PMP40041 Test Results

1. Efficiency

Vin=5.5V

	Vin(V)	Iin(A)	Vo1(V)	Io1(A)	Vo2(V)	Io2(A)	Vo3(V)	Io3(A)	Effi.(%)
Half Load	5.466	1.130	1.008	2.5	1.005	1.5	1.005	1.0	81.5
Full Load	5.423	2.689	1.012	5.0	1.010	3.0	1.010	2.0	69.3

Vin=12V

	Vin(V)	Iin(A)	Vo1(V)	Io1(A)	Vo2(V)	Io2(A)	Vo3(V)	Io3(A)	Effi.(%)
Half Load	11.98	0.617	1.07	2.5	1.001	1.5	1.004	1	70.1
Full Load	11.96	1.243	1.001	5	1.005	3	1.001	2	67.4

2. Line and Load Regulation

Vin	**4.5V**		**5.5V**		**6V**	
Load	Io1=0A Io2=Io3=0A	Io1=0A Io2=3A Io3=2A	Io1=0A Io2=Io3=0A	Io1=0A Io2=3A Io3=2A	Io1=0A Io2=Io3=0A	Io1=0A Io2=3A Io3=2A
Vout1	1.008V	1.011V	1.008V	1.008V	1.008V	1.007V

Vin	**4.5V**		**5.5V**		**6V**	
Load	Io2=0A Io1=Io3=0A	Io2=0A Io1=5A Io3=2A	Io2=0A Io1=Io3=0A	Io2=0A Io1=5A Io3=2A	Io2=0A Io1=Io3=0A	Io2=0A Io1=5A Io3=2A
Vout2	1.809V	1.822V	1.809V	1.813V	1.808V	1.811V

Vin	**4.5V**		**5.5V**		**6V**	
Load	Io3=0A Io1=Io2=0A	Io3=0A Io1=5A Io2=3A	Io3=0A Io1=Io2=0A	Io3=0A Io1=5A Io2=3A	Io3=0A Io1=Io2=0A	Io3=0A Io1=5A Io2=3A
Vout3	3.343V	3.374V	3.344V	3.362V	3.343V	3.345V

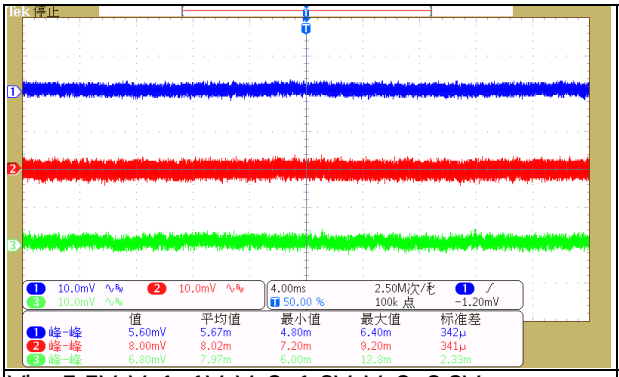
Vin	**7.8V**		**12V**		**14V**	
Load	Io1=0A Io2=Io3=0A	Io1=0A Io2=3A Io3=2A	Io1=0A Io2=Io3=0A	Io1=0A Io2=3A Io3=2A	Io1=0A Io2=Io3=0A	Io1=0A Io2=3A Io3=2A

