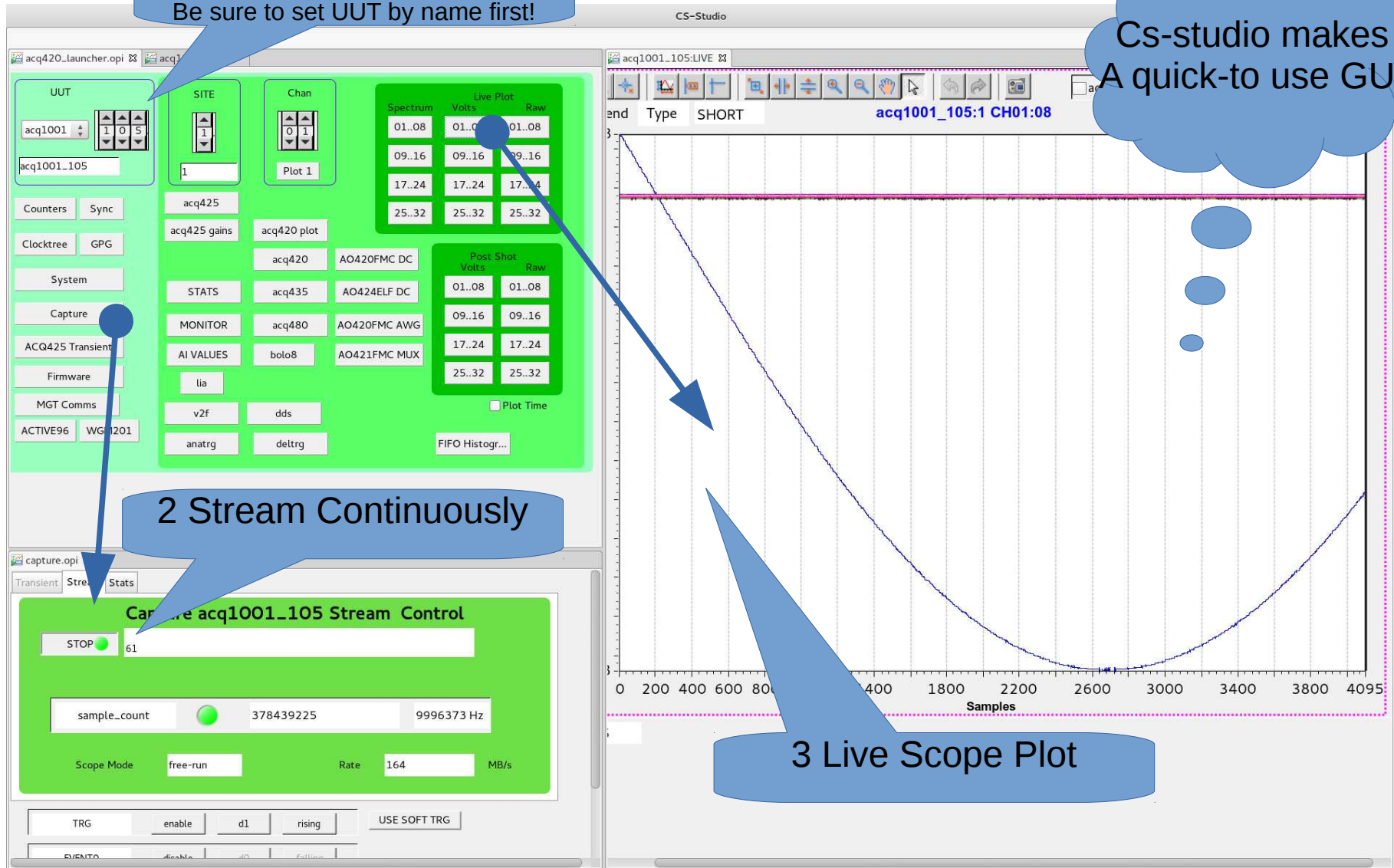


ACQ1001+ACQ480 Quickstart

1 Use the Launcher..
Be sure to set UUT by name first!

Cs-studio makes
A quick-to use GUI



2 Stream Continuously

3 Live Scope Plot

Sample Clock is Critical

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

- Clock Tree (Top Left):** Shows the configuration for ACQ1001 and ACQ1001_105. A callout '1 Select 10MHz' points to the ZCLK input. The MBCLK SETPOINT is set to 1E7. The CLK source is set to 'external', 'd1', and 'falling' with a divider of 1. A callout '2 External, d1, falling' points to these settings.
- Waveform Capture (Top Right):** Shows a multi-channel waveform for acq1001_105:1.CH01:08. A callout 'OSR Min 10M, max 50M' points to the top of the plot.
