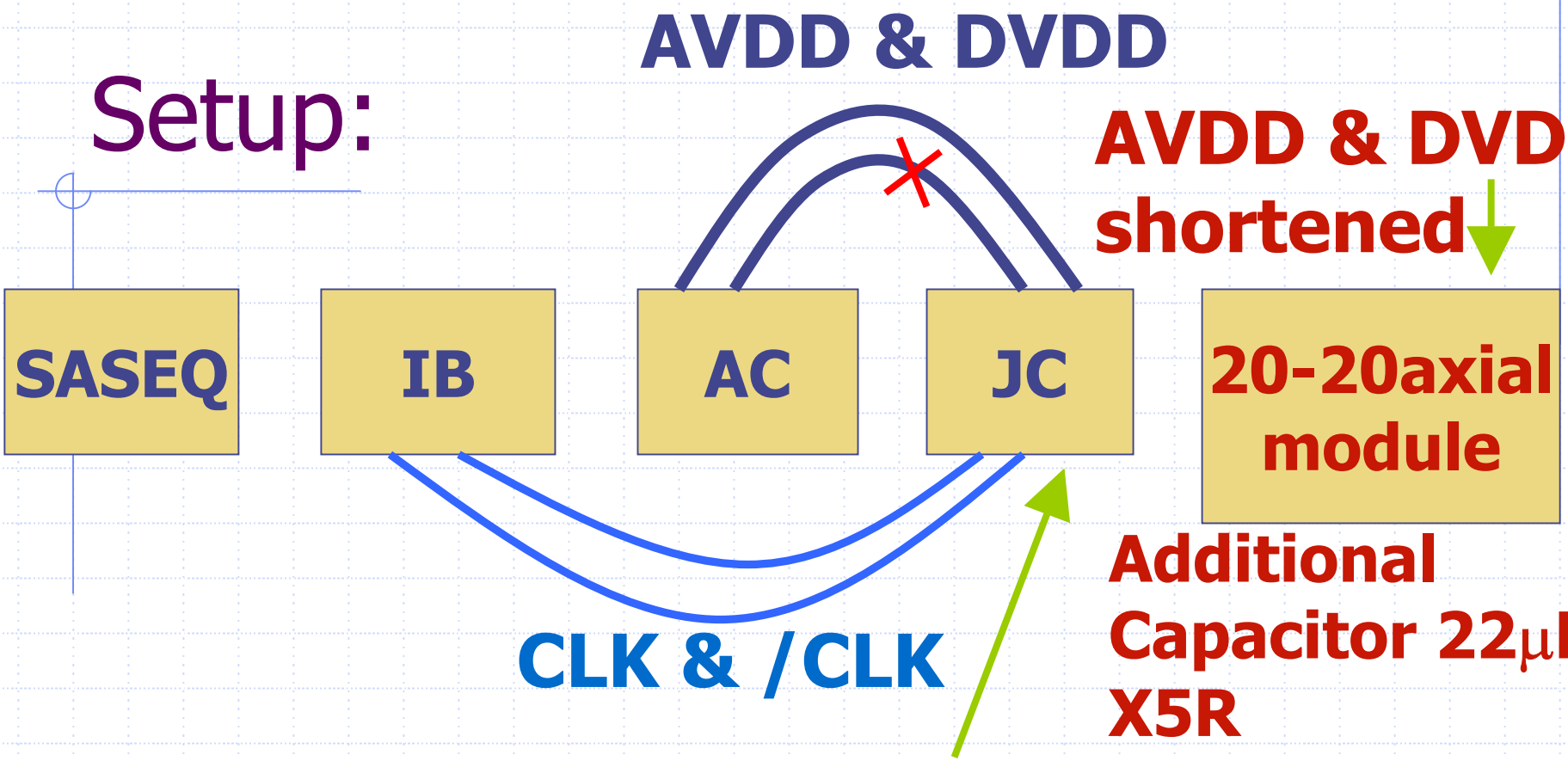
“Full Chain” Tests

S.Burdin
S.Lager
3/3/3

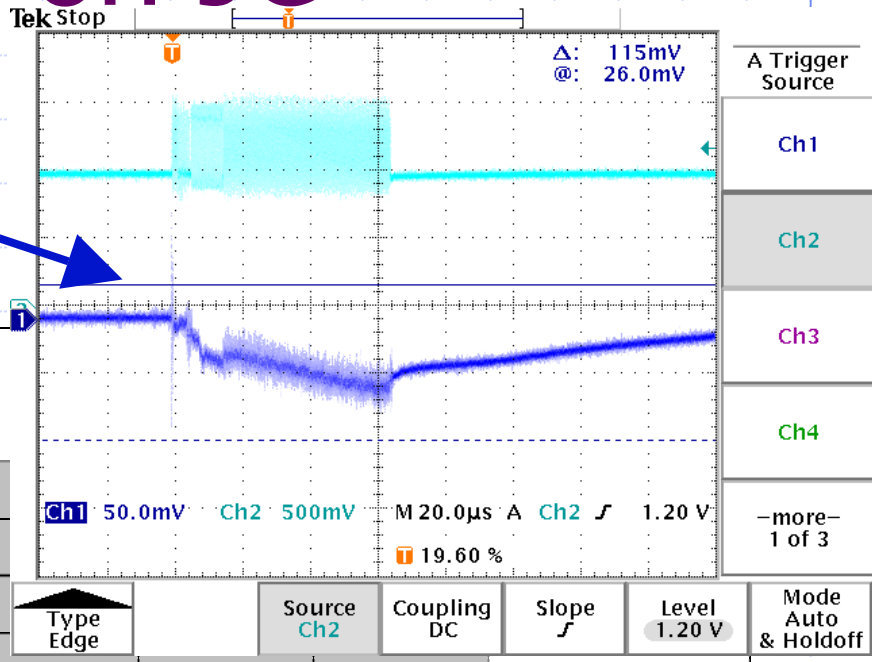
Setup:

