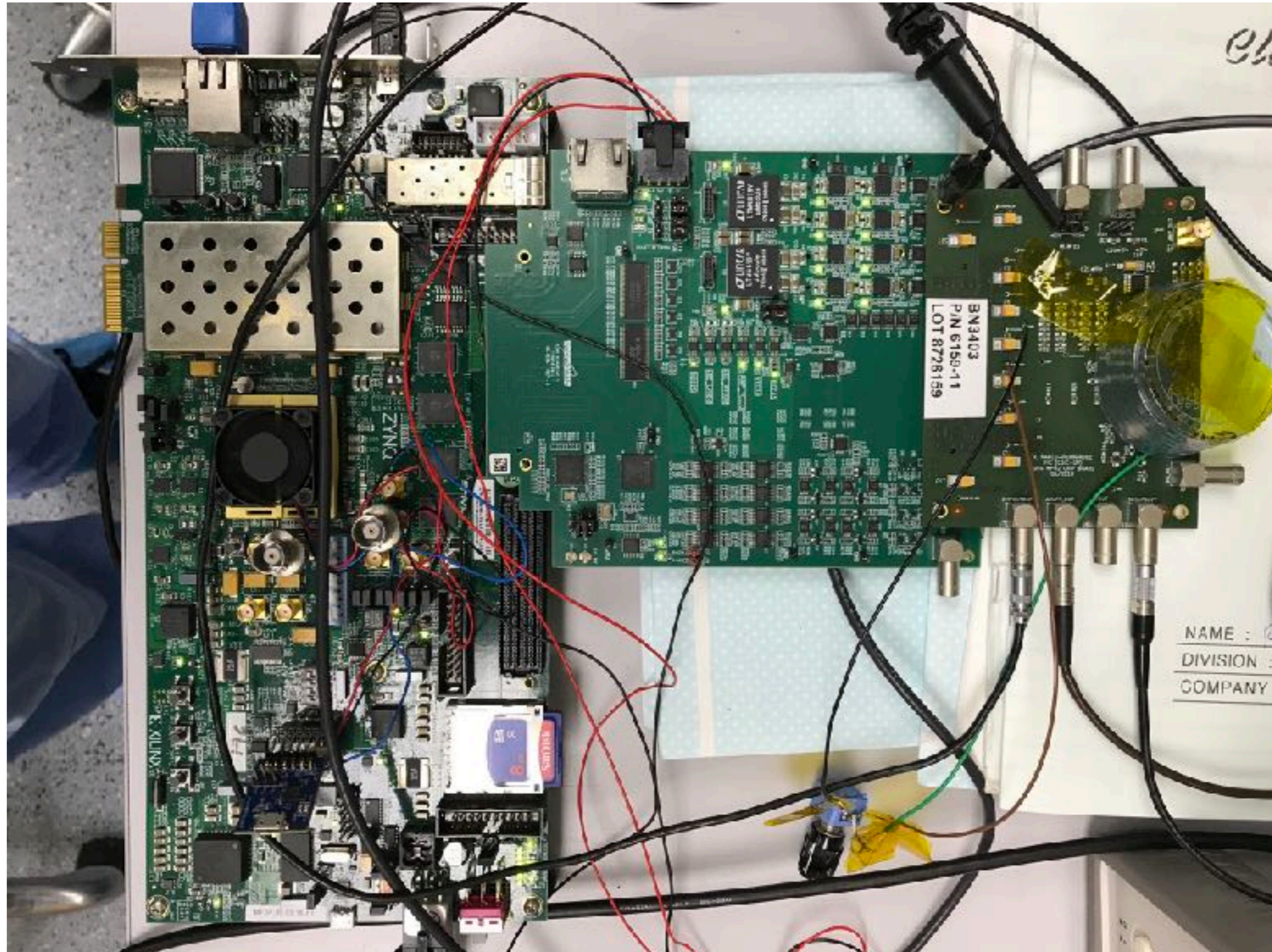
