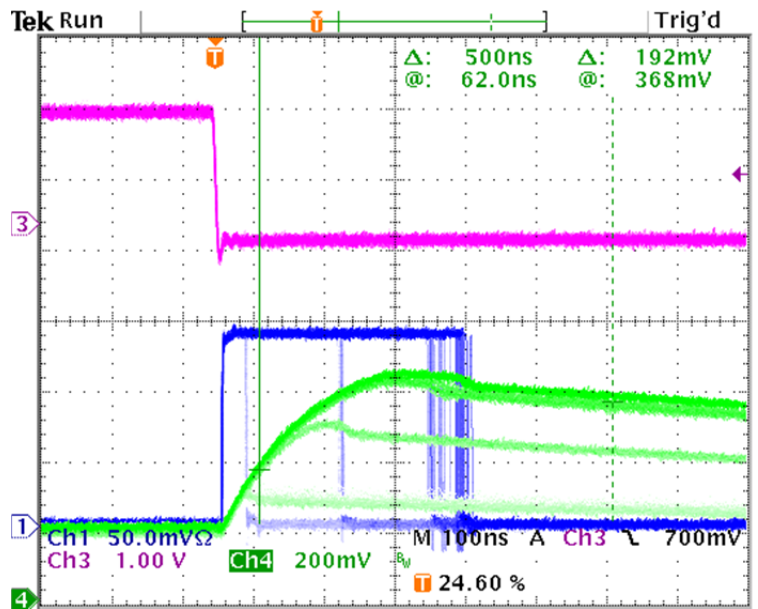
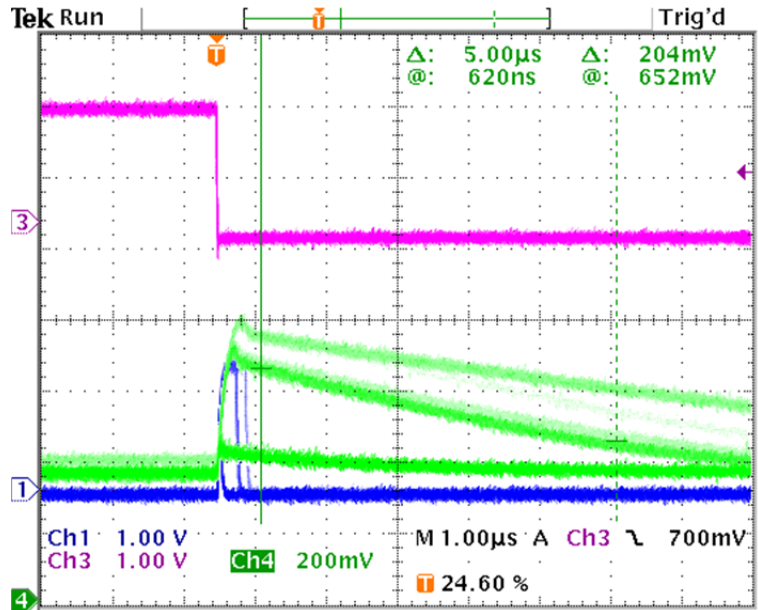