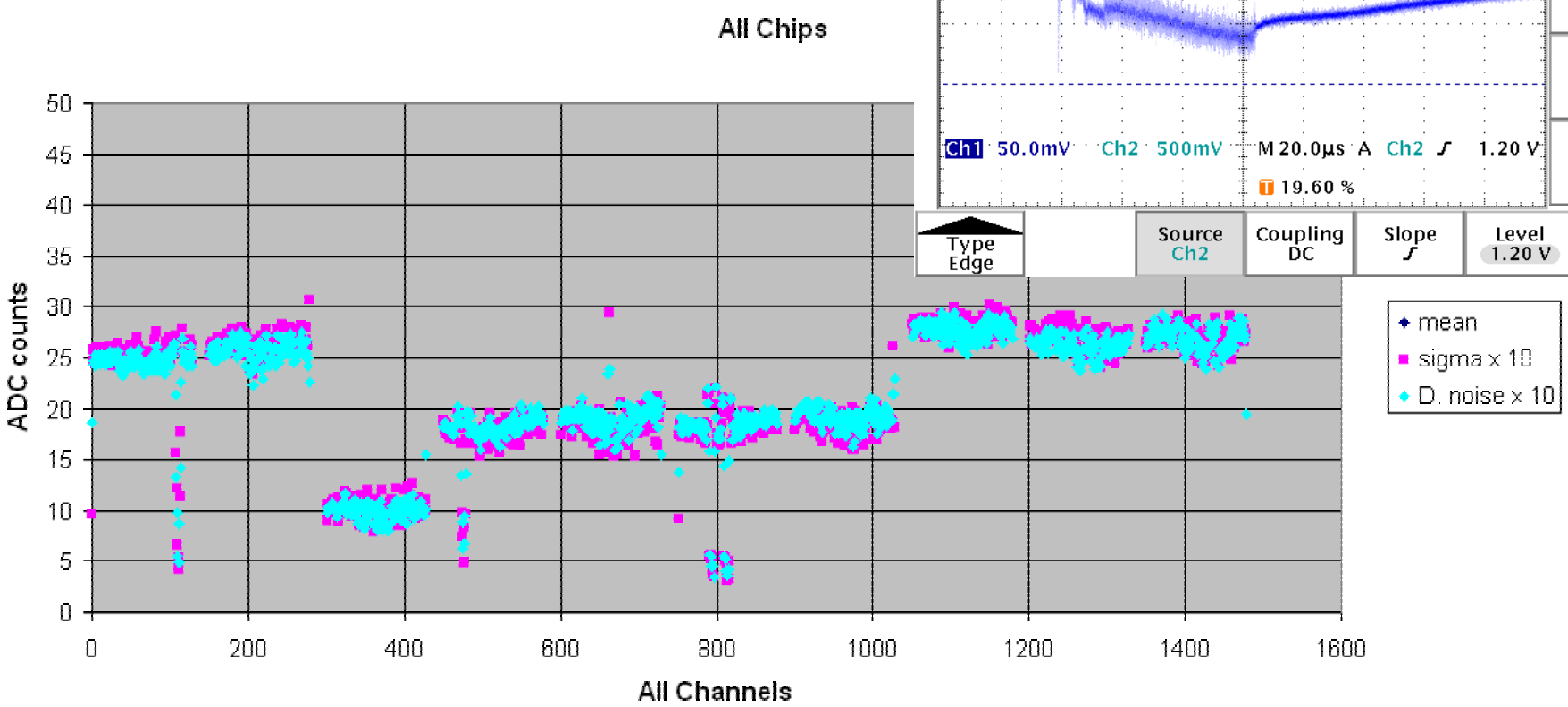


a) Original design of capacitors 100μF
b) Capacitors are shortened
c) One capacitor is removed
d) Both capacitors are removed

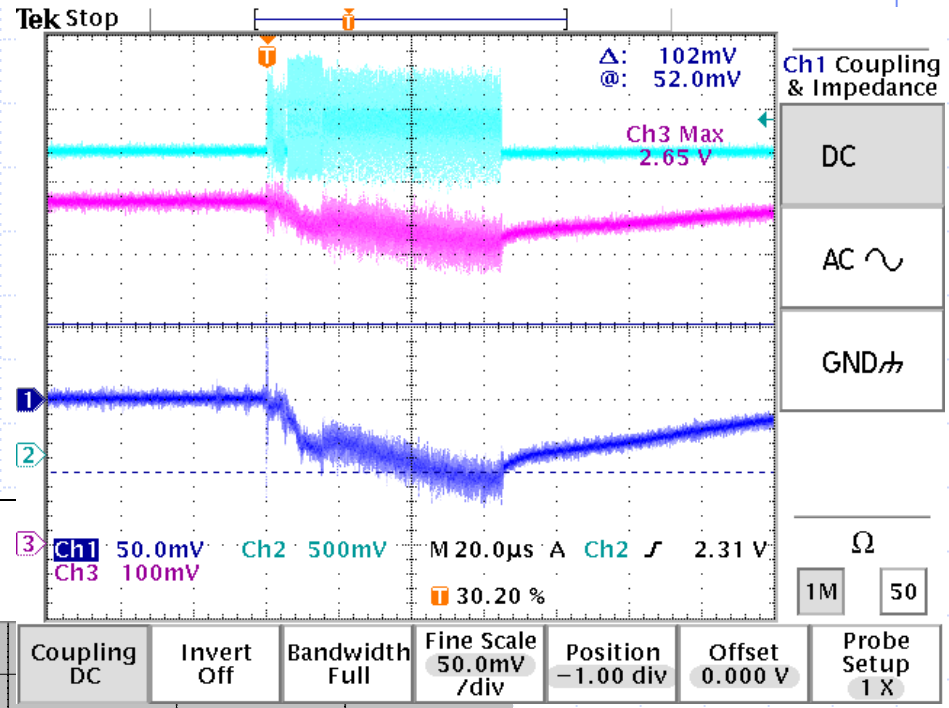
A) Original Design of Capacitors 100μF on JC