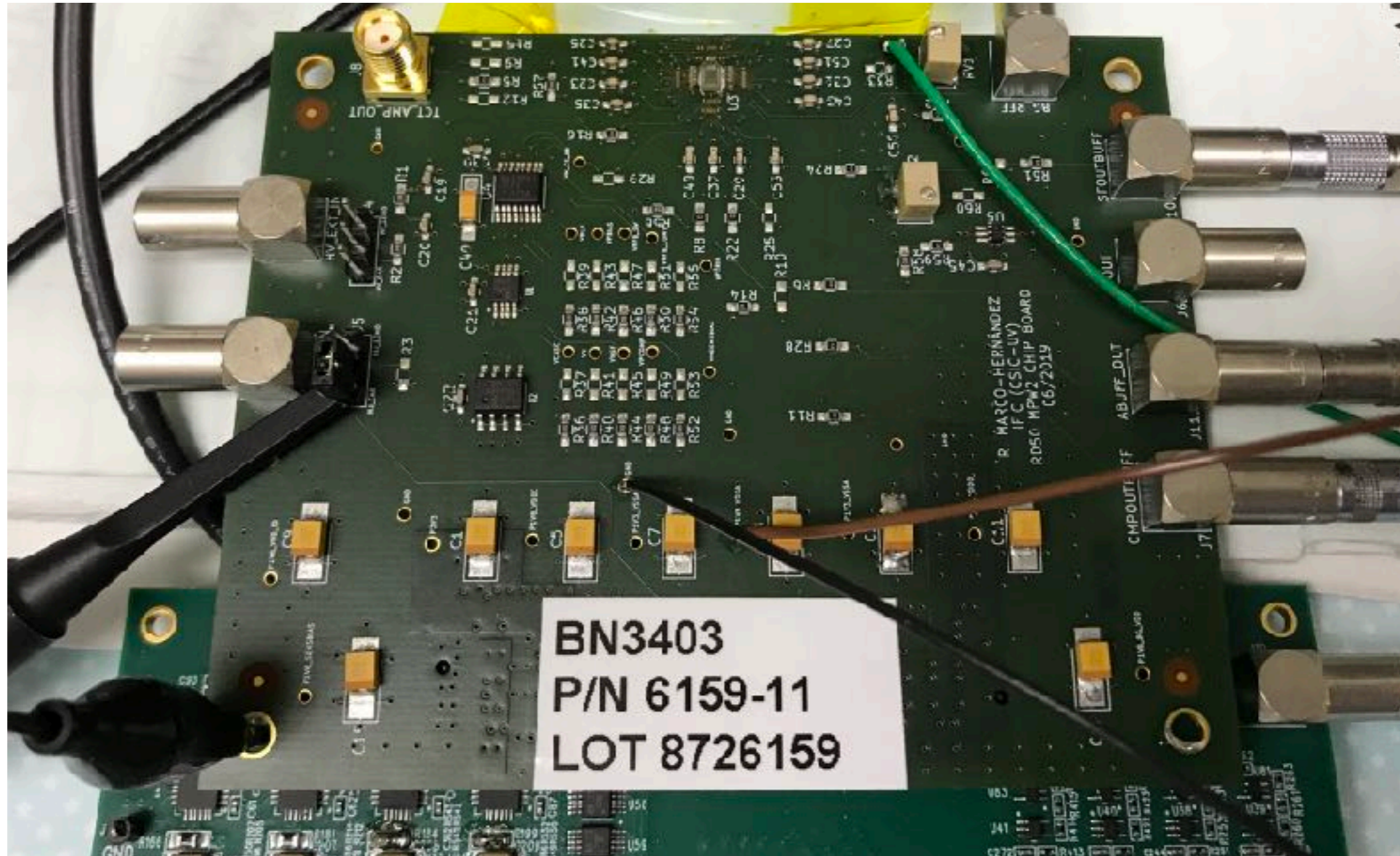