VIENNA



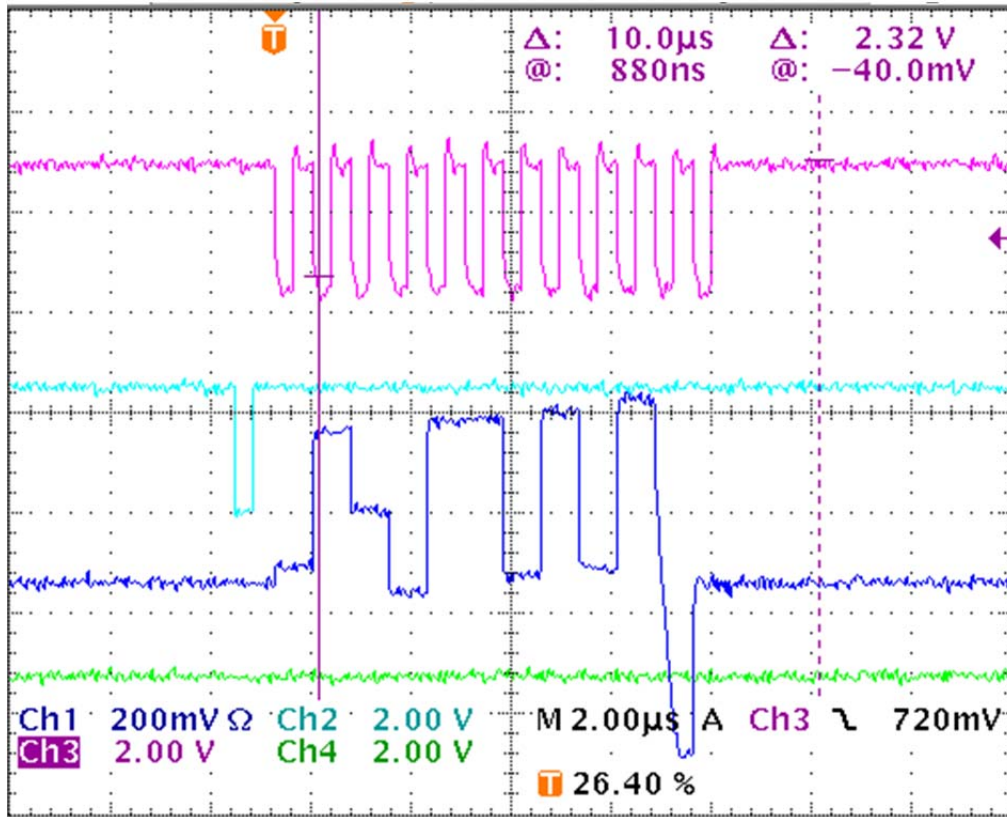
LIVERPOOL



Channel	Output	Nominal value	Current	Voltage	Description
CH1	VPCOMP	44	10.09 µA	1.23 V	sets current of comparators
CH2	VPTRIM	27	152.7 nA	1.238 V	sets current of trimming DACs
CH3	VSENSBIAS	13	2.138 nA	1.309 V	bias transistors as the R for DNWELL
CH4	VBLR	25	6.621 nA	1.203 V	bias transistors as the R in HP-filters
CH5	VNSF	18	1.028 µA	418.9 mV	sets current of source followers
CH6	VNFB_CONT	45	401.4 nA	584.4 mV	sets I _{fb} of continuous-reset pixels
CH7	VPFB_SW	25	6.556 nA	1.279 V	sets I _{fb} of switched-reset pixels
CH8	VPBIAS	26	2.98 µA	1.025 V	sets current of the load of CSAs
	VNCASC		995 nA	926.9 mV	bias the cascode transistor of CSAs
CH9	VN	42	6.022 µA	616.3 mV	sets current of CSAs
V_REF	VN_CS_BB	/	34.99 µA	539.9 mV	reference voltage for all DACs

SFOUT pulse shape ???????

ABUFF_OUT



CH0	VN_CS_BB	CH3	VPBIAS	CH6	VPCOMP	CH9	VNFB_CONT
CH1	VN	CH4	VNSF	CH7	VBLR	CH10	VNSENSBIAS
CH2	VNCASC	CH5	VPTRIM	CH8	VPFB_SW	CH11	SFOUTBUFF