- Stream Control (Bottom Right):** A green panel titled 'Capture acq1001_105 Stream Control' with a 'START' button and a value of 57. A callout '6 Press Start...' points to this button. Below it, 'sample_count' is 1266057144 and 'Rate' is 0 Hz.
- ACQ480FMC Settings (Bottom Left):** Shows various channel settings (01-06) with callouts '3 No Decimation' and '4 Plenty of per-channel Tweaks. See ADS5294 For details'. A 'Jitter Cleaner' section is visible with a callout '5 Switched 50 Ω'. A callout 'Jitter Cleaner Not set ..' points to the Jitter Cleaner controls.

2 External, d1, falling

3 No Decimation

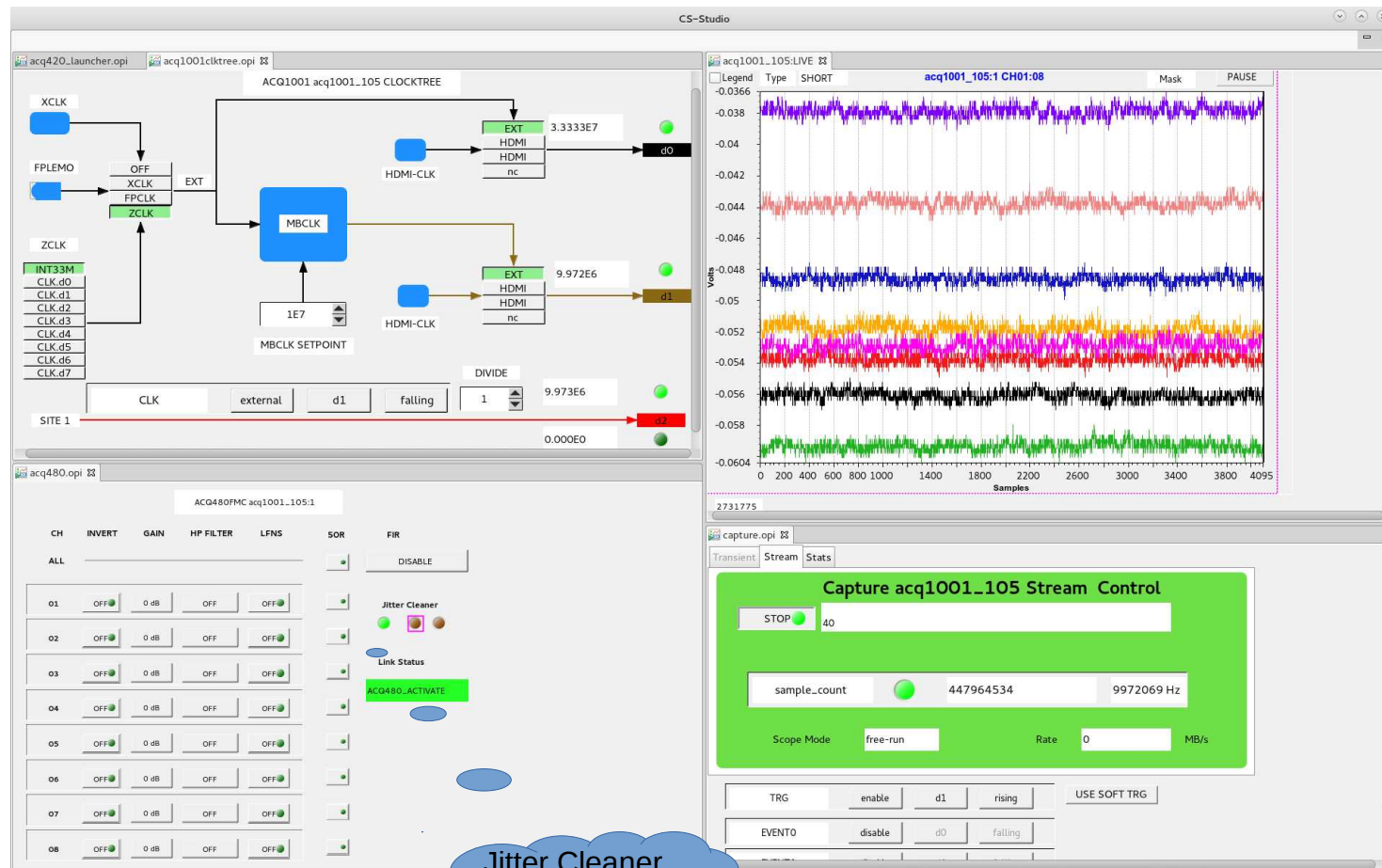
4 Plenty of per-channel Tweaks. See ADS5294 For details

