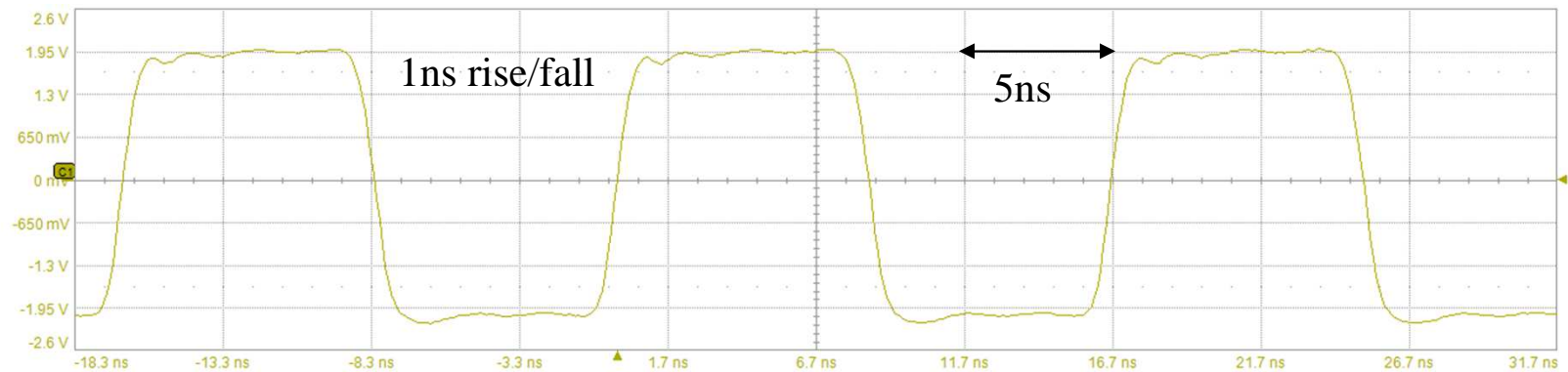


# M2k module pulse response (Tek 5014 drive):

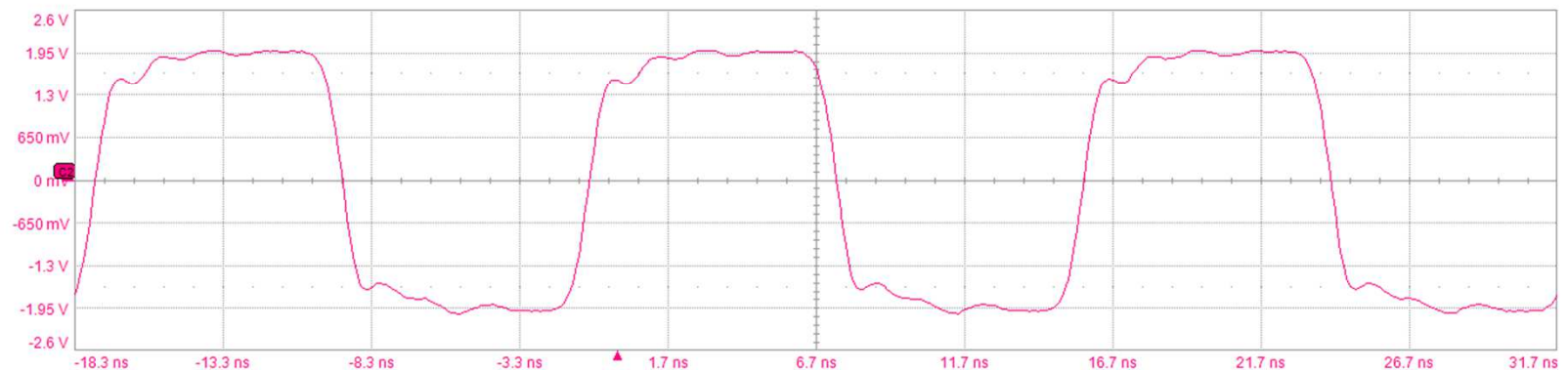
M2k has predistortion to compensate for TEK undershoot, improving pulshape combined with less variation in pulshape as a function of amplitude (see next slides)  
 Rise time improves by a factor of 2

4Vpp in 50Ω

Tek (2Vpp)  
 via M2k  
 2V/V Amp



Tek only  
 doing 4Vpp



Measure	P1:ampl(C1)	P2:rms(C1)	P3:rise(C1)	P4:fall(C1)	P5:rise(C2)	P6:fall(C2)	P7:---	P8:---
value	3.977 V	1.884 V	1.030 ns	1.067 ns	2.130 ns	1.191 ns		
status	✓	✓	✓	✓	✓	✓		

C1	AVG	DC50	C2	AVG	DC50
650 mV/div			650 mV/div		
0 mV offset			0 mV offset		
5.677 k#			5.677 k#		