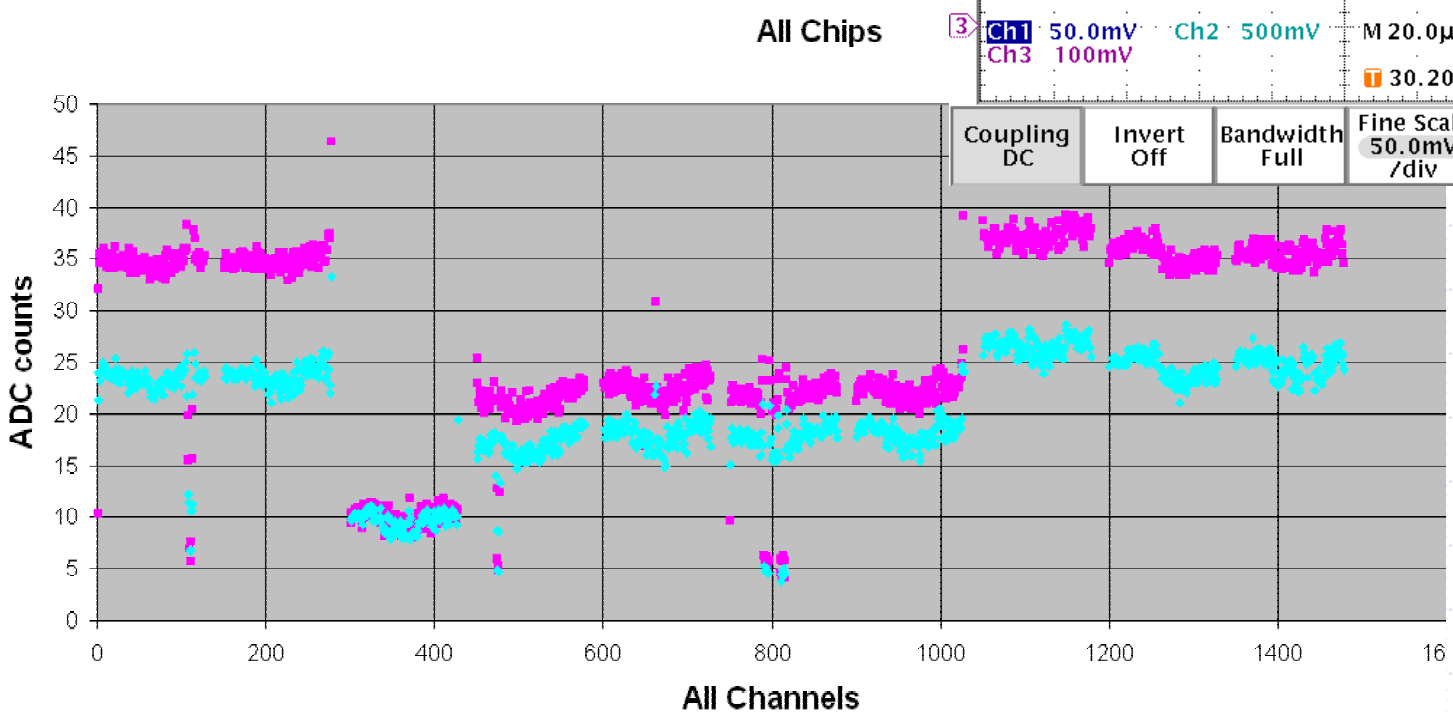
Voltage is measured On Hybrid



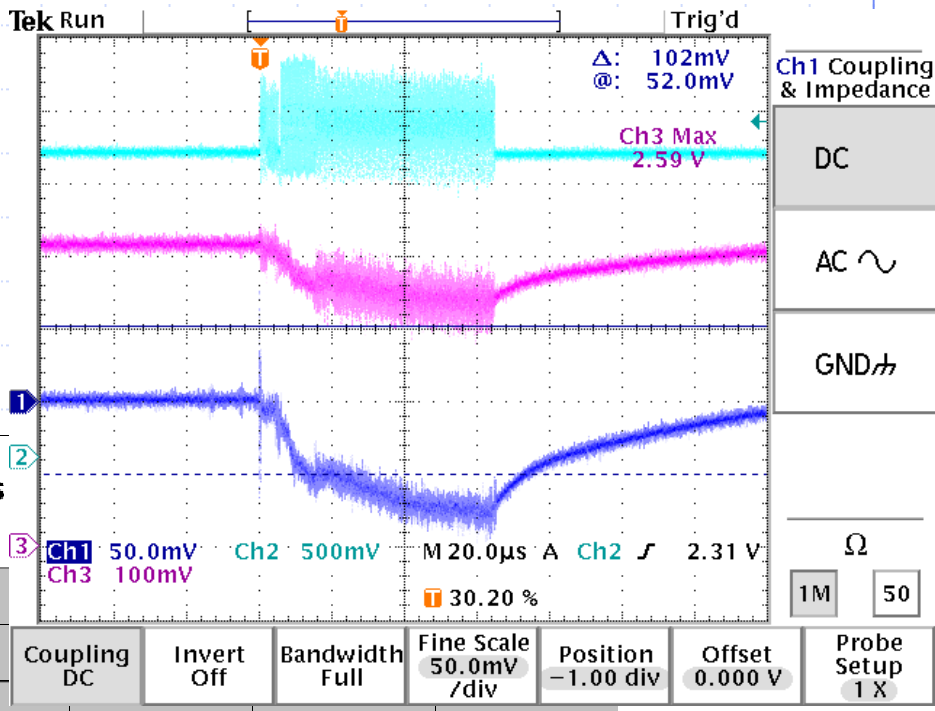


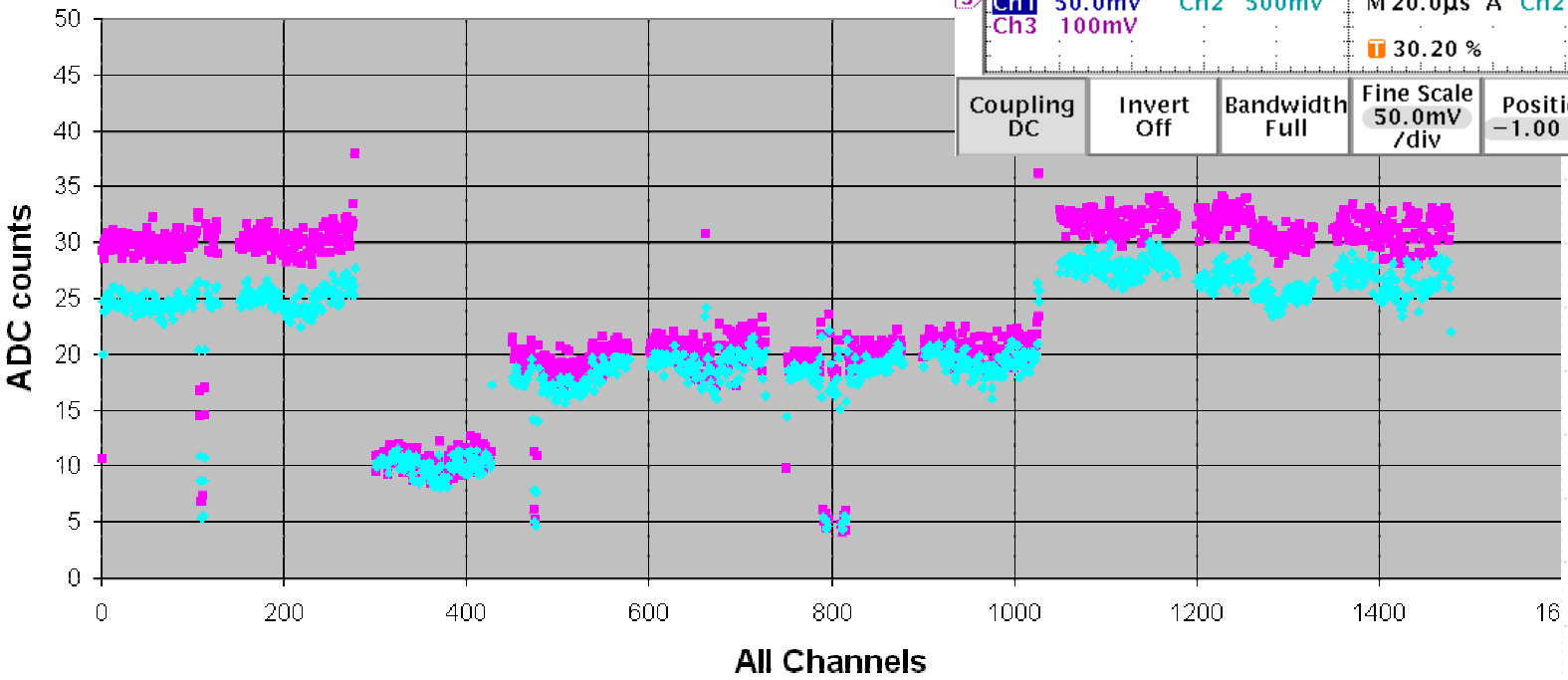
