ATD EPICS Interface

ATD: Analog Threshold Detect
Live Scope with up to NCHAN triggers.

Default personality NCHAN=64
(2xACQ423ELF-32-200)

NCHAN can be 4..192,
Supported on ACQ42x, ACQ53x ACQ465

Definition: 4GUG: #13.3

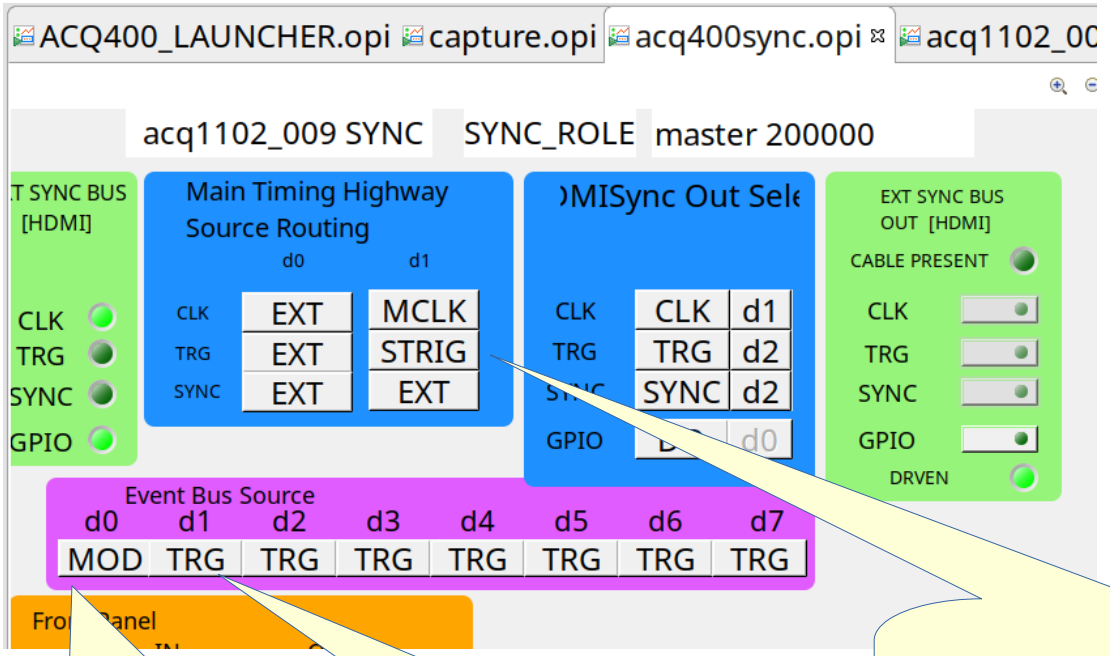
EPICS PV's

1.0	${UUT}:${S}:ANATRG:${CC}:M	enum	Mode. none|rising|falling|inside|outside
1.1	${UUT}:${S}:ANATRG:${CC}:H	enum	Hysterisis % 1|2|5|10|20
1.2	${UUT}:${S}:ANATRG:${CC}:L1	double	Level 1 V
1.3	${UUT}:${S}:ANATRG:${CC}:L2	double	Level 2 V
2.0	${UUT}:${S}:ANATRG:ALL:M H/L1/L2	enum/ double	Parameters as above
2.1	${UUT}:${S}:ANATRG:ALL:SET	bo	SET all channels to ALL:M H/L1/L2
3	${UUT}:${S}:ANATRG:LIVE:${CC}	bi	Live State monitor
4.0	${UUT}:${S}:ANATRG:GROUP:${CC}	bo	Channel ${CC} is part of GROUP
4.1	${UUT}:${S}:ANATRG:GROUP:ALL:SET	bo	Set all channels in Group
4.2	${UUT}:${S}:ANATRG:GROUP:ALL:CLR	bo	Clear all channels from Group
4.3	${UUT}:${S}:ANATRG:GROUP_MODE	enum	CURRENT (active same time) | HISTORY (active in period)
4.4	${UUT}:${S}:ANATRG:GROUP:FIRST_N	int	Trigger on first N channels in group.
5	${UUT}:${S}:ANATRG:SCALE	enum	1,2,4,8 : 1:level is -127..+127 <<8, <<7, <<6, <<5 Ie as scale rises, level is closer to zero and more precise.
6	${UUT}:${S}:ANATRG:RESET	bo	Reset all logic.
	${UUT} : UUT NAME, ${S} : Site 1..6 ${CC} Channel 01..192		