Vout1	1.014V	1.012V	1.013V	1.011V	1.012V	1.011V

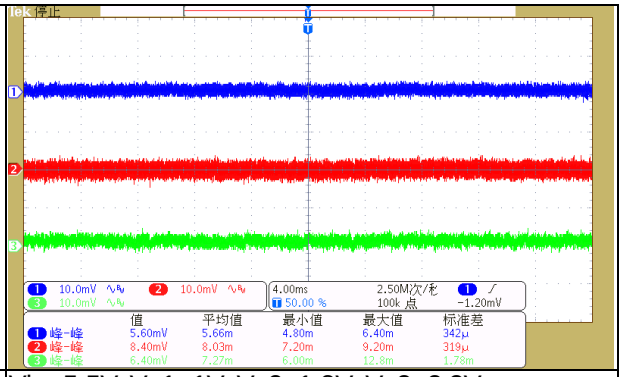
Vin	**7.8V**		**12V**		**14V**	
Load	Io2=0A Io1=Io3=0A	Io2=0A Io1=5A Io3=2A	Io2=0A Io1=Io3=0A	Io2=0A Io1=5A Io3=2A	Io2=0A Io1=Io3=0A	Io2=0A Io1=5A Io3=2A
Vout2	1.805V	1.804V	1.804V	1.803V	1.805V	1.805V

Vin	**7.8V**		**12V**		**14V**	
Load	Io3=0A Io1=Io2=0A	Io3=0A Io1=5A Io2=3A	Io3=0A Io1=Io2=0A	Io3=0A Io1=5A Io2=3A	Io3=0A Io1=Io2=0A	Io3=0A Io1=5A Io2=3A
Vout3	3.322V	3.322V	3.323V	3.324V	3.322V	3.315V

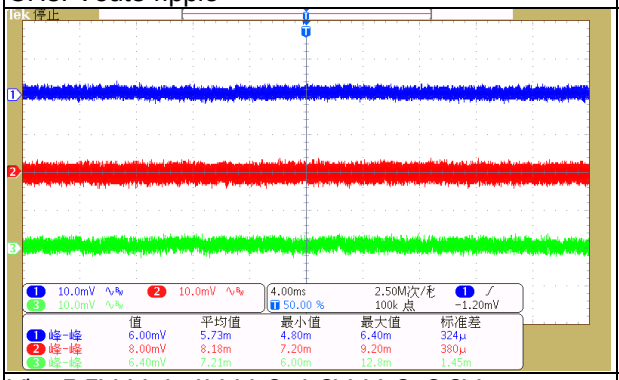
3. Ripple and noise



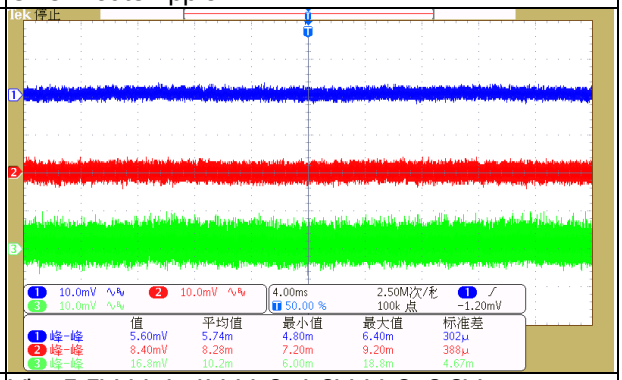
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=Io2=Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



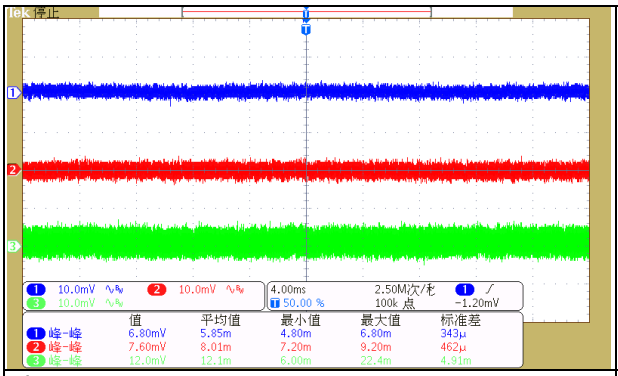
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=0A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