B) Capacitors Are Shortened on JC



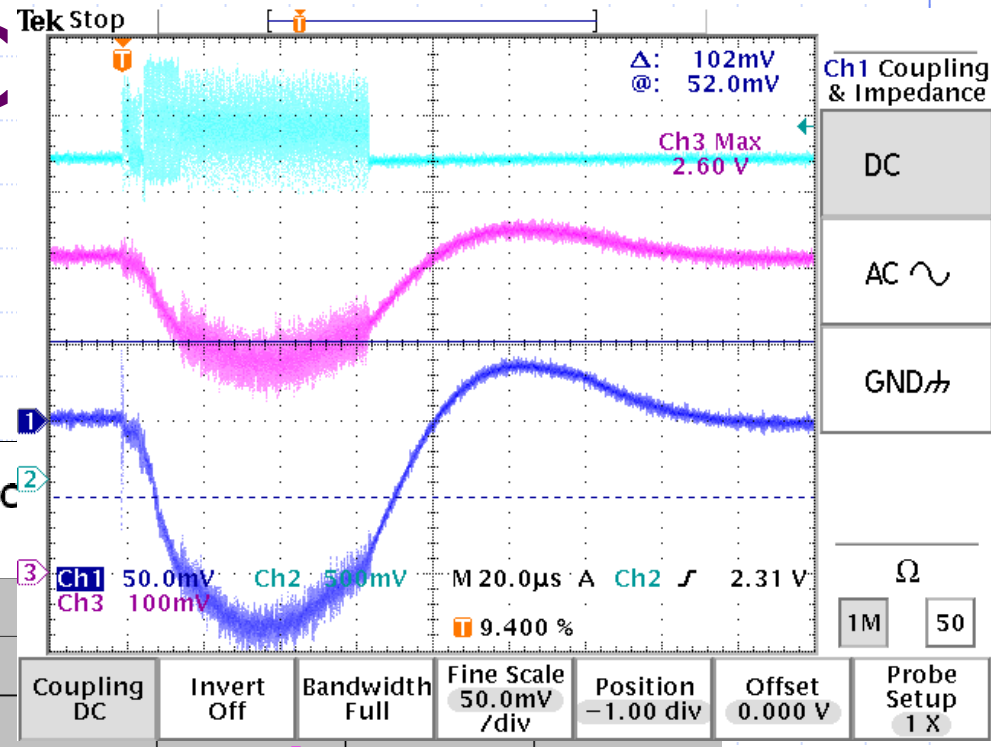


C) One Capacitor 100μF is Removed from JC