Prams For One Channel set immediate

Prams For ALL CH Commit with SET

Event Source Selection

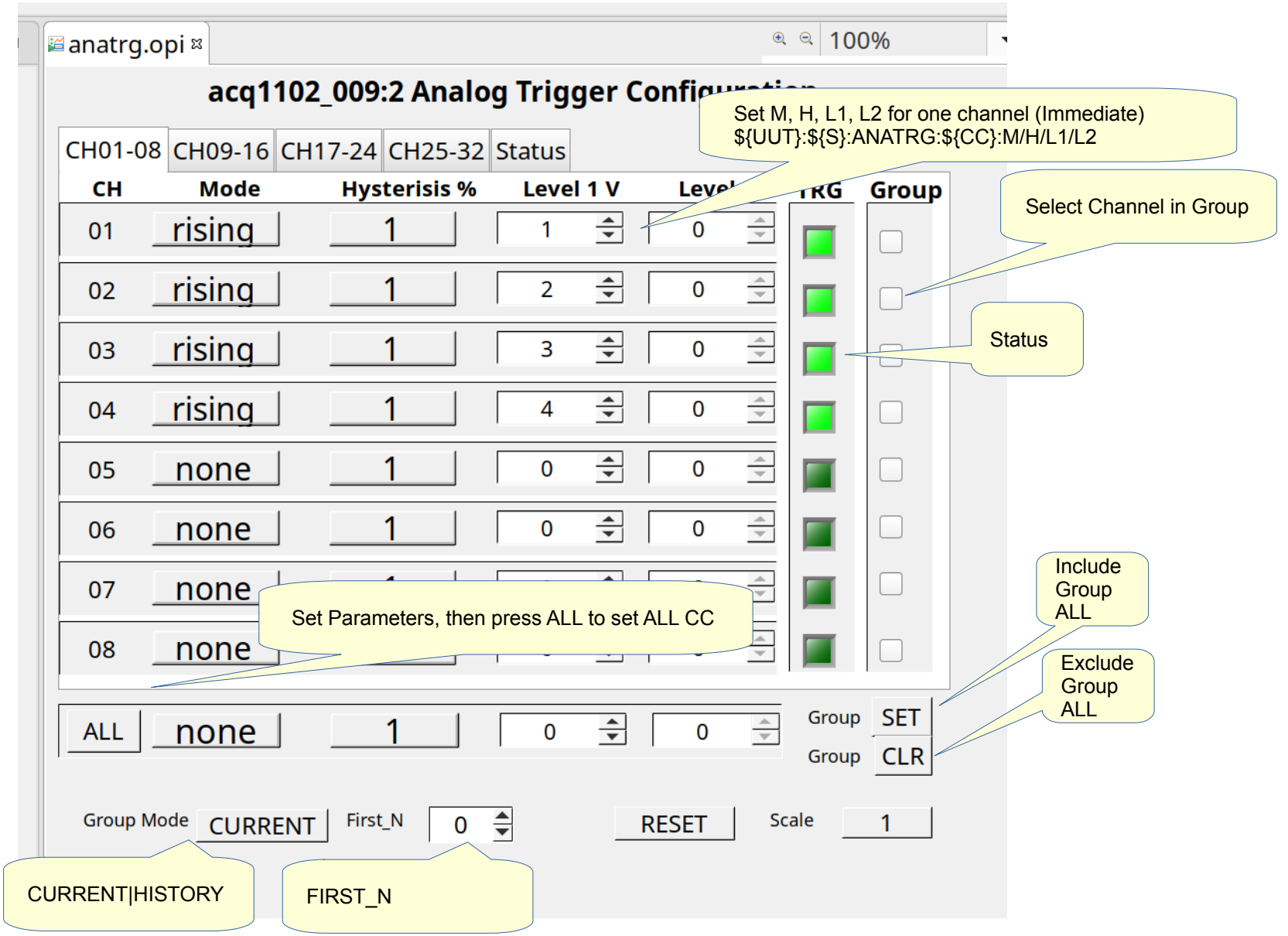