RD50-MPW2: DAQ system



RD50-MPW2: DAQ system



- Configuration register programming is unstable.

not working

working

```
start configure PC ...
[0010000][1110000][0010000][0
[0000] [0000] [0000] [0000]
[101010][101001][011001][0100

VN      = 220.50 [mV]
VNCASC  = 105.50 [mV]
VNSF    = 70.00 [mV]
VPTRIM  = 1339.00 [mV]
VPCOMP  = 1496.50 [mV]
VNSENSBIAS = 1193.00 [mV]
VBLR    = 576.50 [mV]
VNFB_CONT = 1252.00 [mV]
VPFB_SW = 1376.50 [mV]
VPBIAS  = 1234.50 [mV]
VNCS_BB = 696.00 [mV]

PAD_SOUT_PC readback[hex]:
00000000000000000000000000000000
```

```
start configure PC ...
[0010000][1110000][0010000][001
[0000] [0000] [0000] [0000]
[101010][101001][011001][010010

VN      = 662.50 [mV]
VNCASC  = 970.50 [mV]
VNSF    = 445.00 [mV]
VPTRIM  = 1302.50 [mV]
VPCOMP  = 1260.50 [mV]
VNSENSBIAS = 1239.50 [mV]
VBLR    = 644.50 [mV]
VNFB_CONT = 1258.00 [mV]
VPFB_SW = 1054.00 [mV]
VPBIAS  = 965.50 [mV]
VNCS_BB = 420.50 [mV]

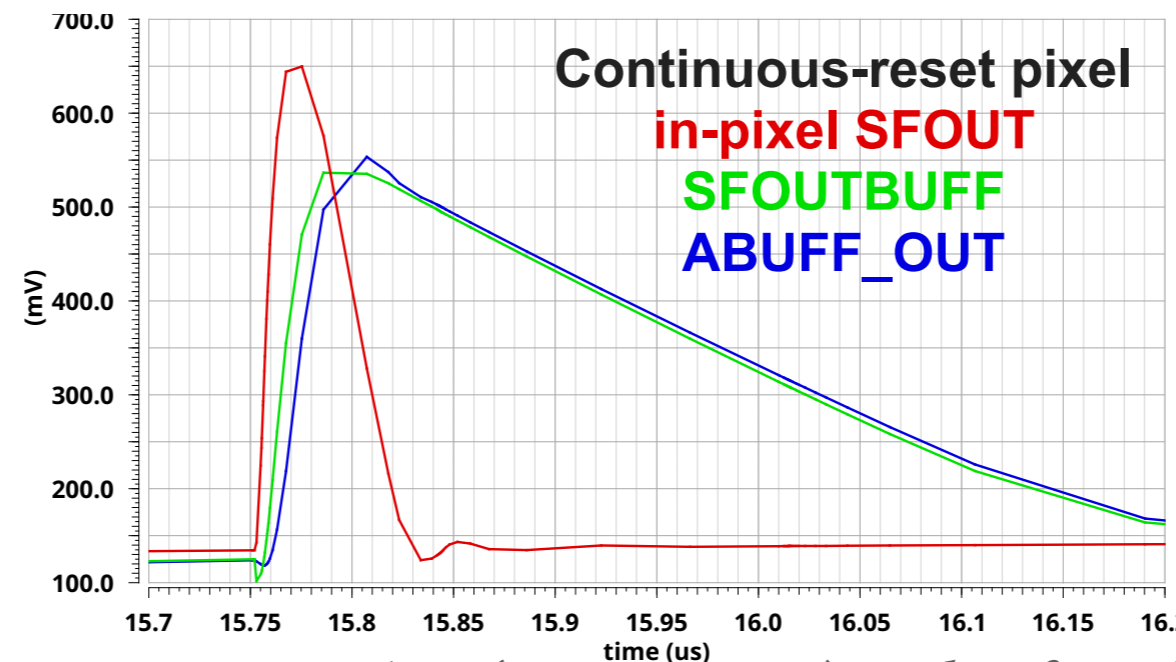
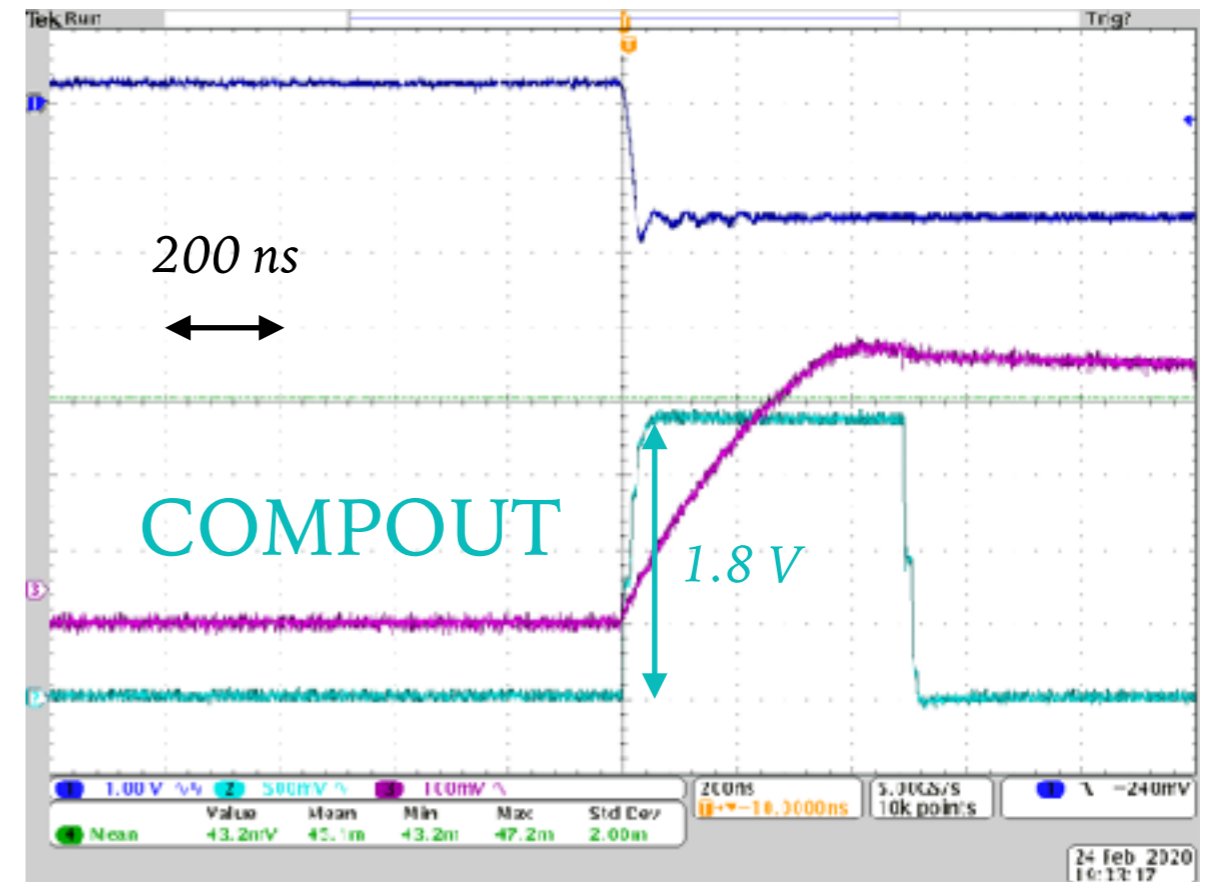
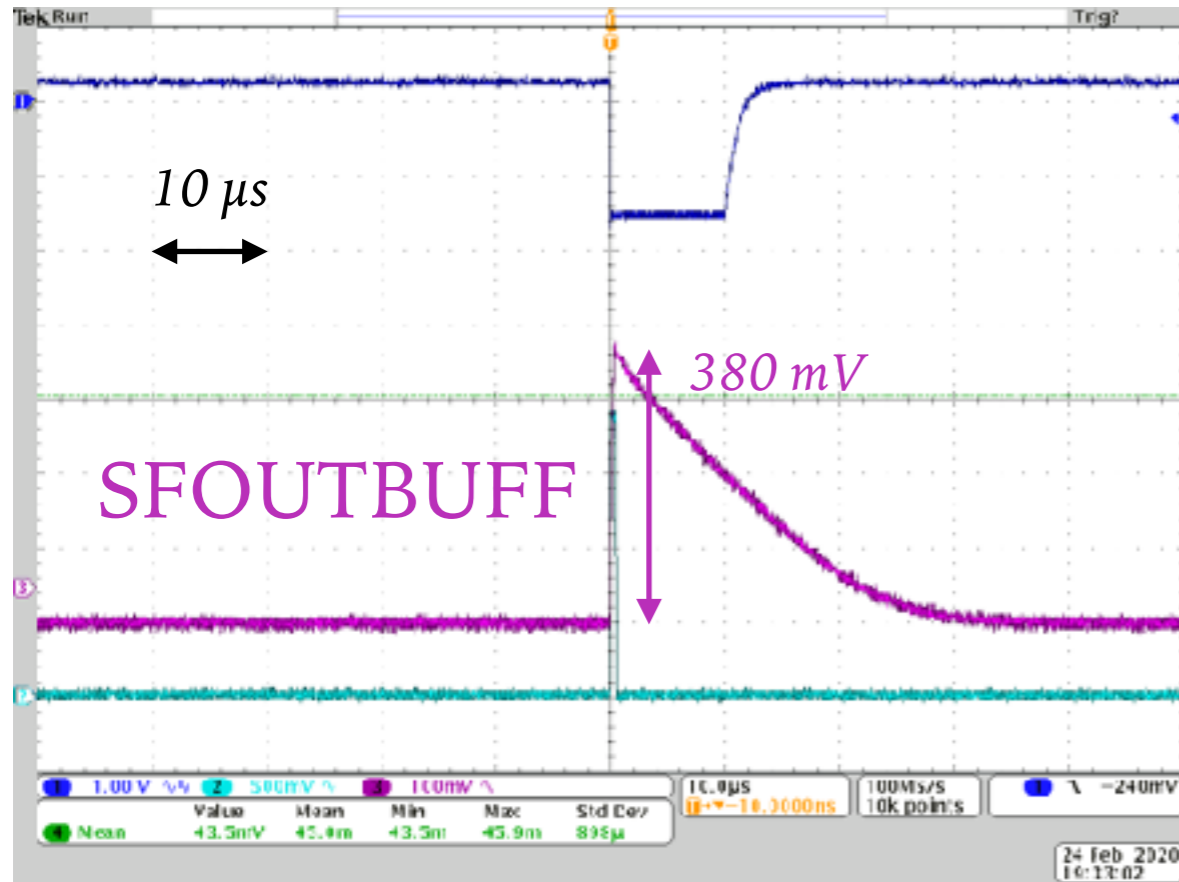
PAD_SOUT_PC readback[hex]:
00000000000000000000000000000000
```