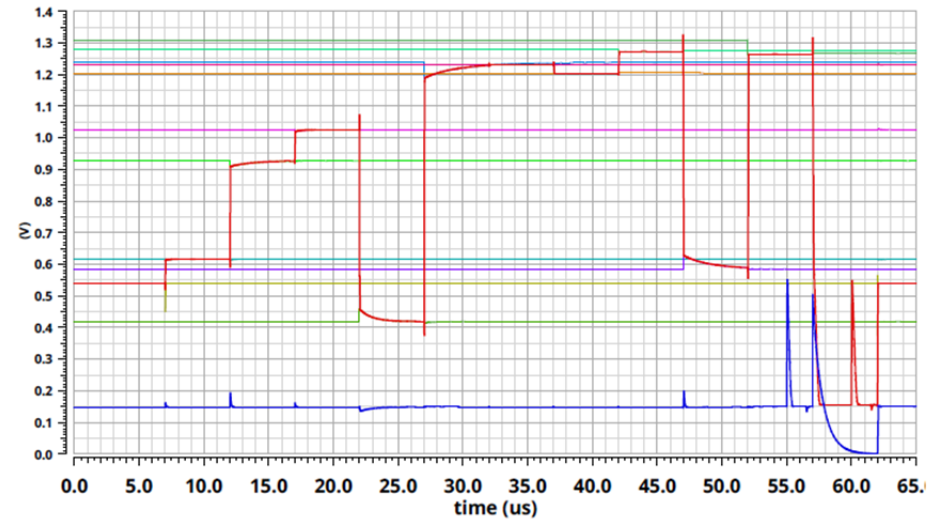


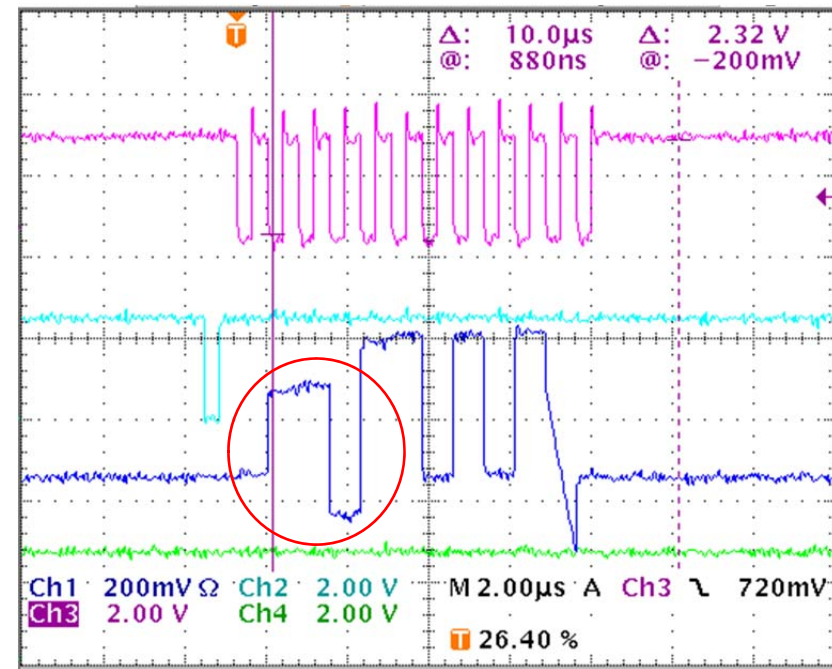
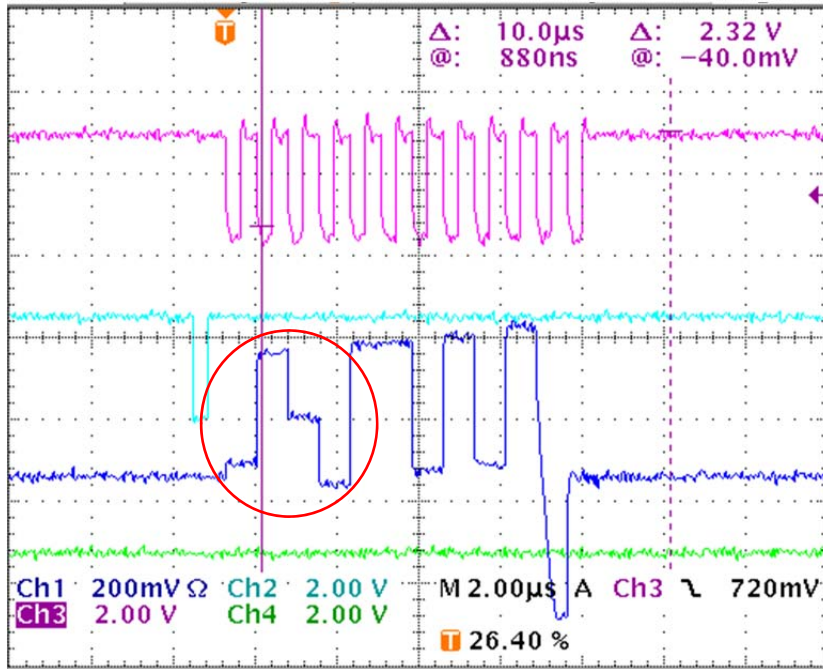
Figure 6.4. ABUFF_OUT following inputs of different channels

start configure PC ...

```
[0010000] [1110000] [0010000] [0010000] [0010000] [0010000] [0010000] [0010000]    92  COL<7..0>
[0000] [0000] [0000] [0000] [0000] [0000] [1111] [0000]    60  ROW<7..0>
[101010] [101001] [011001] [010010] [101101] [011001] [010011] [001001] [110010] [000000]    BIAS
```

```
VN          = 659.00 [mV]
VNCASC     = 982.50 [mV]
VNSF      = 475.00 [mV]
VPTRIM    = 1252.00 [mV]
VPCOMP    = 1240.50 [mV]
VNSENSBIAS = 1257.00 [mV]
VBLR      = 666.50 [mV]
VNFB_CONT = 609.50 [mV]
VPFB_SW   = 1226.00 [mV]
VPBIAS    = 1019.50 [mV]
VNCS_BB   = 855.00 [mV]
```