${UUT}:0:SIG:EVENT_SRC:0
EVT.d0 SRC set MOD (ATD DSP)

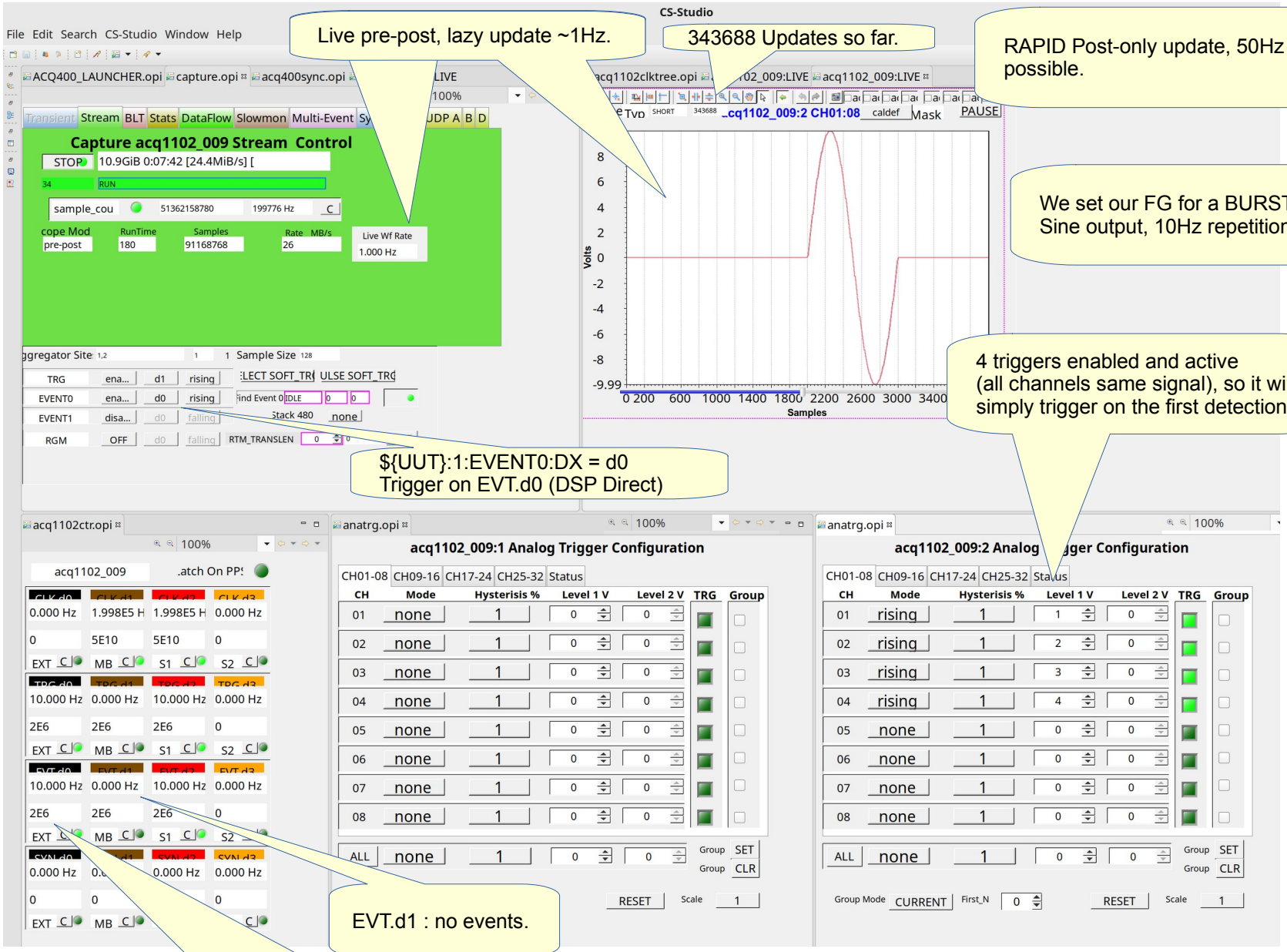
${UUT}:0:SIG:EVENT_SRC:1
EVT.d1 SRC set TRG