5 Switched 50 Ω

Jitter Cleaner Not set ..

6 Press Start...

Clock Link Training on Start..



Jitter Cleaner
And Link Training
OK

Oversampling FIR

The image displays the CS-Studio interface for configuring and monitoring an ACQ480FMC device. It is divided into three main sections:

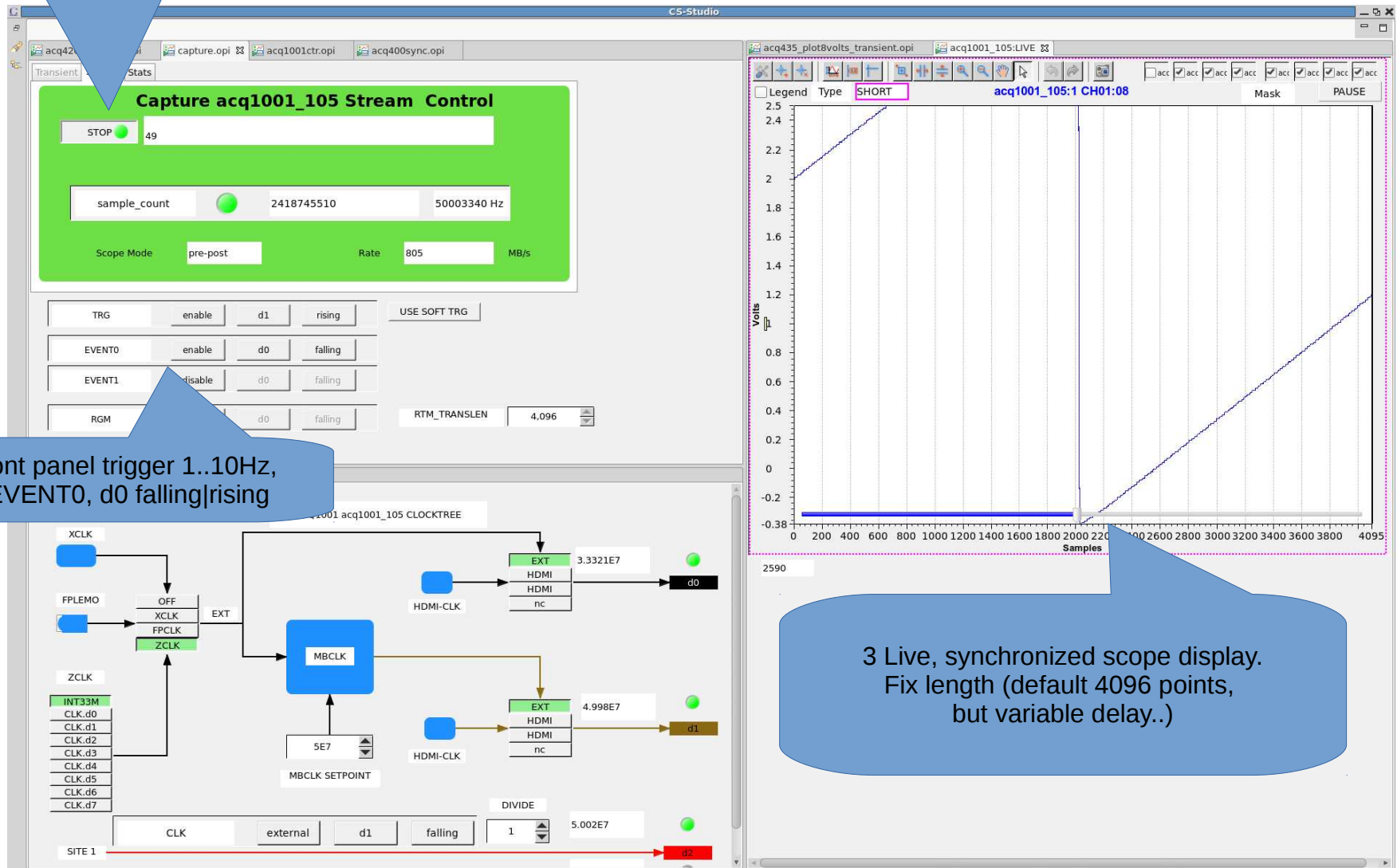
- Top Left: Clock Tree Diagram**
This diagram shows the clock hierarchy for the ACQ1001 acq1001_105. A callout bubble points to the ZCLK input, stating "1 Select 80MHz". The diagram includes components like FPLEMO, XCLK, FPCCLK, ZCLK, MBCLK, and HDMI-CLK. A "DIVIDE" block is set to 1, resulting in a frequency of 1.128E7. A "SITE 1" signal is shown at the bottom.
- Top Right: Waveform**
The waveform shows eight channels (CH01:08) of the acq1001_105. The y-axis is labeled "Volts" and ranges from -0.064 to -0.0363. The x-axis is labeled "Samples" and ranges from 0 to 4095. A callout bubble indicates "ISR=80M, OSR=80M +> too fast!".
- Bottom Left: Control Panel**
This panel shows the configuration for the ACQ480FMC acq1001_105:1. It includes a table of channels (CH 01-08) with settings for INVERT, GAIN, HP FILTER, LFNS, and FIR. A "Jitter Cleaner" section is visible with a "Link Status" indicator. A callout bubble points to the "ACQ480_ACTIVATE" button, stating "Jitter Cleaner Shows LOL".
- Bottom Right: Stream Control**