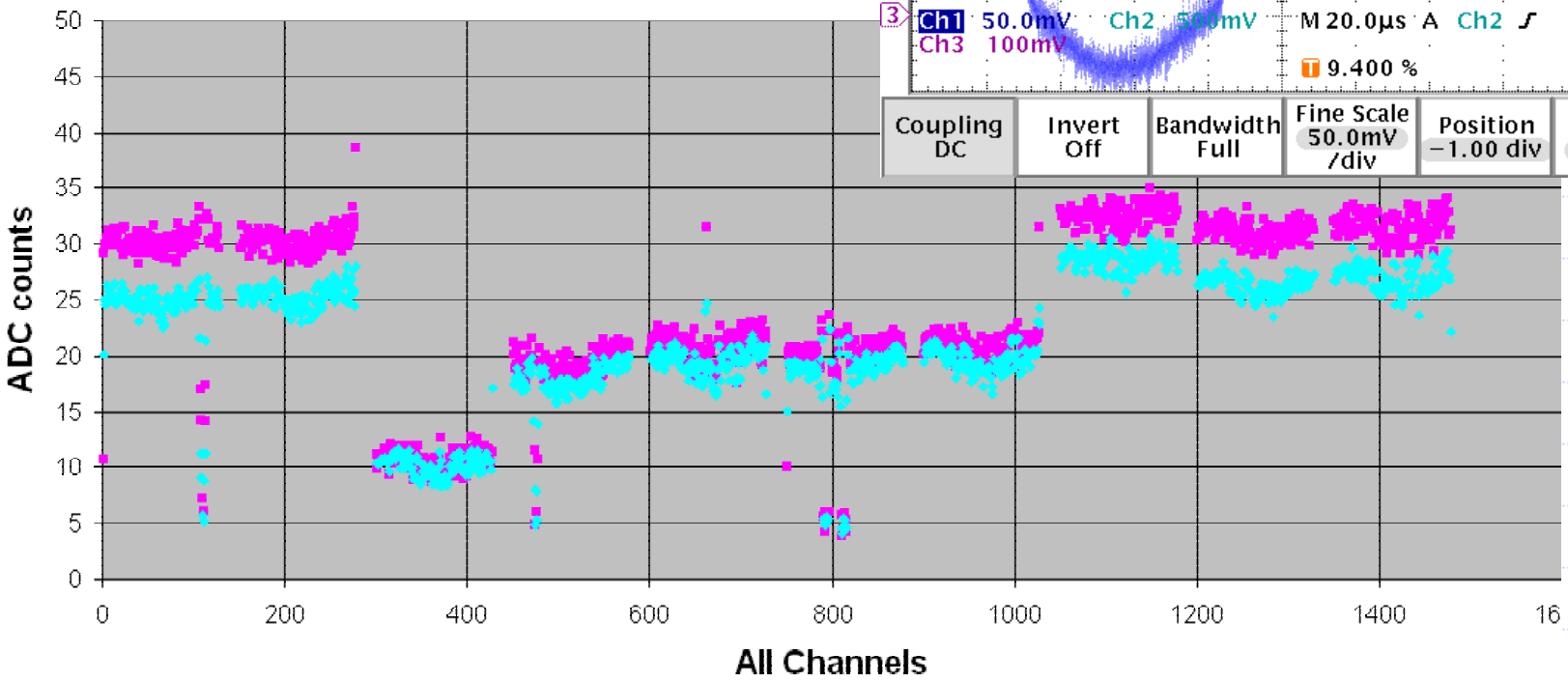




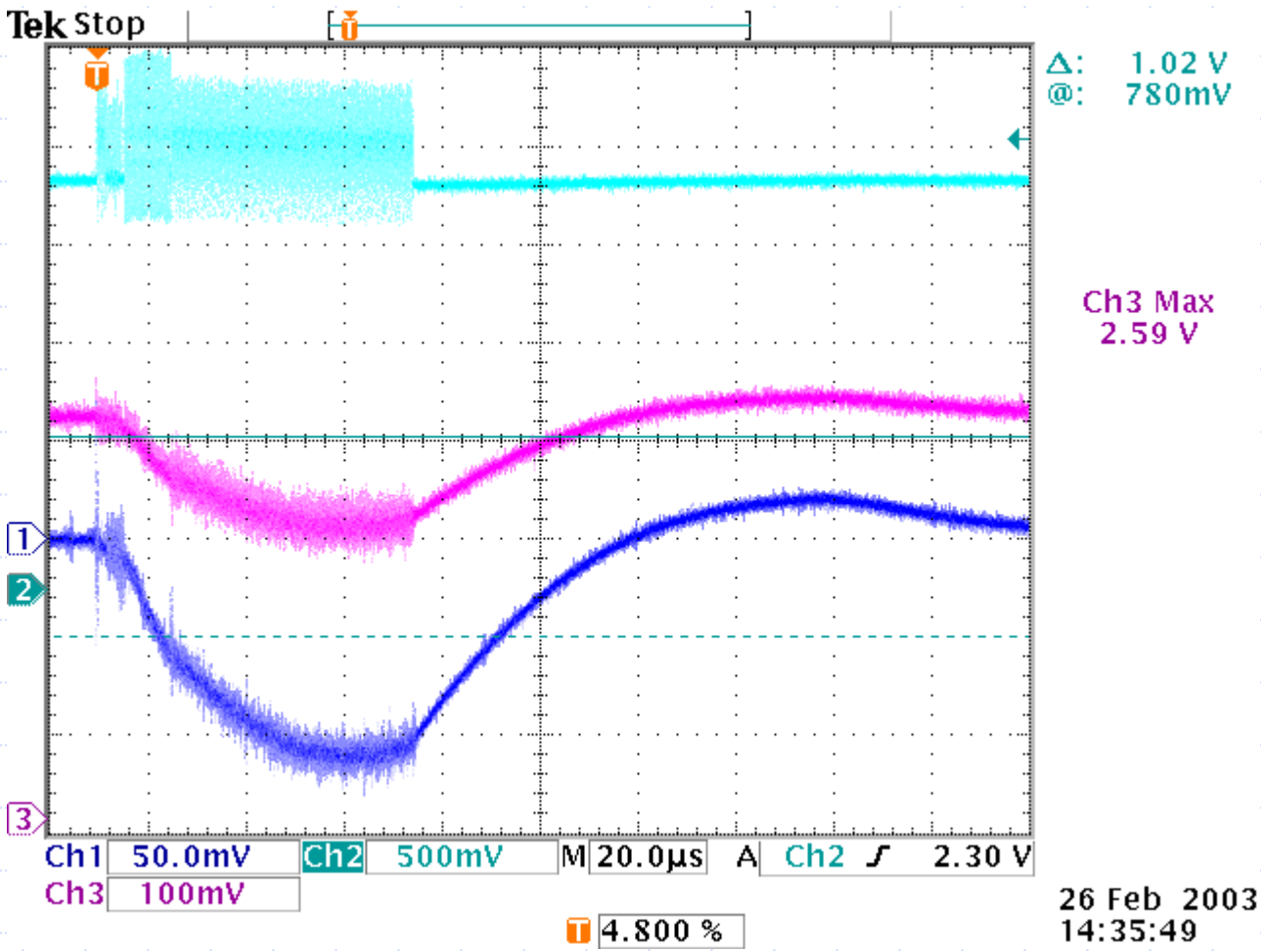
D) Both Capacitors are Removed from JC (26.4 μF on Hybrid)