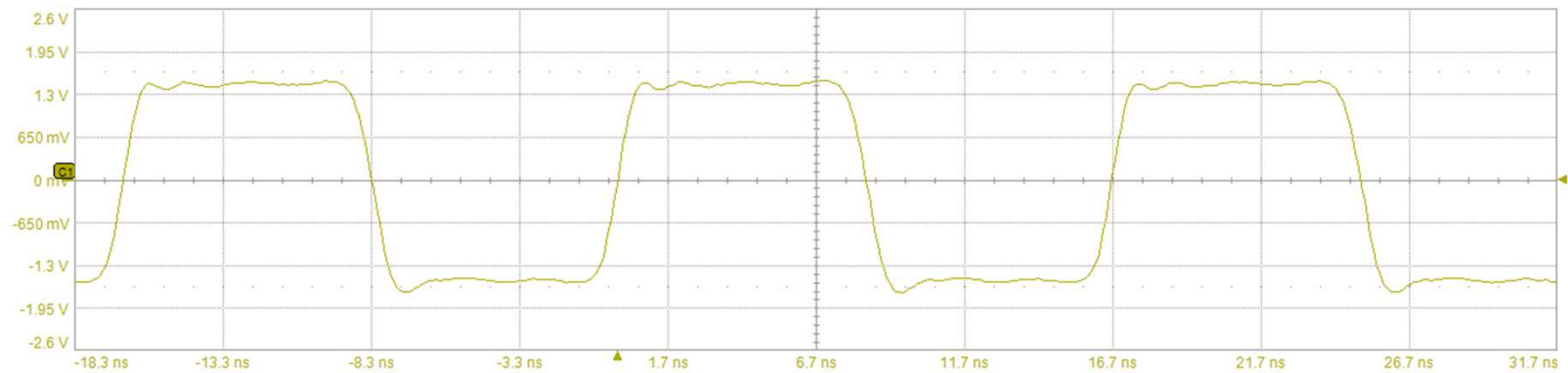
  

Tbase	-6.7 ns	Trigger	C1	DC
500 S		Auto		10 mV
10 GS/s		Edge		Positive

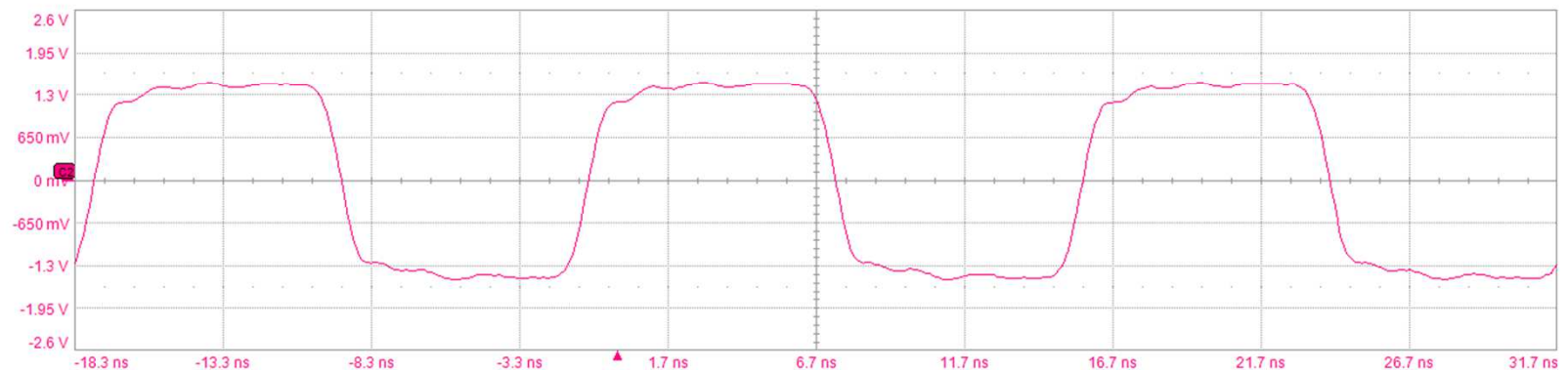
# M2k module pulse response (Tek 5014 drive):

3Vpp in 50Ω

Tek (1.5Vpp)  
via M2k  
2V/V Amp



Tek only  
doing 3Vpp



Measure	P1:ampl(C1)	P2:rms(C1)	P3:rise(C1)	P4:fall(C1)	P5:rise(C2)	P6:fall(C2)	P7:---	P8:---
value	2.983 V	1.418 V	1.004 ns	1.075 ns	1.334 ns	1.230 ns		
status	✓	✓	✓	✓	✓	✓		

C1	AVG	DC50	C2	AVG	DC50
650 mV/div			650 mV/div		
0 mV offset			0 mV offset		
14.867 k#			14.867 k#		