Simulated values:

VPCOMP	1.23 V	VNFB_CONT	584.4 mV
VPTRIM	1.238 V	VPFB_SW	1.279 V
VNSENSBIAS	1.309 V	VPBIAS	1.025 V
VBLR	1.203 V	VNCASC	926.9 mV
VNSF	418.9 mV	VN	616.3 mV
VN_CS_BB	539.9 mV		

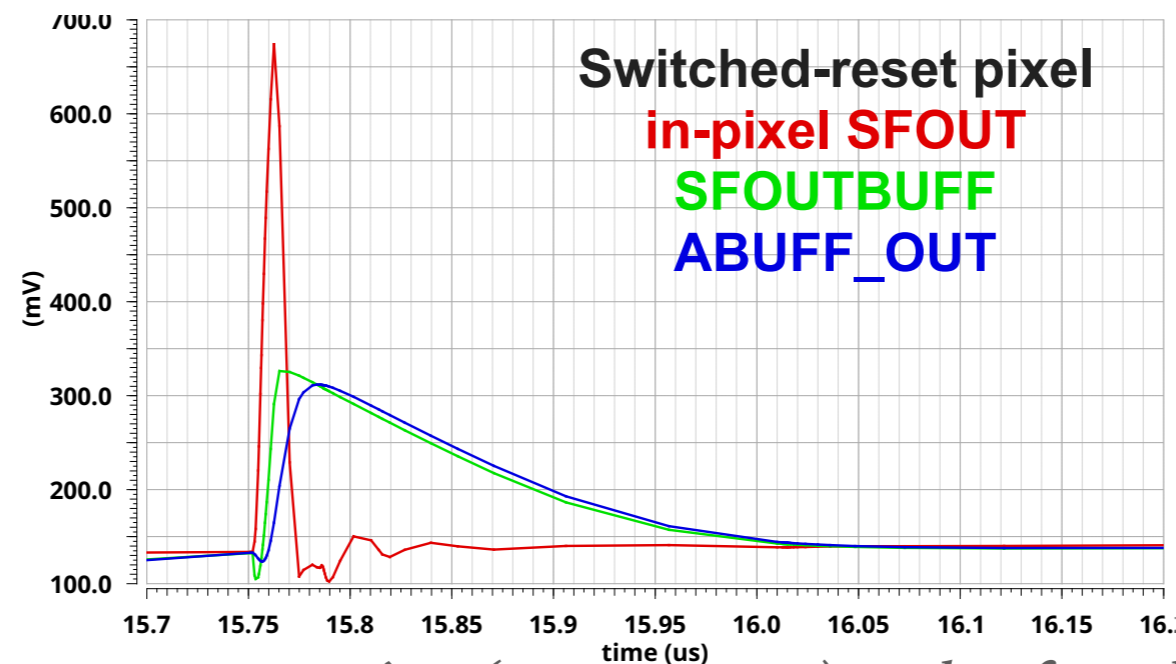
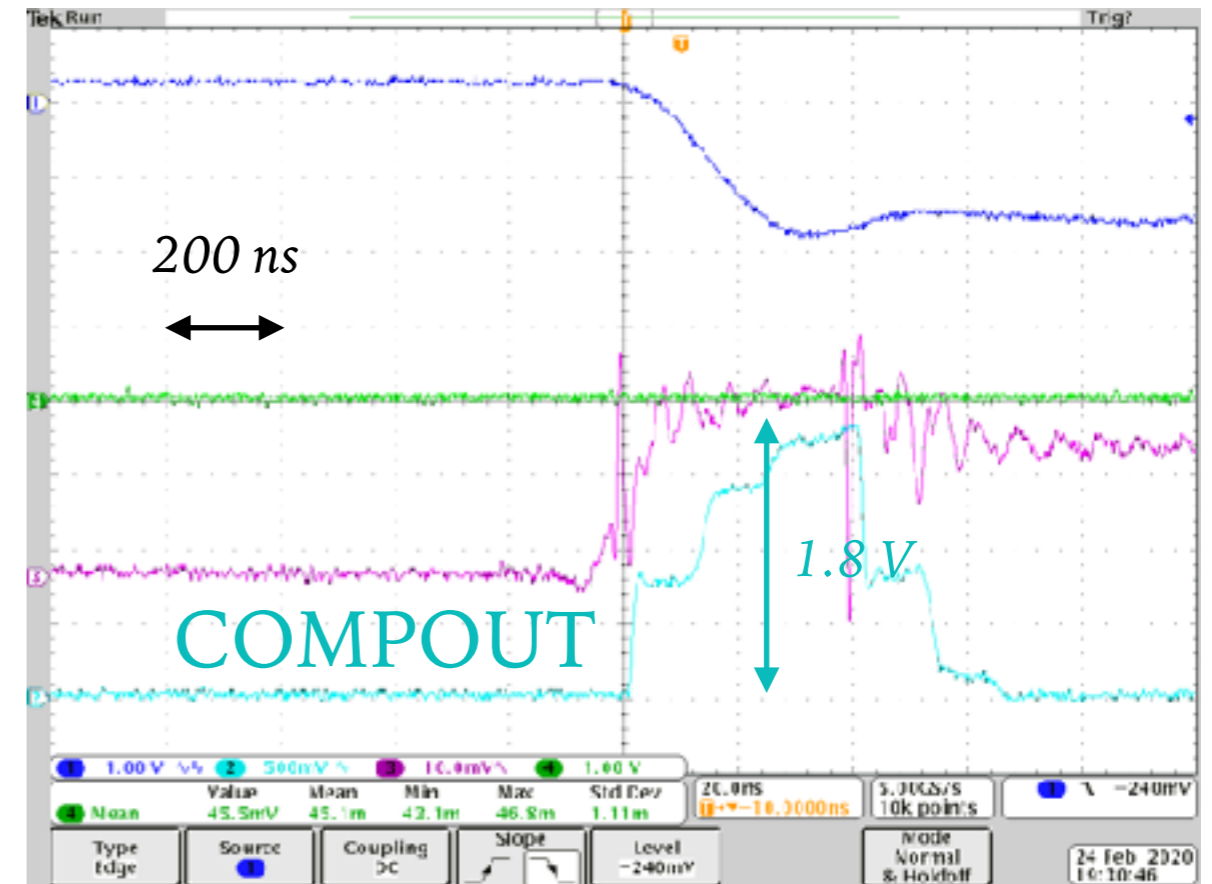
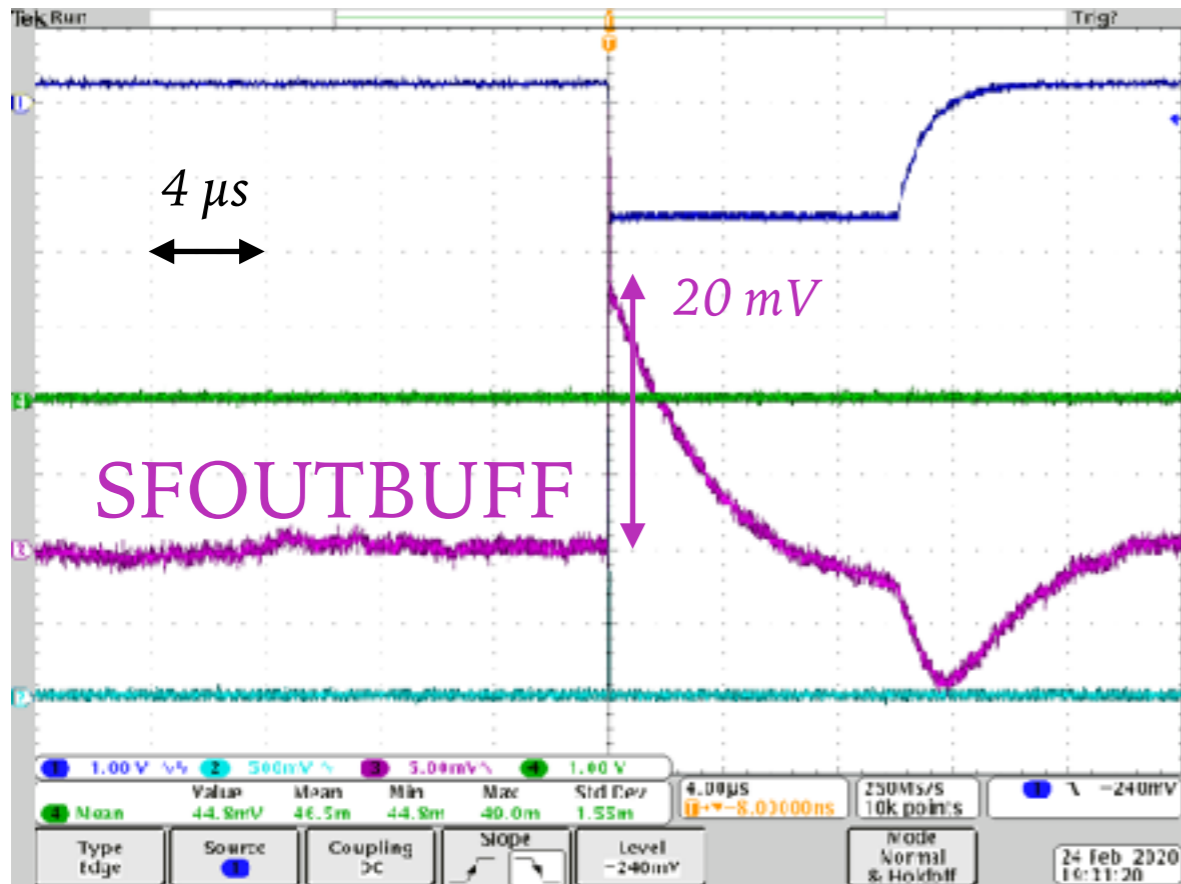
RD50-MPW2: analog outputs by injections