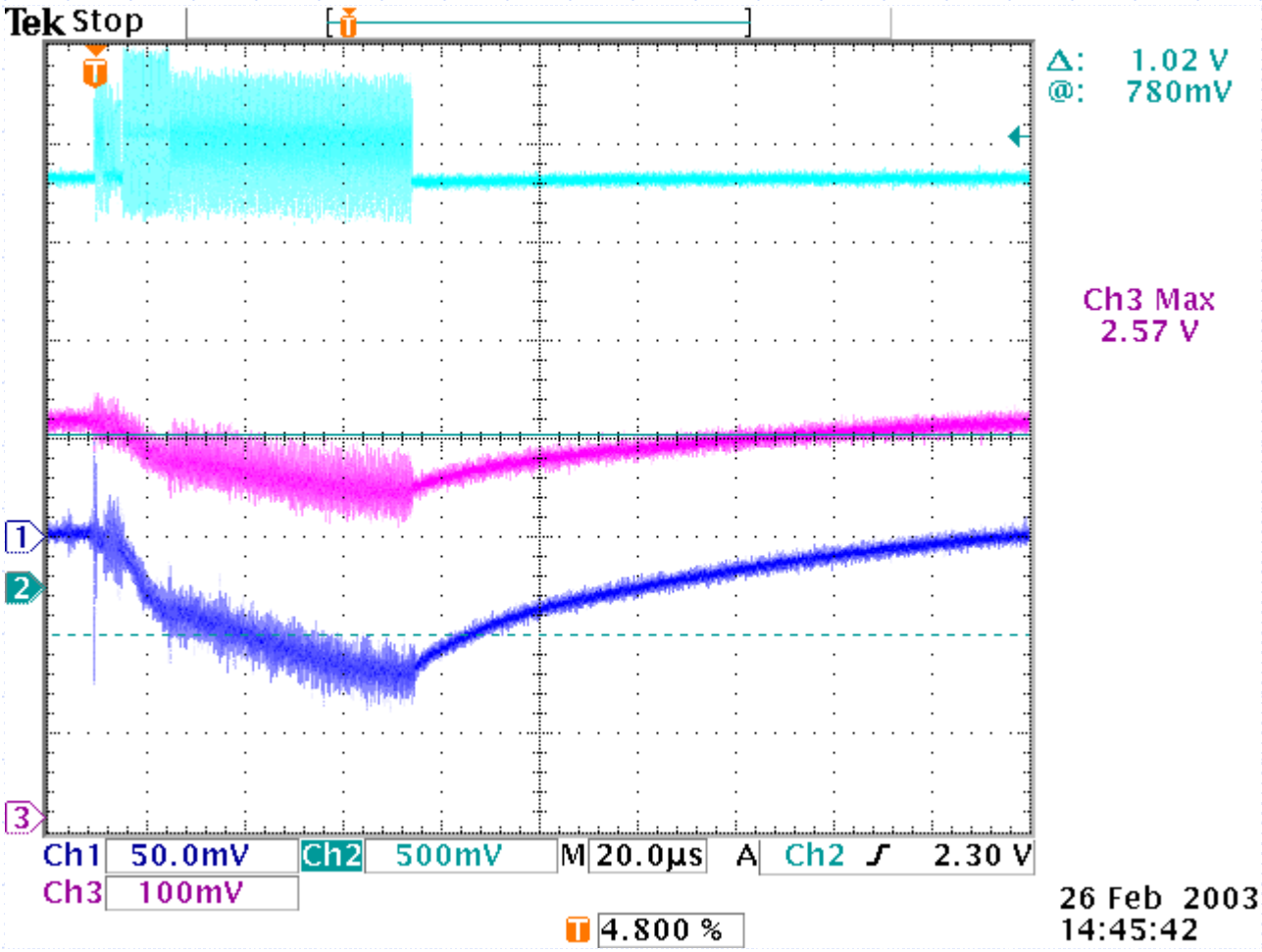
All C



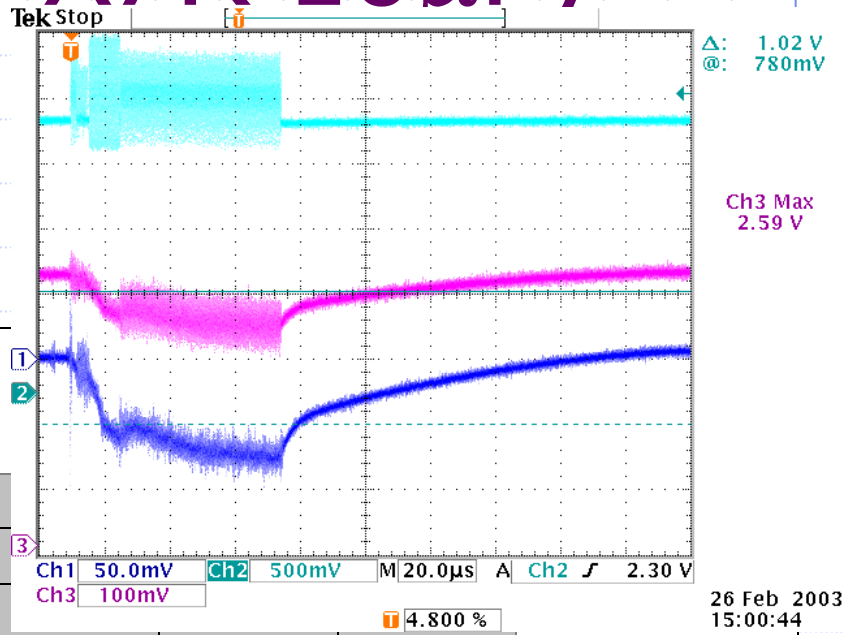
48.4μF on Hybrid

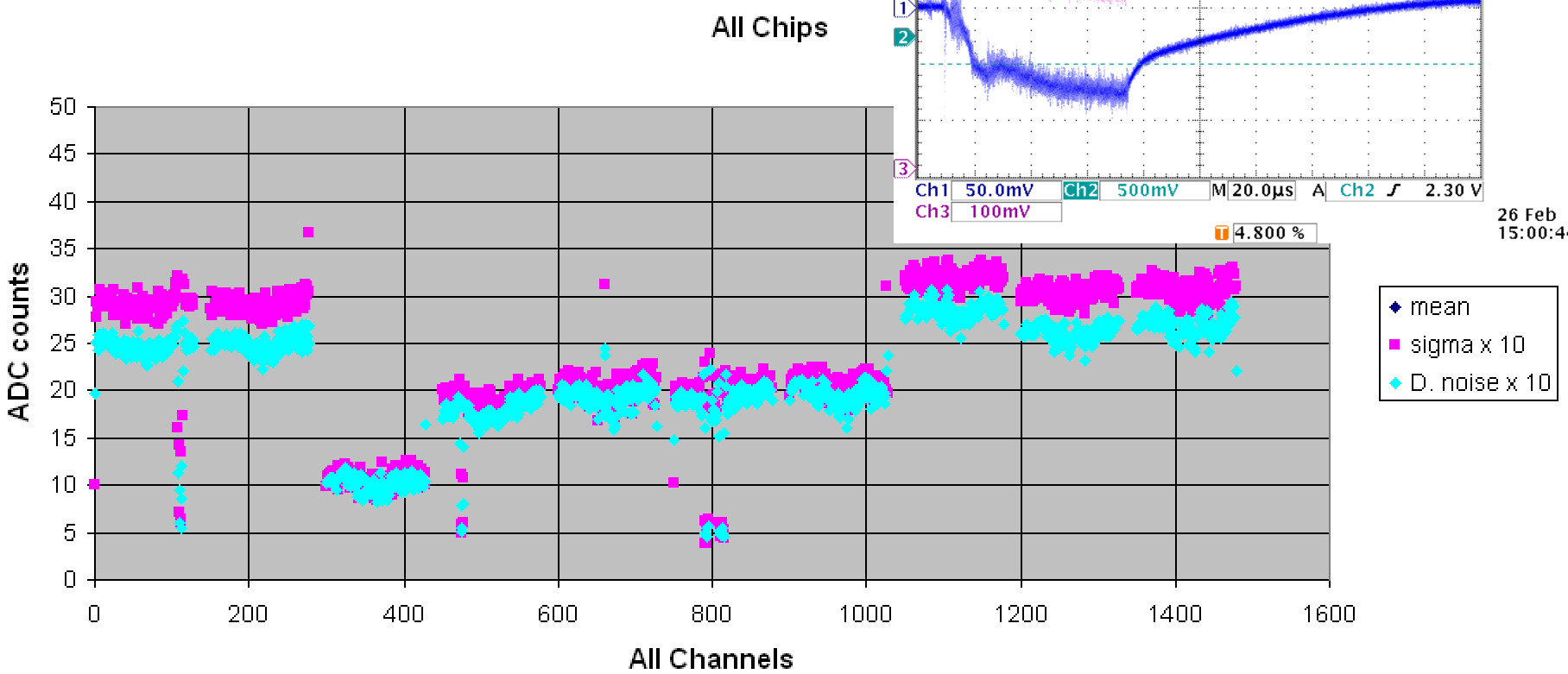


100μF on JC + 48.4μF on Hybrid

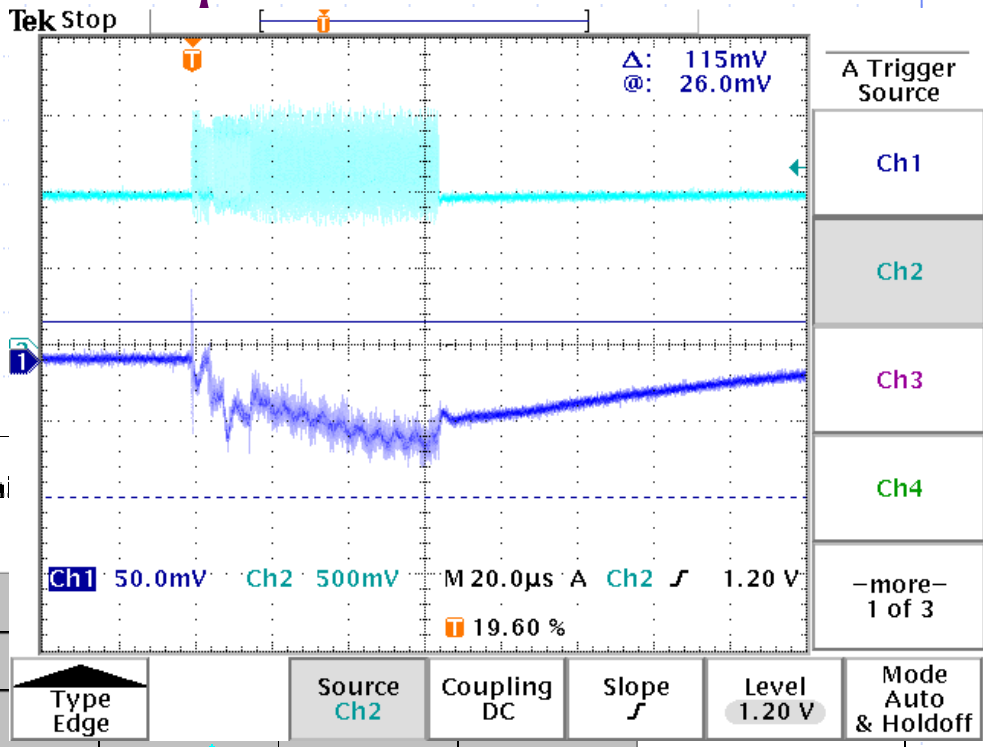


100μF on JC + 14.4μF on Hybrid (additional X7R 10μF)

