

***CMB***

LED driver, PIN-PD preamp, more boards for test

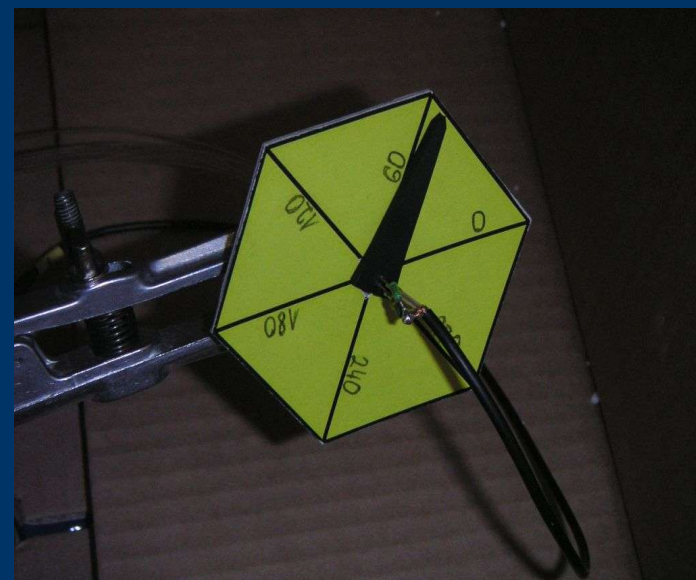
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# *Activities at Prague - june*

- We spend some time with LED Q-test setup
  - It works with 9CH low gain APD system
  - More Jara Zalesak in his presentation
- Ongoing 2 more LEDdrivers
  - 4 more PINdiode preamp



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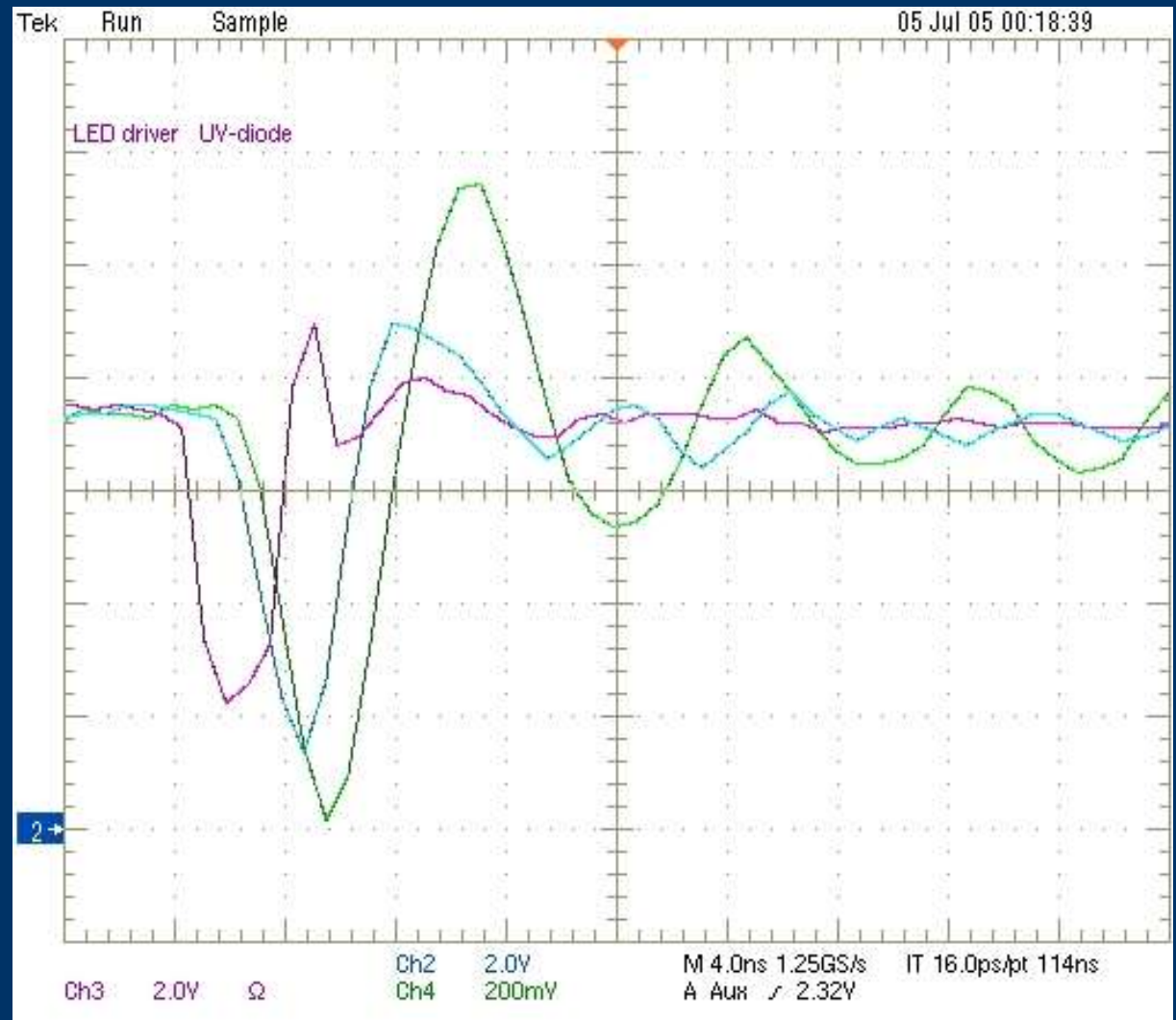
# 3 scope probes, what we see...