${UUT}:0:SIG:SRC:TRG:1 STRIG
TRG.d1 SRC set STRIG
(soft-trigger). The ATD Interrupt Routine sets soft-trigger to drive the system

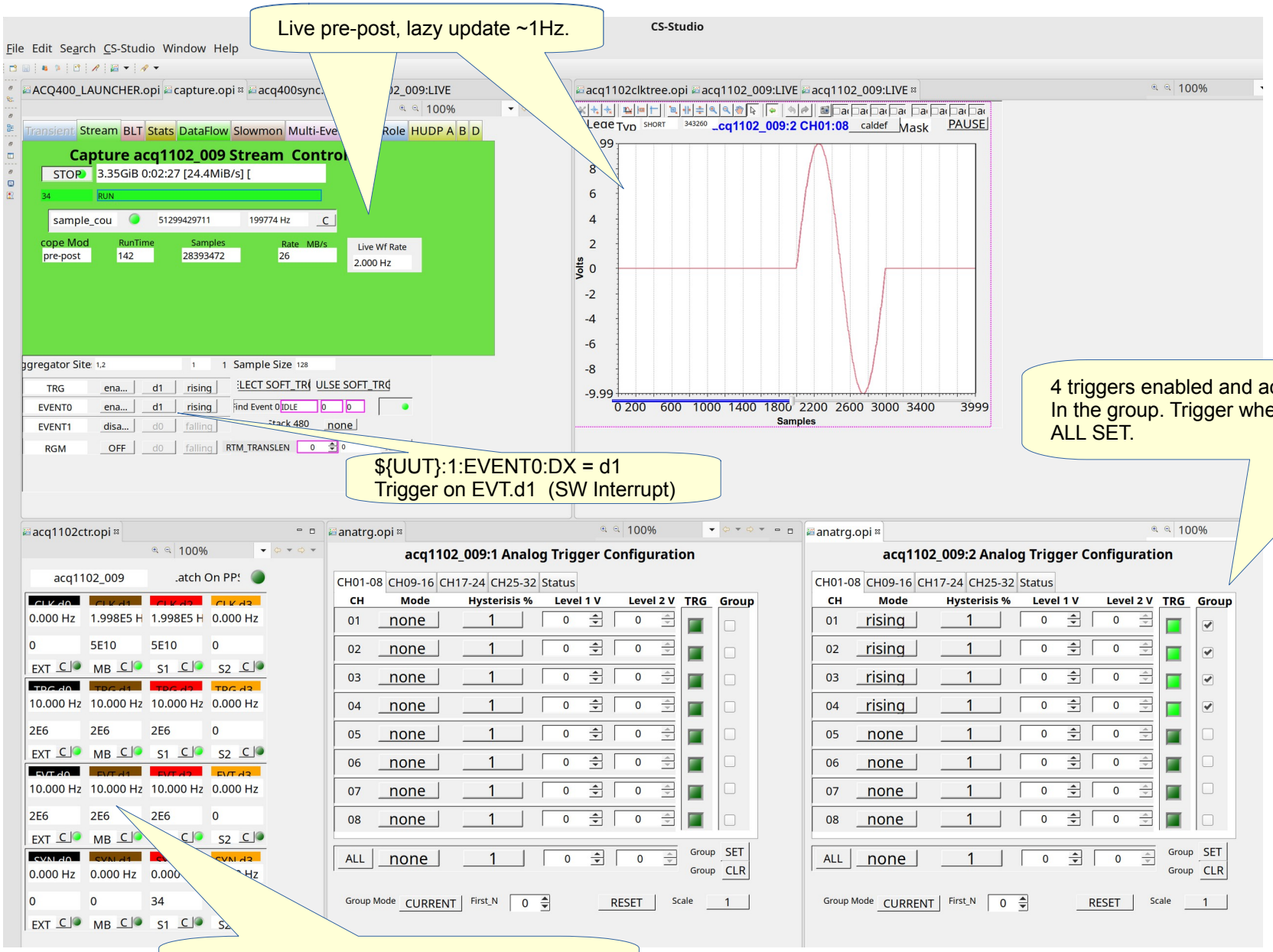
Controls



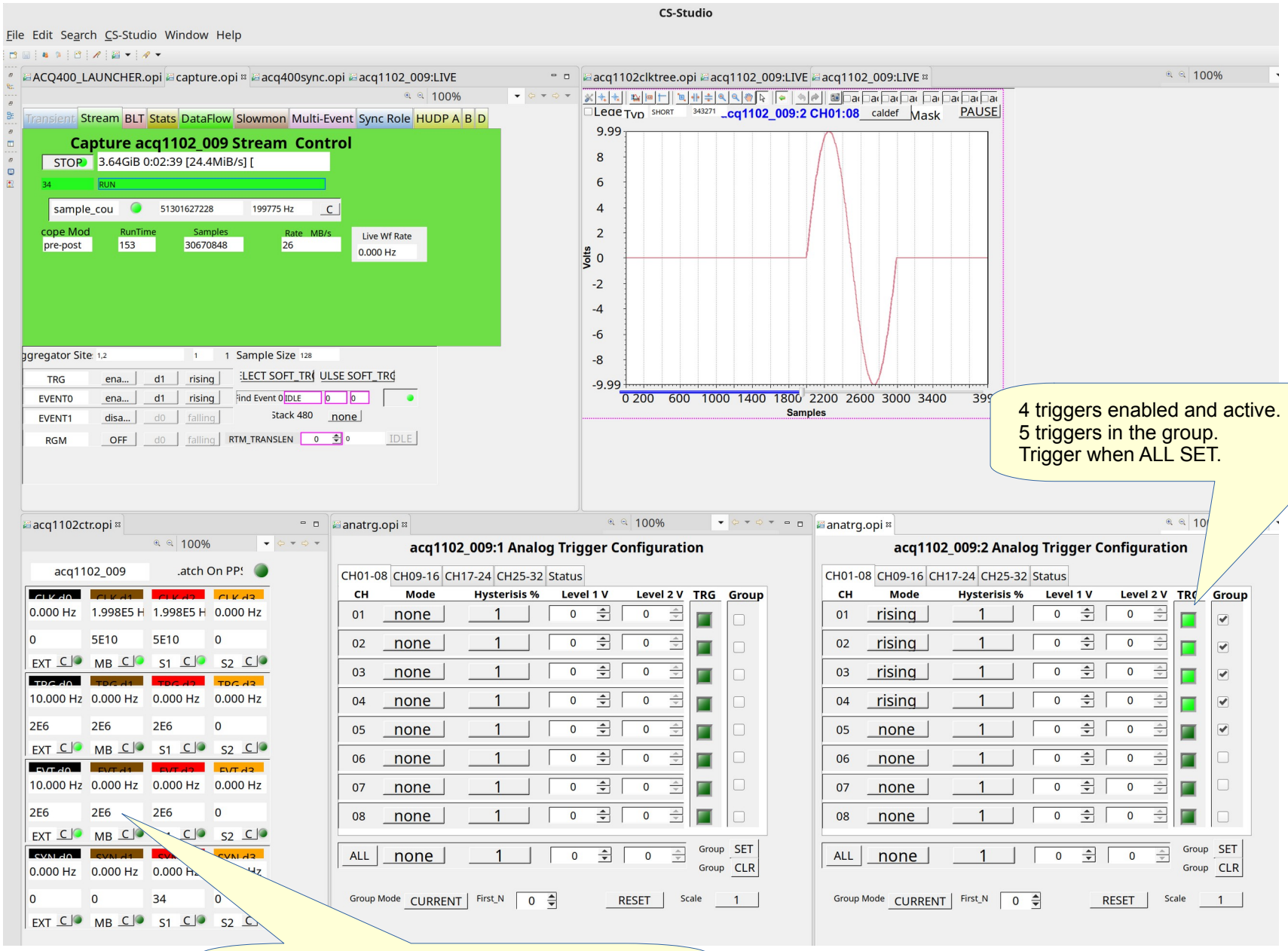
Standard (Direct DSP) Triggers