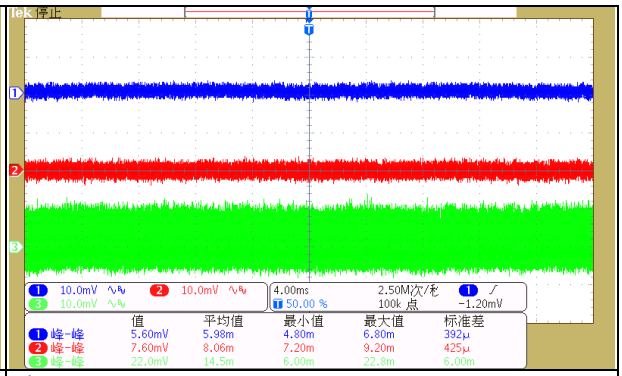
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=3A, Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



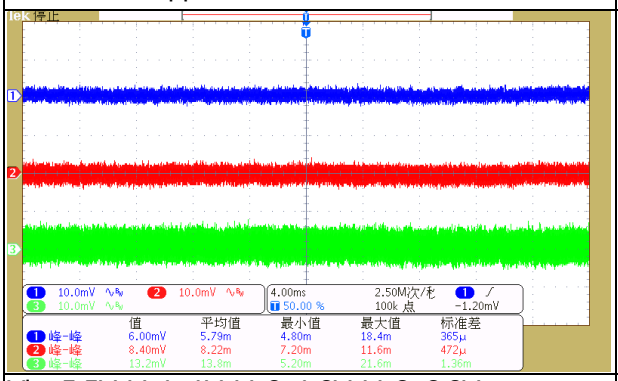
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=3A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



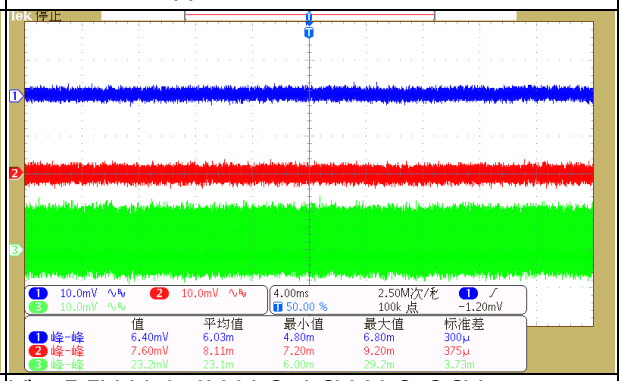
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=0A, Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



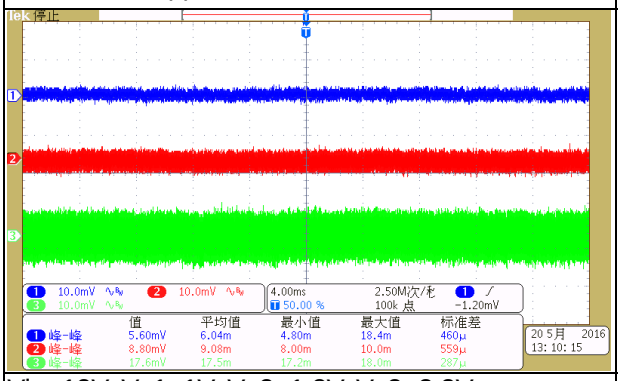
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=0A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



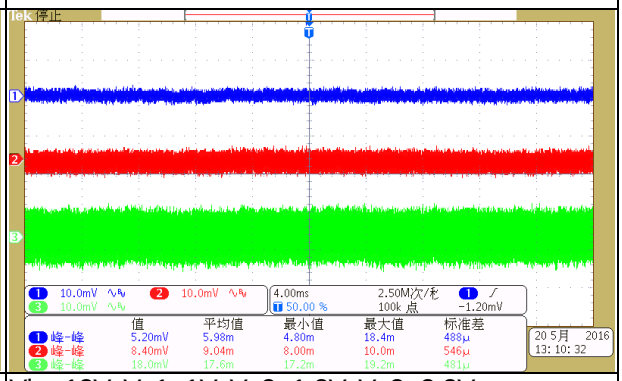
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