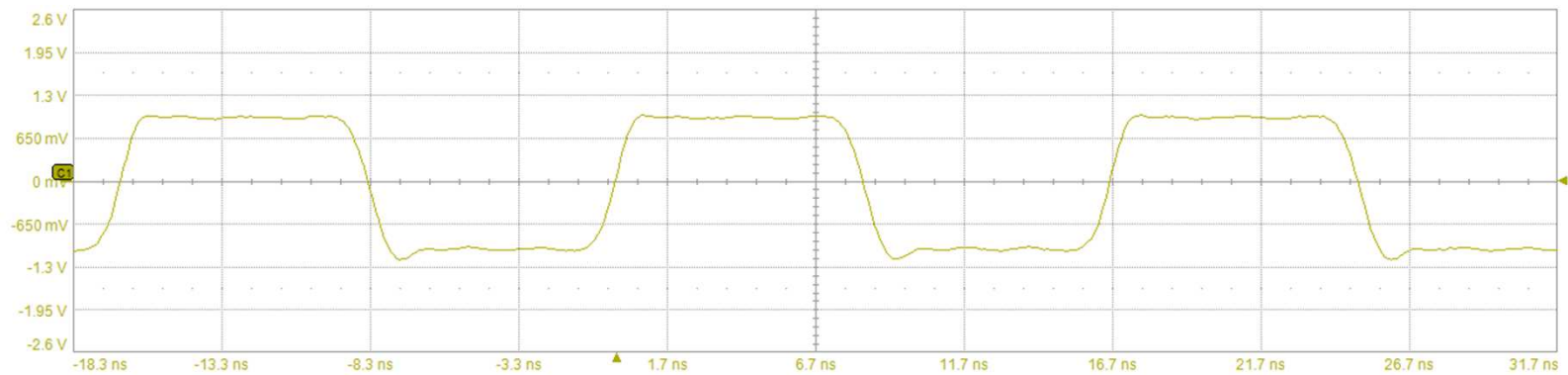
  

Tbase	-6.7 ns	Trigger	C1	DC
			Auto	10 mV
500 S	10 GS/s	Edge		

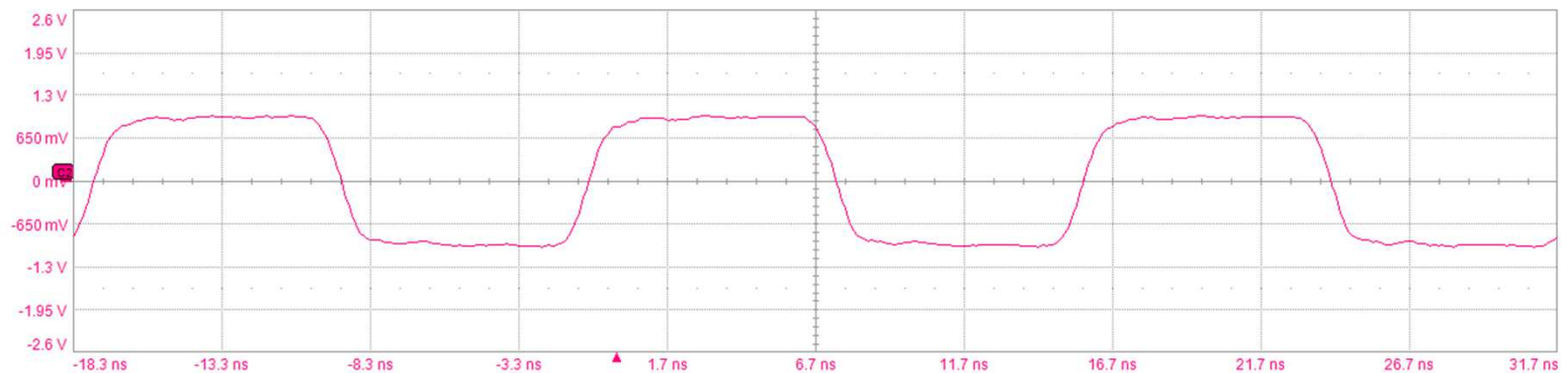
# M2k module pulse response (Tek 5014 drive):

2V<sub>pp</sub> in 50Ω

Tek (1V<sub>pp</sub>)  
via M2k  
2V/V Amp



Tek only  
doing 2V<sub>pp</sub>



Measure	P1:ampl(C1)	P2:rms(C1)	P3:rise(C1)	P4:fall(C1)	P5:rise(C2)	P6:fall(C2)	P7:---	P8:---
value	1.998 V	948 mV	1.074 ns	1.137 ns	1.339 ns	1.238 ns		
status	✓	✓	✓	✓	✓	✓		
C1	AVG	DC50	C2	AVG	DC50			
	650 mV/div	650 mV/div		650 mV/div				
	0 mV offset	0 mV offset		0 mV offset				
	21.334 k#	21.334 k#		21.334 k#				

Tbase	-6.7 ns	Trigger	C1 DC
	5.00 ns/div	Auto	10 mV
500 S	10 GS/s	Edge	Positive