This panel is titled "Capture acq1001_105 Stream Control". It features a "START" button, a "sample_count" display showing 497843466, and a "Rate" display showing 0 Hz. The "Scope Mode" is set to "free-run".

Oversampling FIR#2

The image displays the CS-Studio interface for configuring and capturing data from an ACQ1001 device. The main window shows the 'ACQ1001 acq1001_105 CLOCKTREE' diagram, which details the clock hierarchy including XCLK, FPCLK, ZCLK, MBCLK, and HDMI-CLK. A 'DIVIDE' block is set to 2, resulting in a 3.983E7 Hz output. The right-hand side features a 'Legend' window with a 'Type SHORT' and a 'Wave' viewer showing a multi-colored digital signal waveform over 4095 samples. Below the clock tree is a control panel for 'ACQ1001_105:1' with various settings like 'INVERT', 'GAIN', and 'HP FILTER'. A 'Jitter Cleaner' section is active, with a 'Link Status' indicator showing 'ACQ480_ACTIVATE'. A 'Capture acq1001_105 Stream Control' panel is also visible, showing a 'STOP' button, a 'sample_count' of 1104652667, and a 'Rate' of 39823207 Hz. Handwritten annotations in blue circles and arrows provide specific instructions: '1 Select /2 FIR' points to the divide-by-2 block; 'OSR 40MHz' is written in a cloud; 'Jitter Cleaner Link Train, OK' is written in another cloud; and '2 Start' points to the 'STOP' button in the capture control panel.