- LED driver
- Oscilloscope  
TDS5104, 1.5GHz
- Probes TEK
  - GRN 16pF 200MHz
  - Cyan 11pF 500MHz
  - VIO 1.5pF 3GHz
- Same circuit at once

P6185 passive 1kOhm 1.5pF  
20x (3GHz)

P5050 passive 10MOhm 11pF  
500MHz 10x

P2200 passive 10MOhm 16pF  
200MHz 10x

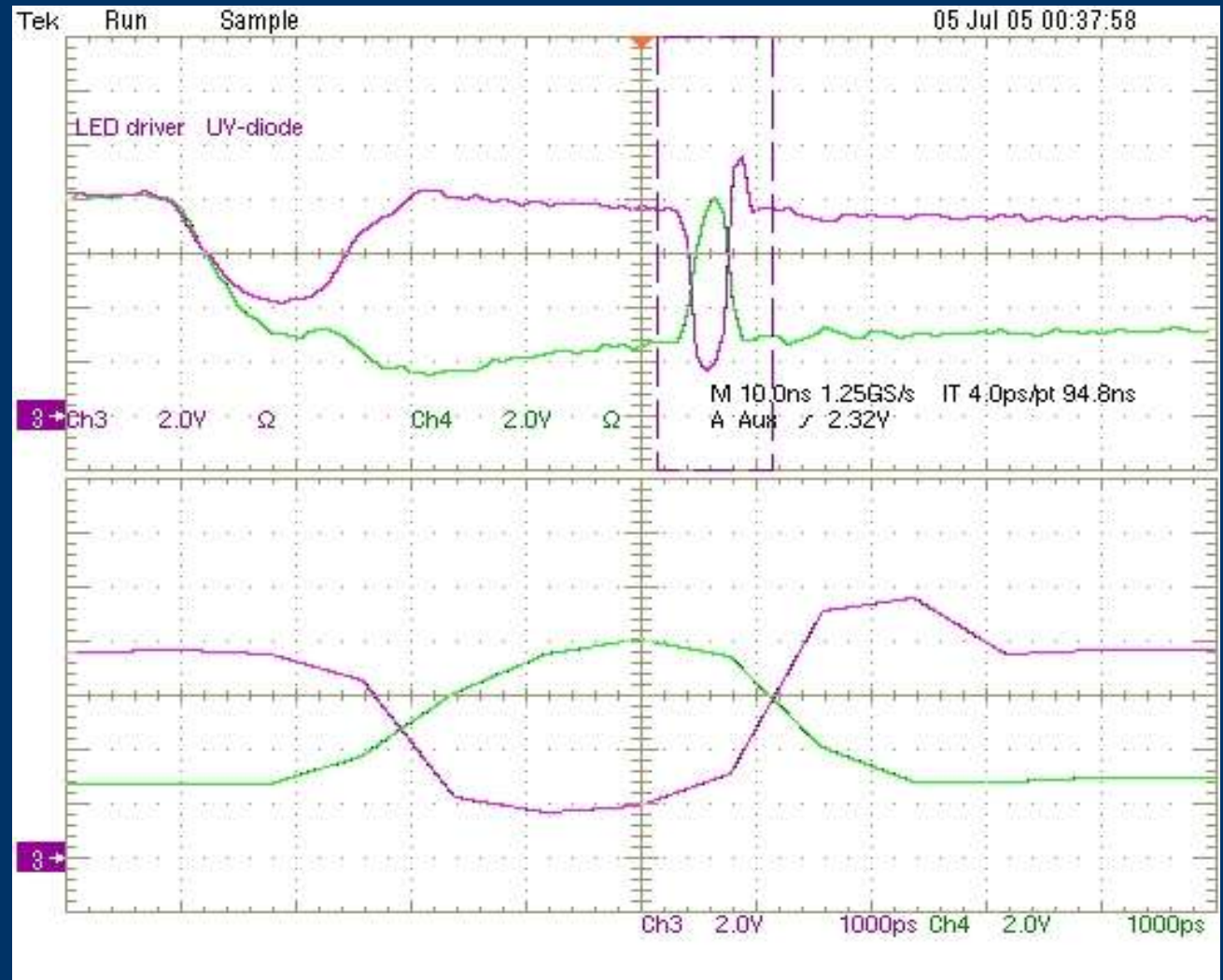