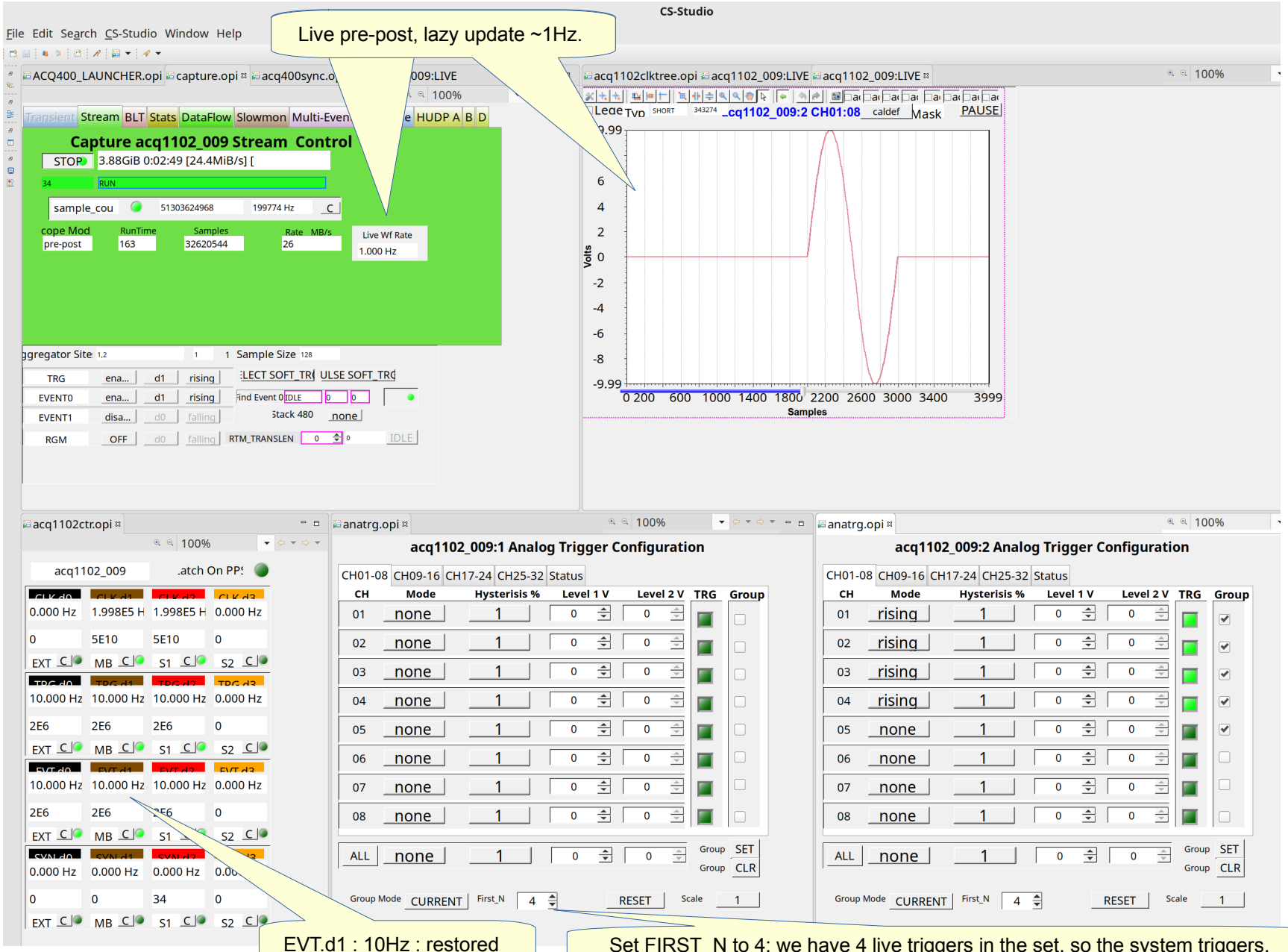
Group Trigger



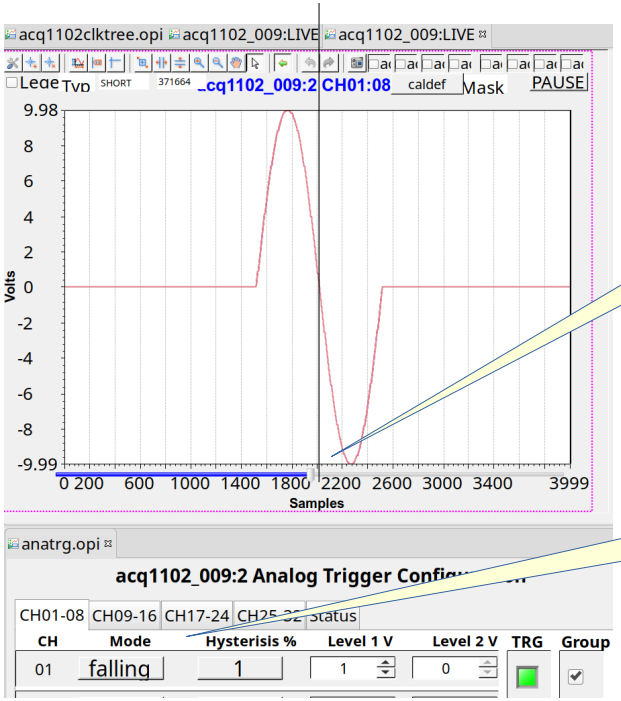
Group Trigger 2



Group Trigger 3