Fat #2 Triggered Continuous Scope

2 Press to Start. Press to Stop



1 With front panel trigger 1..10Hz, enable EVENT0, d0 falling|rising

3 Live, synchronized scope display. Fix length (default 4096 points, but variable delay..)

Fat #2 Triggered Continuous Scope

The screenshot displays the CS-Studio interface with three main components:

- Capture acq1001_105 Stream Control:** A green control panel with a STOP button, a sample count of 1518570143, a rate of 49946080 Hz, and a Scope Mode of pre-post. Below it are trigger settings for TRG, EVENT0, EVENT1, and RGM.
- acq1001clktree.opi:** A clock tree diagram showing the ACQ1001 acq1001_105 CLOCKTREE. It includes components like XCLK, FPLEMO, ZCLK, MBCLK, and SE7, with various clock outputs and dividers.
- acq435_plot8volts_transient.opi:** A scope plot titled acq1001_105:1 CH01:08. The y-axis is Volts (ranging from -0.38 to 2.5) and the x-axis is Samples (ranging from 0 to 4095). The plot shows a linear ramp signal. A blue callout bubble points to a delay cursor on the x-axis with the text "3 Drag delay cursor to change delay."

Fat #3 Transient Capture

1 Select Default POST

2 Press setMode

3 External TRG: d0, or press "Use Soft TRG"

4 ARM Shot proceeds, check "Traffic Light"

5 One-Shot transient to 100K points

The screenshot displays the S-Studio interface for transient capture. The top panel, titled "Capture acq1001_105 Transient Control", includes fields for PRE (0), POST (100,000), OSAM (1), and OUTPUT SOFT_TRG (1). A "setMode" button is highlighted with a callout. Below this, TRG and EVENT0 settings are visible. The bottom panel shows the "ACQ1001 acq1001_105 CLOCKTREE" diagram, with a callout pointing to the "d0" output. The right panel shows a waveform plot for "acq1001_105:1 CH01:08" with a "SHORT" legend type. A callout points to the plot area, indicating a one-shot transient capture.

FAT #4 One-Shot PRE/POST

The image displays a software interface for configuring and capturing a transient signal. It is divided into two main sections: a control panel on the left and a waveform plot on the right.

Control Panel (Left): Titled "Capture acq1001_105 Transient Control", it features several configuration fields and buttons. The "PRE" and "POST" fields are both set to 50,000. The "OSAM" field is set to 1, and "OUTPUT SOFT_TRG" is also set to 1. The "Default PRE/POST" dropdown is selected. Below these are "REPEAT" (set to 0), "setMode", "ARM", and "STOP" buttons. Further down, there are "TRG" (enable, d1, rising) and "EVENT0" (enable, d0, falling) settings. A "Find Event 0" field shows "FOUND 7 5".

Waveform Plot (Right): Titled "acq1001_105:1 CH01:08", it shows a periodic waveform with a sharp transient spike. The y-axis is labeled "Volts" and ranges from -0.95 to 1.0. The x-axis is labeled "Samples" and ranges from 447 to 5.0313E4. A red horizontal line is drawn at 0 Volts to highlight the transient spike.

Diagram (Bottom Left): A block diagram titled "ACQ1001 acq1001_105 CLOCKTREE" shows the internal clocking and signal paths. It includes components like "MBCLK", "HDMI-CLK", and "EXT" blocks. A "5E7" multiplier is shown for the "MBCLK SETPOINT".

Annotations: Five blue callout boxes provide instructions: 1. "1 Select Default PRE/POST" points to the "Default PRE/POST" dropdown. 2. "2 Press setMode" points to the "setMode" button. 3. "3 External TRG: d1, (SOFT) Event0 ENABLE" points to the "EVENT0" settings. 4. "4 ARM Shot proceeds, check 'Traffic Light', and Event Status" points to the "ARM" button. 5. "5 One-Shot transient to 100K points (Zoomed to show transition point)" points to the transient spike in the waveform plot.

1 Select Default PRE/POST

2 Press setMode

4 ARM Shot proceeds, check "Traffic Light", and Event Status

3 External TRG: d1, (SOFT) Event0 ENABLE

5 One-Shot transient to 100K points (Zoomed to show transition point)