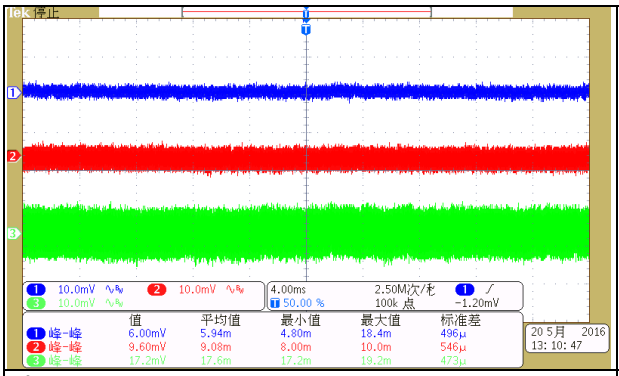
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



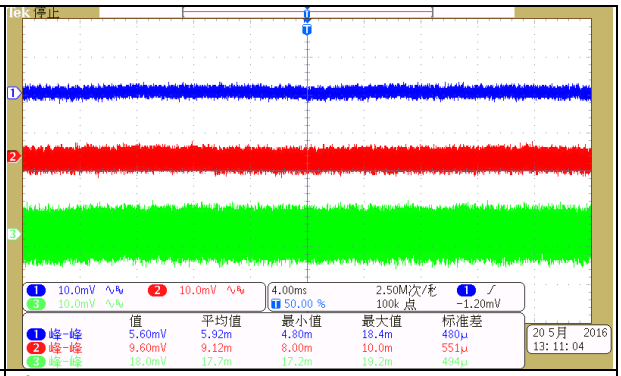
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=Io2=Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



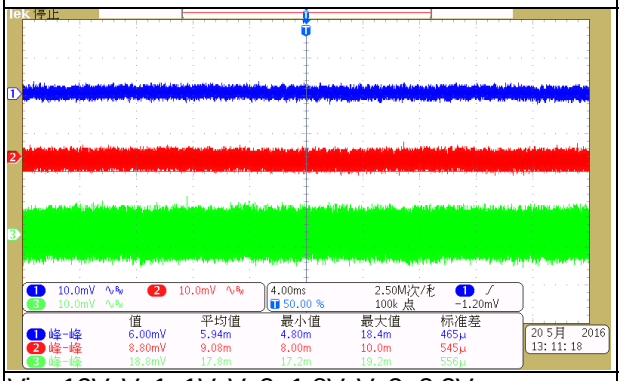
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=0A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



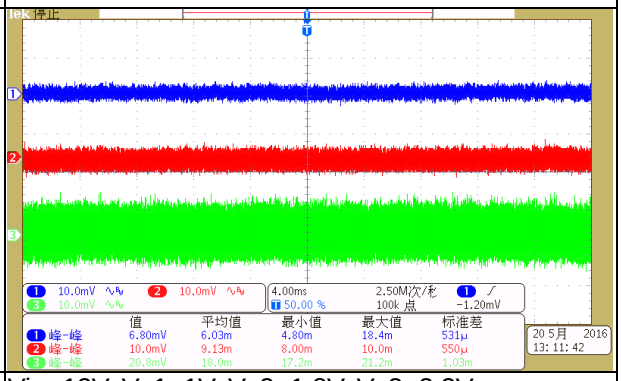
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=3A, Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



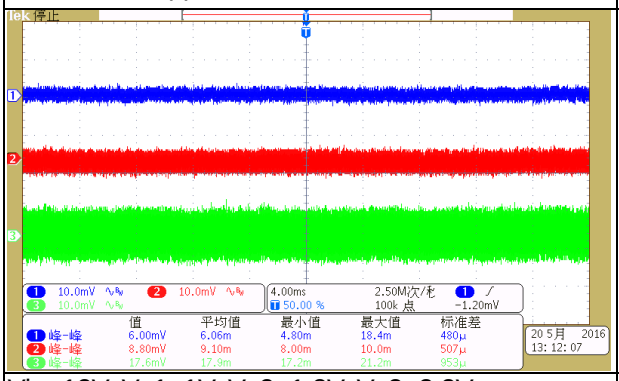
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=3A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