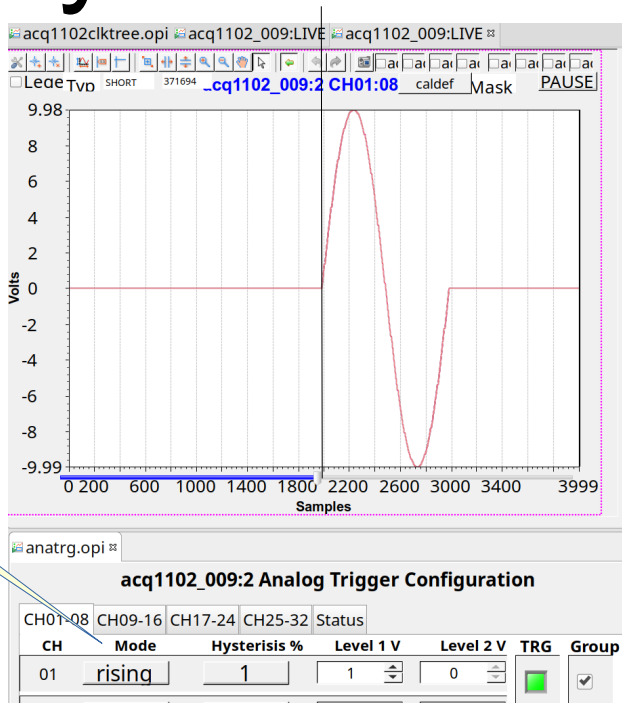
Live Delay Control



PRE=POST

falling

falling



Live Delay adjust: 0..100%
${UUT}:LIVE:PREPCT