- Continuous-reset pixel (column 0 ~ 3)



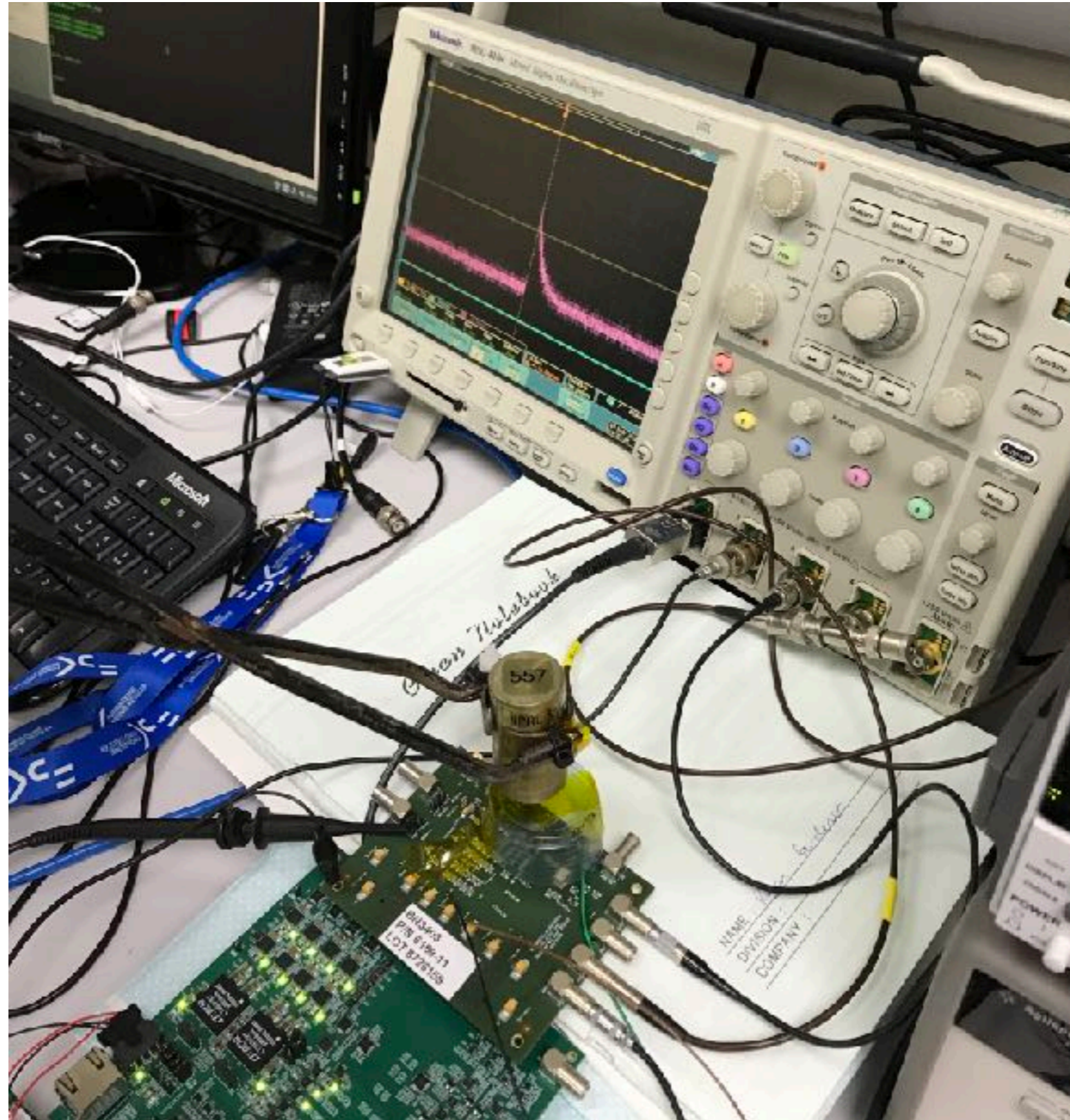
RD50-MPW2: analog outputs by injections

- Switched-reset pixel (column 4 ~ 7)