VPCOMP changed from 44 to 4



```

start configure PC ...
[0010000] [1110000] [0010000] [0010000] [0010000] [0010000] [0010000] [0010000] 92 COL<7..0>
[0000] [0000] [0000] [0000] [0000] [0000] [1111] [0000] 60 ROW<7..0>
[101010] [101001] [011001] [010010] [101101] [011001] [010011] [001001] [110010] [000000] BIAS

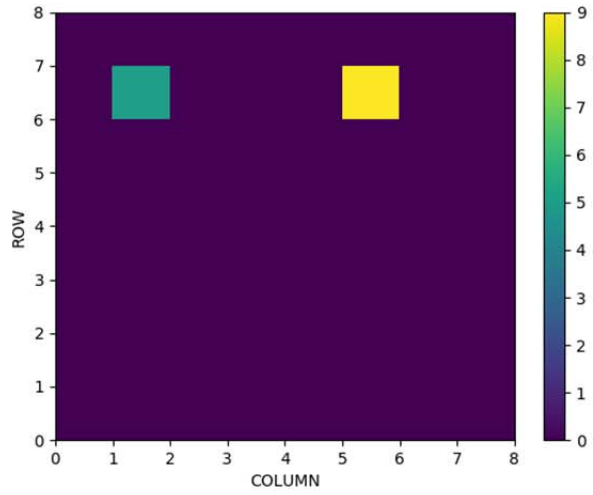
VN = 659.00 [mV]
VNCASC = 982.50 [mV]
VNSF = 475.00 [mV]
VPTRIM = 1252.00 [mV]
VPCOMP = 240.50 [mV]
VNSENSBIAS = 1257.00 [mV]
VBLR = 666.50 [mV]
VNFB_CONT = 609.50 [mV]
VPFB_SW = 1226.00 [mV]
VPBIAS = 1019.50 [mV]
VNCS_BB = 855.00 [mV]
  
```

```

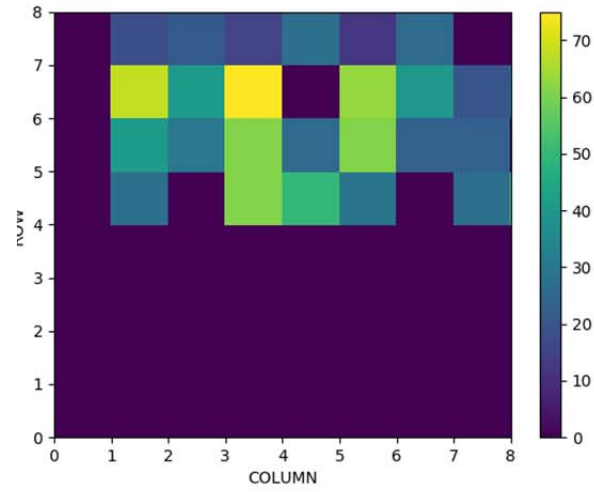
[0010000] [1110000] [0010000] [0010000] [0010000] [0010000] [0010000] [0010000] 92 COL<7..0>
[0000] [0000] [0000] [0000] [0000] [0000] [1111] [0000] 60 ROW<7..0>
[101010] [101001] [011001] [010010] [101101] [011001] [010011] [001001] [110111] [000000] BIAS

VN = 658.00 [mV]
VNCASC = 981.00 [mV]
VNSF = 474.50 [mV]
VPTRIM = 1252.00 [mV]
VPCOMP = 1355.00 [mV]
VNSENSBIAS = 1316.50 [mV]
VBLR = 666.00 [mV]
VNFB_CONT = 608.50 [mV]
VPFB_SW = 1226.00 [mV]
VPBIAS = 1020.00 [mV]
VNCS_BB = 882.00 [mV]
  
```

INJ 500mV



600mV



1800mV