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# LED driver

- 2 Fastest probes at the output
- Short 3ns puls is shown

Zoom 1:10  
1ns/div



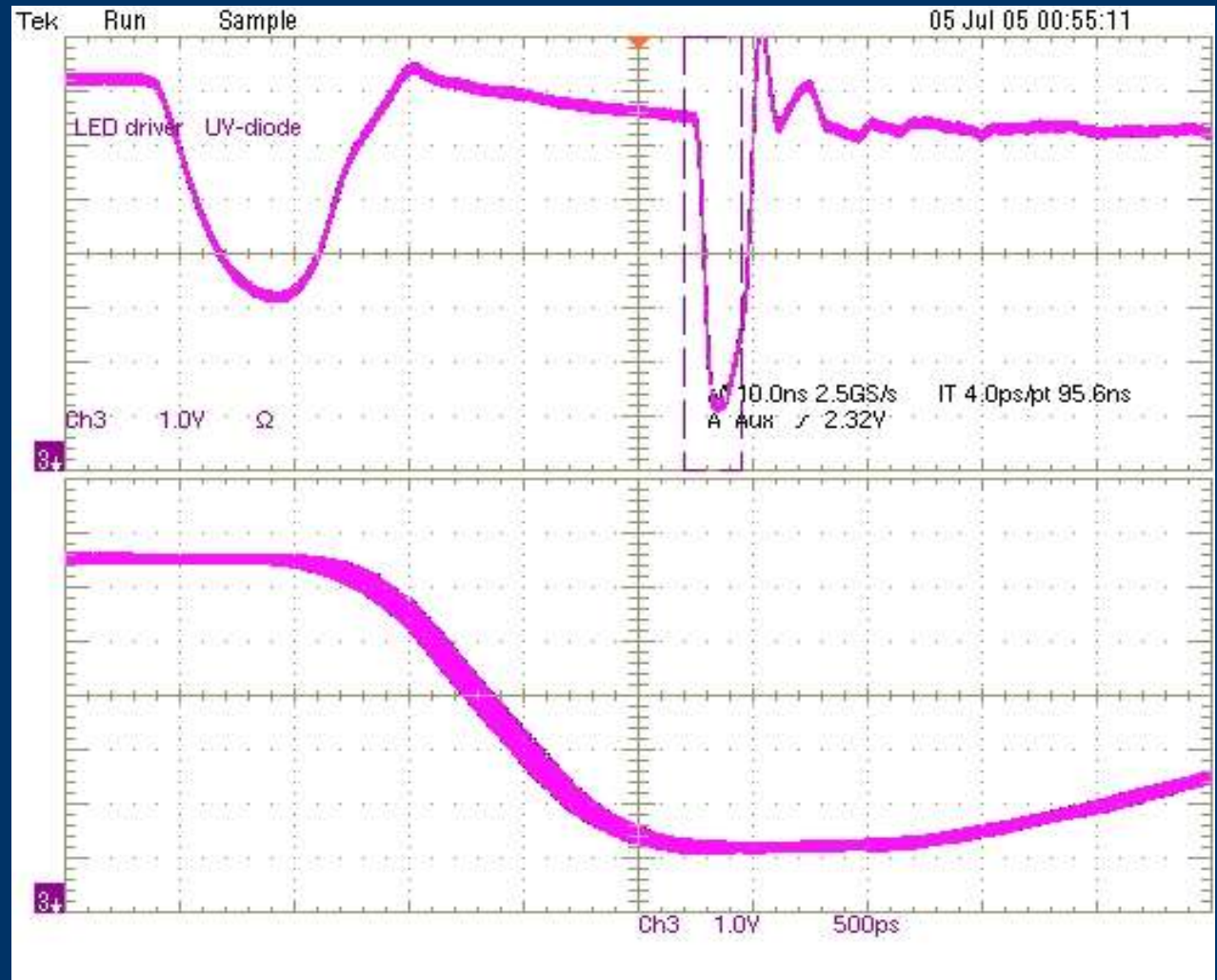
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# LED driver jitter

