_32B
part : 7z020c1g484
date : 2022/11/14
time : 11:41:31
bitstream data starts at : 117
bitstream data size : 4045564
acq1001_564 Sat Dec 3 12:39:41 UTC 2022 Refresh? Done
```

Configure Burst Mode:
/mnt/local/rc.user

```
/usr/local/epics/scripts/set_burst_mode 128 1
```

Operation

The screenshot displays the CS-Studio software interface with several key components:

- Control Panel (Top Left):** Shows acquisition status for 'acq1001_564'. It includes a 'STOP' button, a progress bar, and a 'RUN' button. Below this, it displays 'sample_count' (8441) and '50 Hz' update rate. A table shows 'Scope Mode' (free-run), 'RunTime' (169), 'Samples' (1079936), 'Rate' (2 MB/s), and 'Live Wf Rate' (50.000 Hz).
- Trigger Settings (Middle Left):** Includes 'Aggregator Sites' (1,2), 'Sample Size' (256), and various trigger options like 'TRG enable', 'EVENT0 disable', and 'RGM RTM d0 rising'.
- Waveform Plot (Top Right):** A plot titled '8 CH plot, FG Burst' showing a red sine wave. The y-axis is 'Volts' (-1 to 1) and the x-axis is 'Samples' (0 to 127).
- Pass/Fail Mask (Middle Left):** A 'judgement.opi' window showing a 'CH FAIL' indicator and a '5%' mask level. It includes a 'CH32' indicator and a 'CH01' indicator.
- Per Channel Window (Bottom Left):** Two zoomed-in waveform plots. The top one is labeled 'CH01, positive half' and the bottom one is labeled 'CH17, negative half'. Both plots show 'Primary Y Axis (V)' vs 'Primary X Axis (0)'. The top plot shows a positive sine wave, and the bottom plot shows a negative sine wave.
- Statistics Table (Bottom Right):** A table showing statistics for 20 channels. The table is organized into three groups of four channels each.

Channel	Min	Max	Mean	RMS
01	0.727	0.994	0.902	0.906
02	-0.995	0.995	-0.000	0.592
03	-0.996	0.995	-0.001	0.592
04	-0.996	0.994	-0.001	0.592
09	-0.996	0.994	-0.002	0.592
10	-0.996	0.995	-0.000	0.592
11	-0.995	0.996	0.000	0.592
12	-0.998	0.994	-0.002	0.593
17	-0.996	-0.635	-0.893	0.899
18	-0.995	0.995	-0.001	0.592
19	-0.996	0.995	-0.001	0.592
20	-0.996	0.995	-0.001	0.592

Pass/Fail Mask

50Hz Trigger,
50Hz update

8 CH plot,
FG Burst

Per Channel
Window for
Mask and Stats

CH01,
positive half

CH17,
negative half