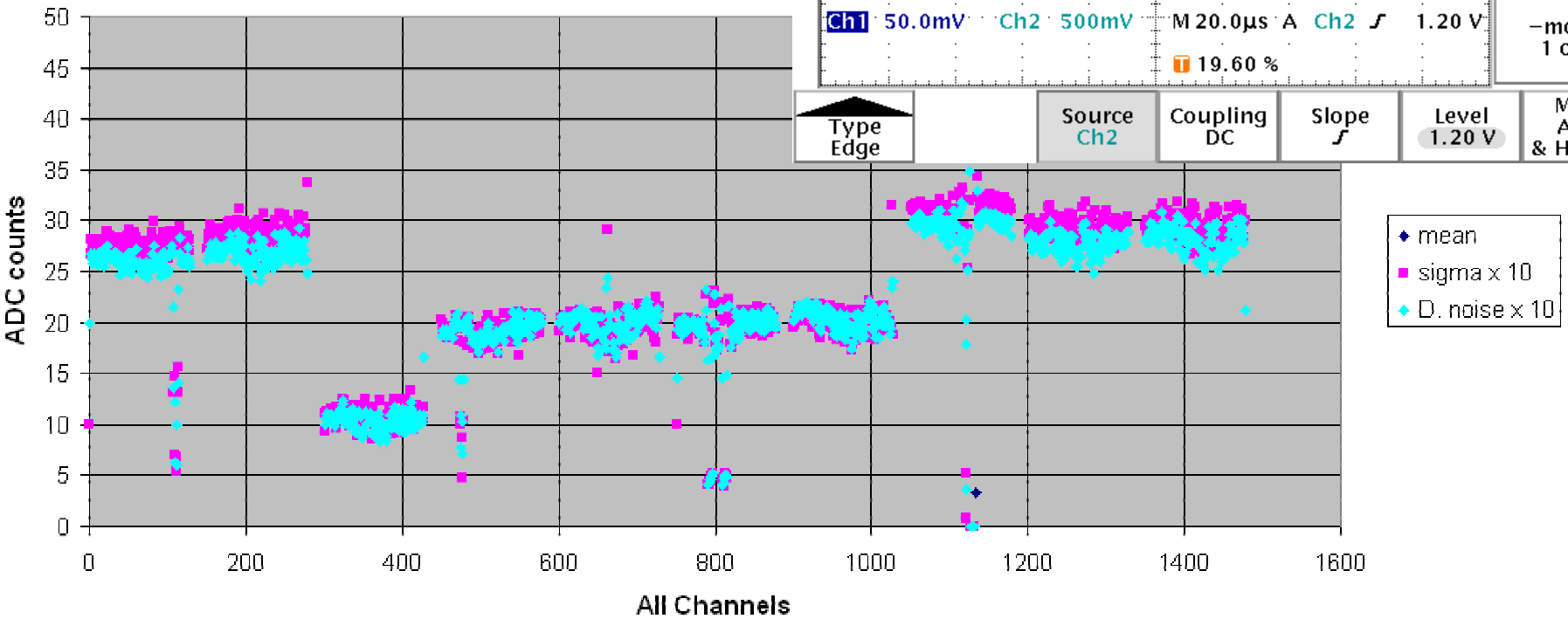




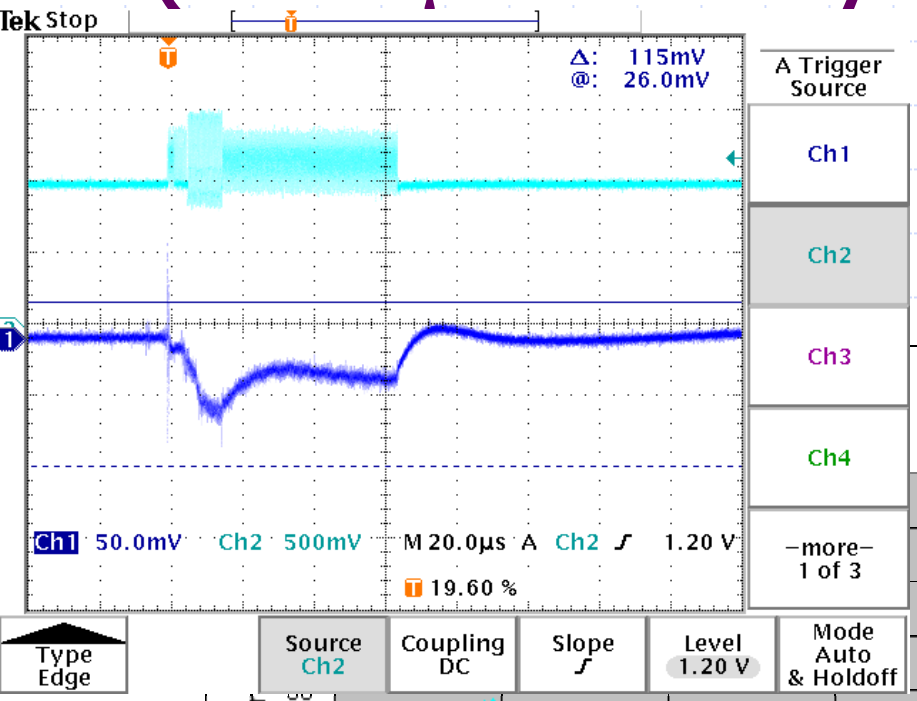
Comparison w/ 4.4μF on Hybrid

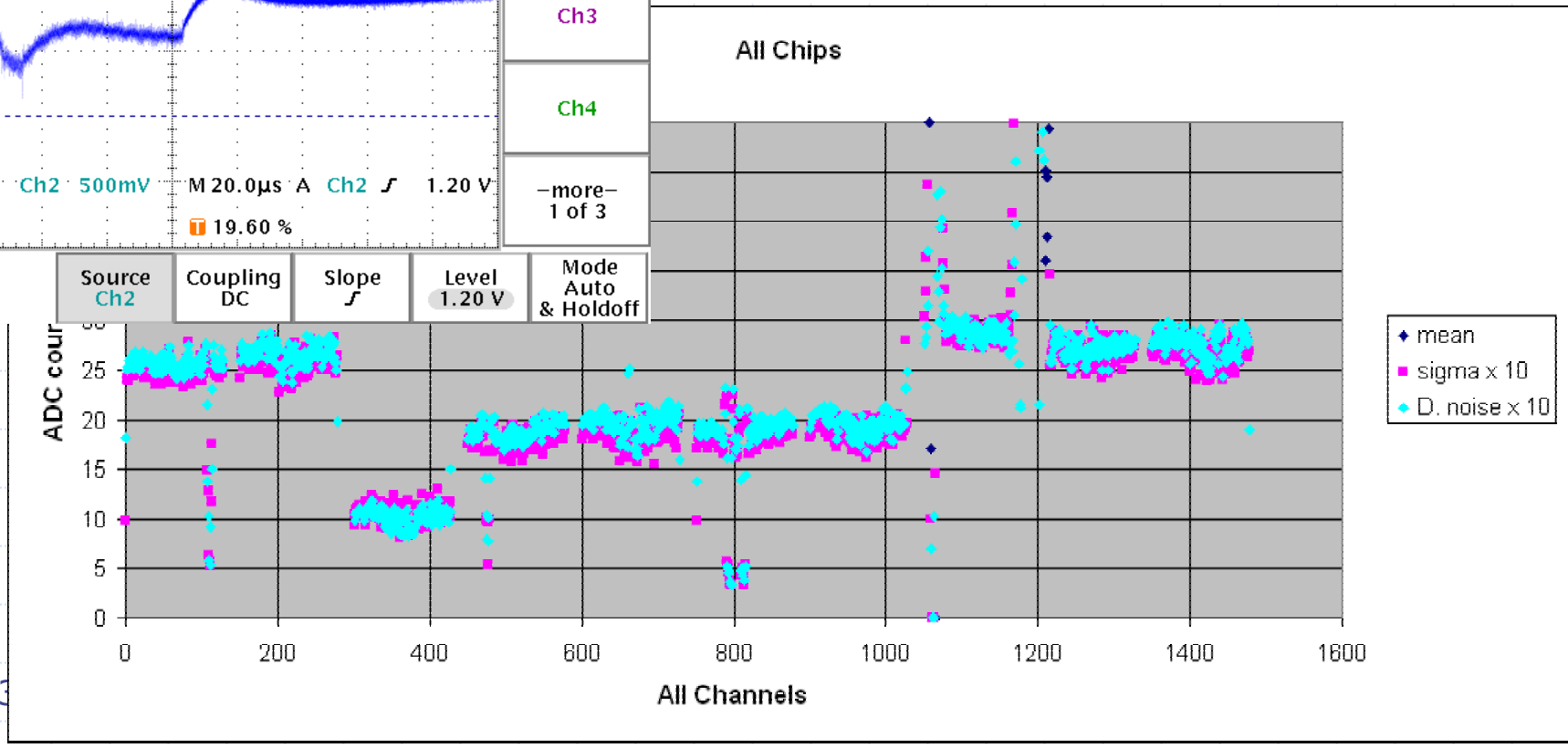


All Chi

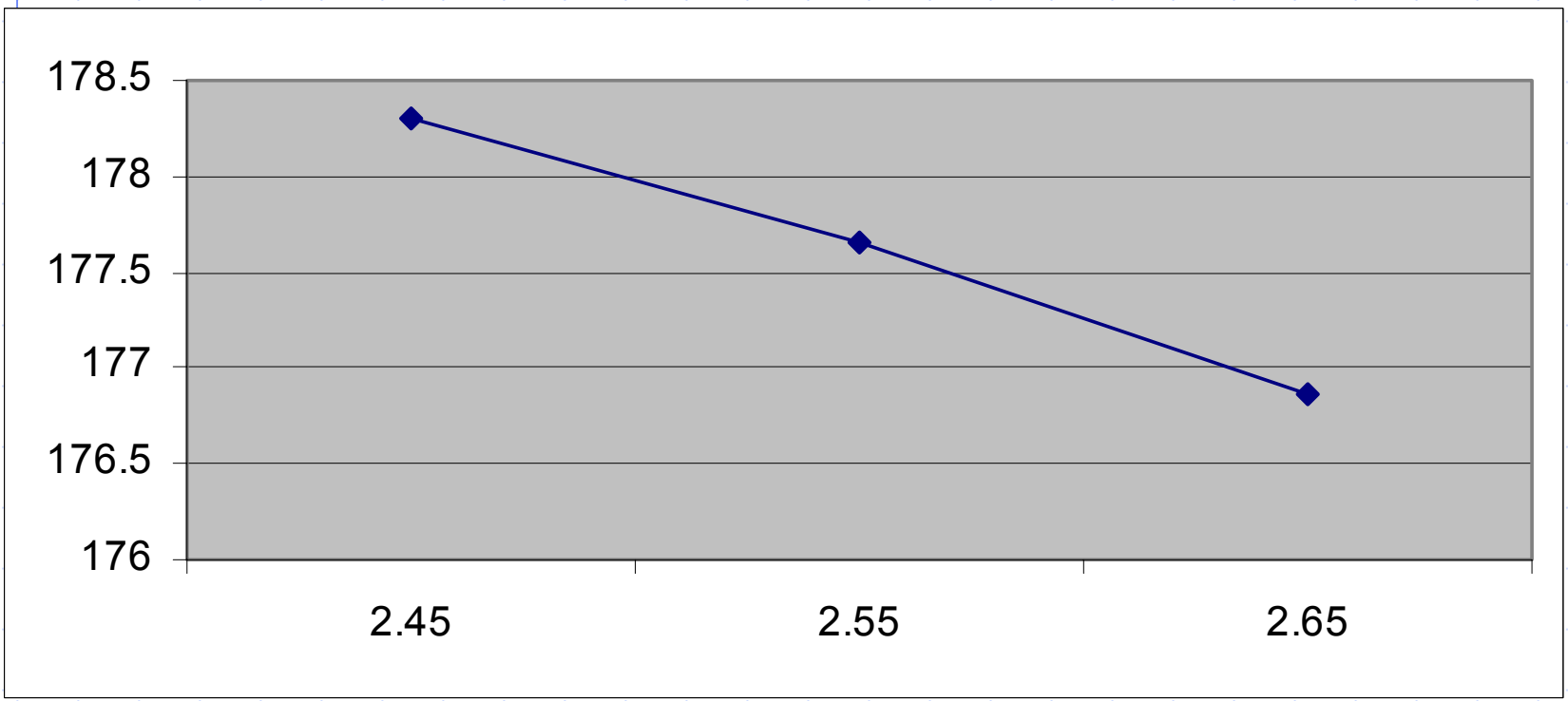


Comparison with Purple Card (26.4μF on Hybrid)





Dependence of pedestal on voltage



Conclusion

- We have oscillations on power line w/o 100μF on JC
- 10μF capacitor on hybrid removes fine structure on power line
- Noise w/ full chain is almost the same as w/ purple card