- TDS 5104 2.5Gs oscilloscope
- Fast probes

Jitter = 200ns

1hr at 10kHz,  
same jitter as  
running 15min on  
picture



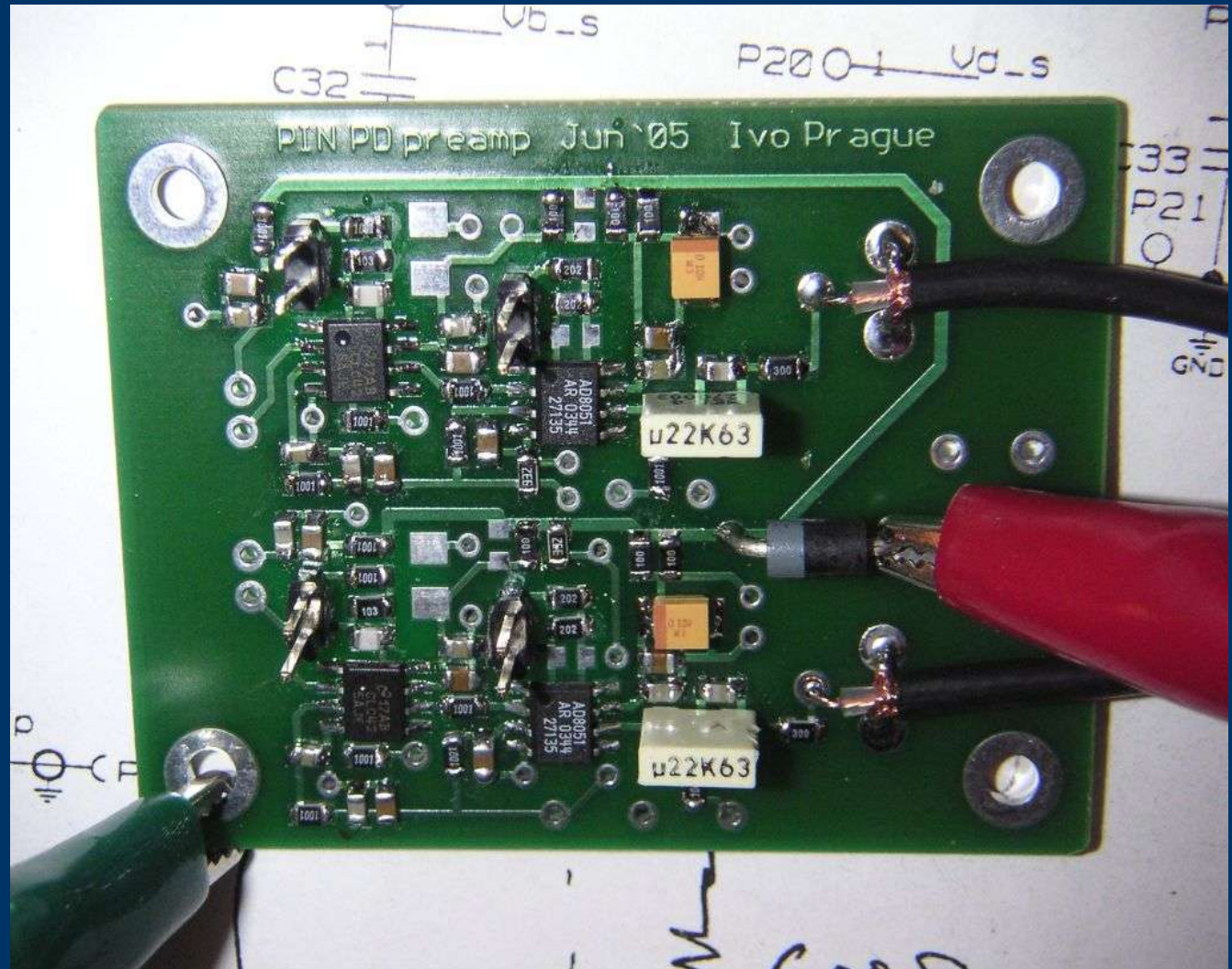
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Zoom 500ps / div



# PIN-PD preamp

- 2CH, low noise, 50Ohm output, 12V power
- Jumpers to set gain (feedback R)
- Made at ONE week, other 4 pcs on assembly



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# *Time plan*

- Two parts of CMB
- Lower part with CANbus is at first hand under design, then upper part with majority of LED drivers
- With an optimistic estimation, prototype in august
- LED Q test to be continued in august/september