RD50-MPW2: analog outputs by source ^{90}Sr

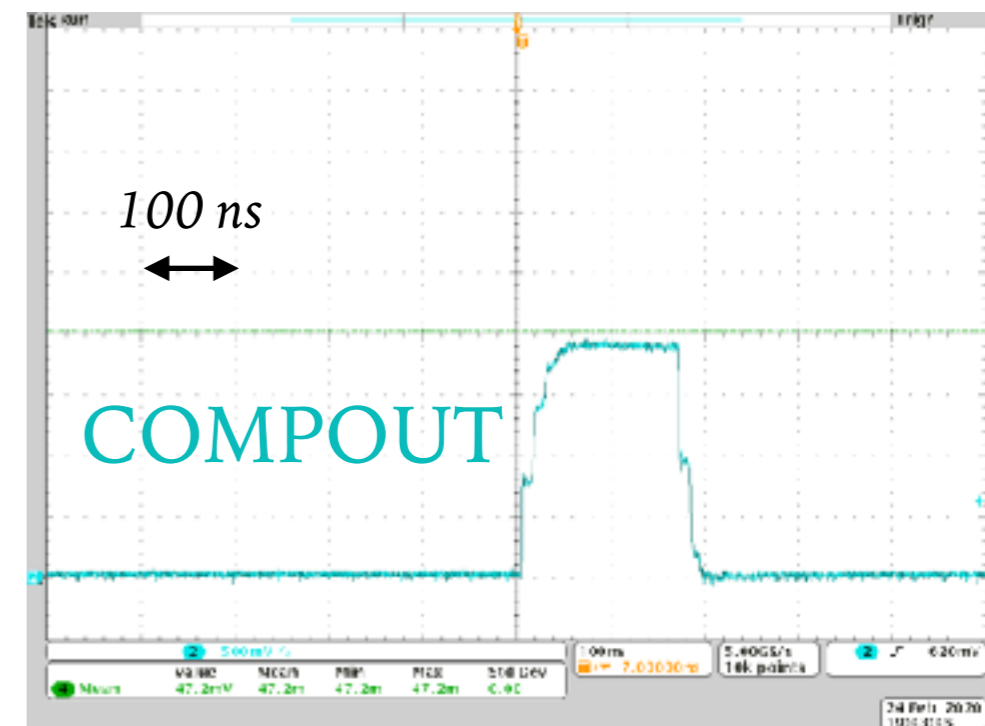
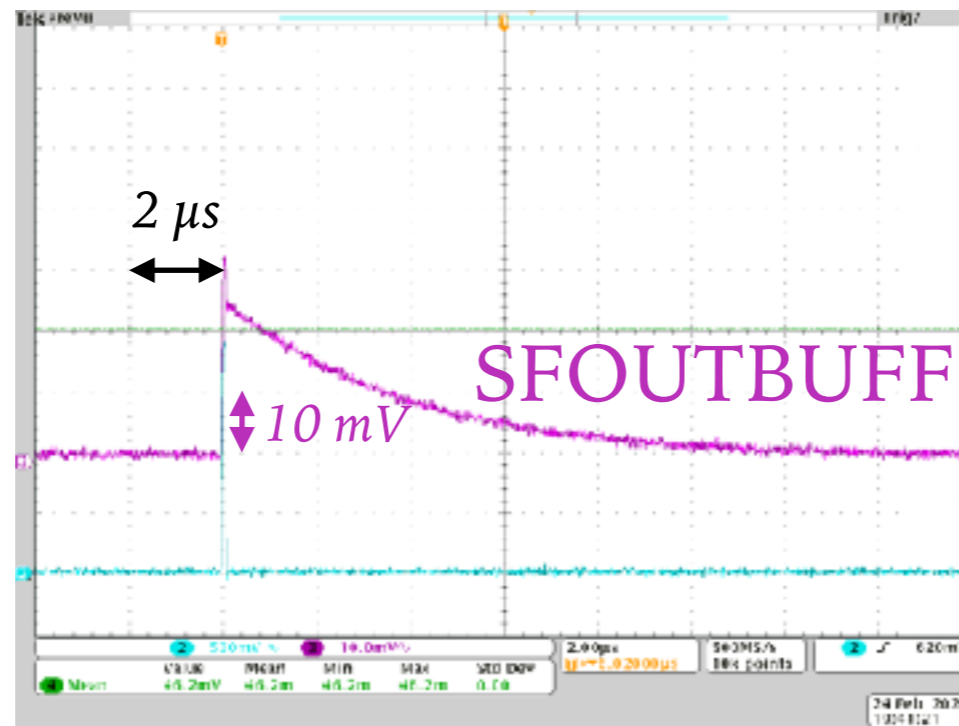
Bias voltage = 0



RD50-MPW2: analog outputs by source ^{90}Sr

Bias voltage = 0

● Continuous-reset



● Switched-reset