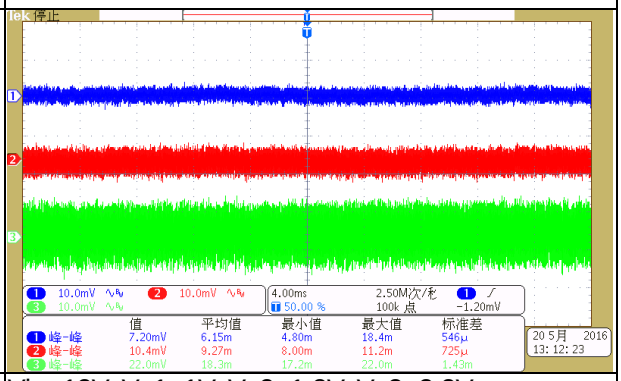
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=0A, Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple



Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=0A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple

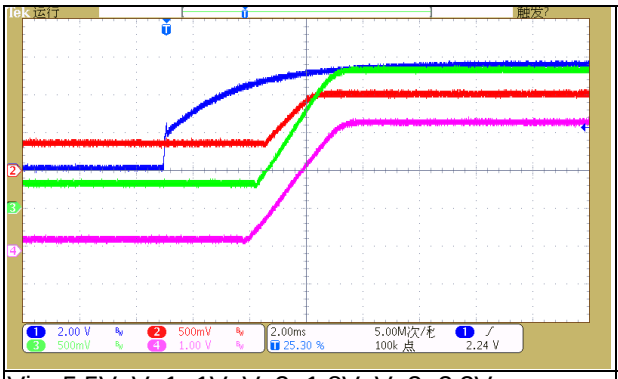
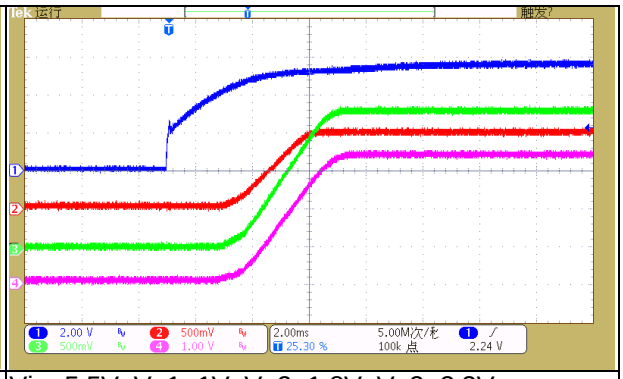
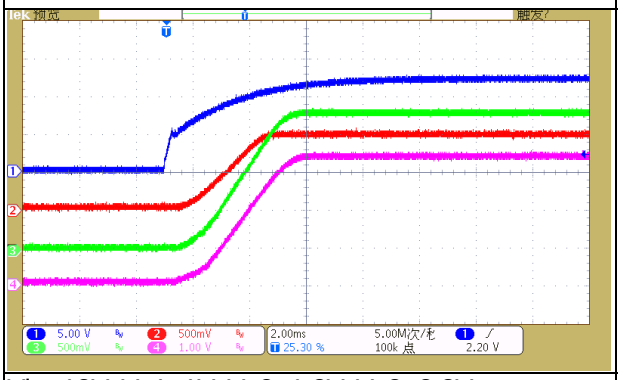
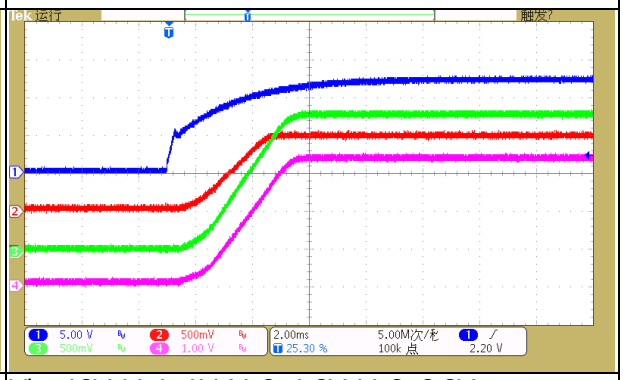


Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3=0A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple

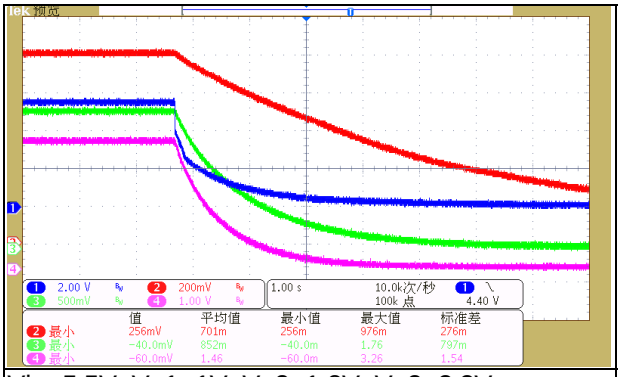
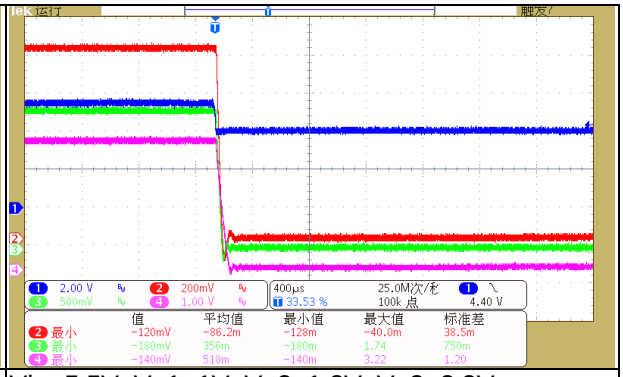


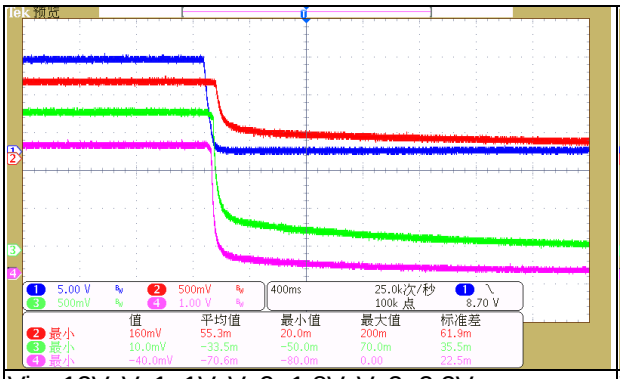
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3=2A
CH1: Vout1 ripple
CH2: Vou2 ripple
CH3: Vout3 ripple

4. Start up

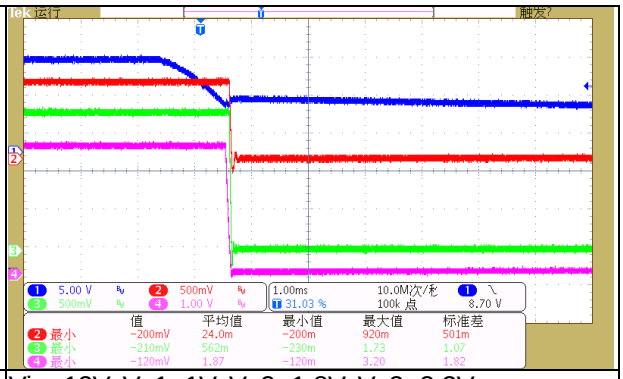
	
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V Io1=0A, Io2=0A, Io3=0A Ch1: Vin Ch2: Vo1 Ch3: Vo2 Ch4: Vo3	Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V Io1=5A, Io2=3A, Io3=2A Ch1: Vin Ch2: Vo1 Ch3: Vo2 Ch4: Vo3
	
Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V Io1=0A, Io2=0A, Io3=0A Ch1: Vin Ch2: Vo1 Ch3: Vo2 Ch4: Vo3	Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V Io1=5A, Io2=3A, Io3=2A Ch1: Vin Ch2: Vo1 Ch3: Vo2 Ch4: Vo3

5. Shut down

	
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V Io1=0A, Io2=0A, Io3=0A Ch1: Vin Ch2: Vo1 Ch3: Vo2 Ch4: Vo3	Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V Io1=5A, Io2=3A, Io3=2A Ch1: Vin Ch2: Vo1 Ch3: Vo2 Ch4: Vo3

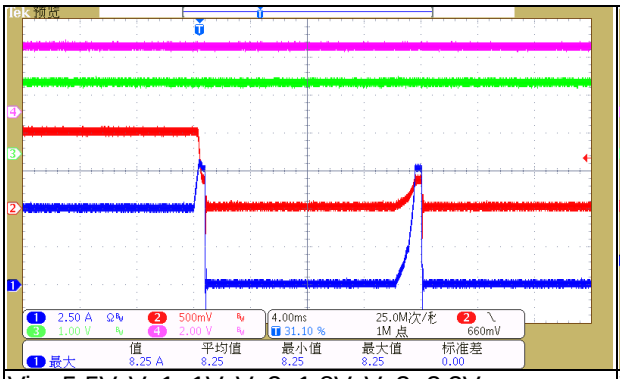


Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=0A, Io2=0A, Io3=0A
Ch1: Vin Ch2: Vo1
Ch3: Vo2 Ch4: Vo3

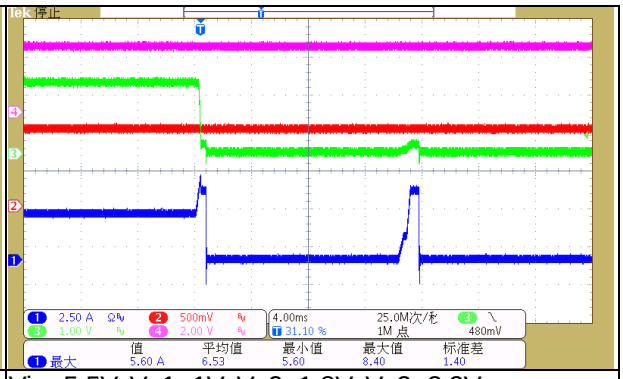


Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3=2A
Ch1: Vin Ch2: Vo1
Ch3: Vo2 Ch4: Vo3

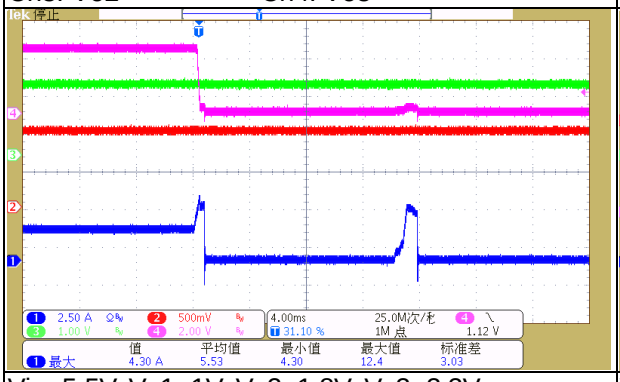
6. OCP



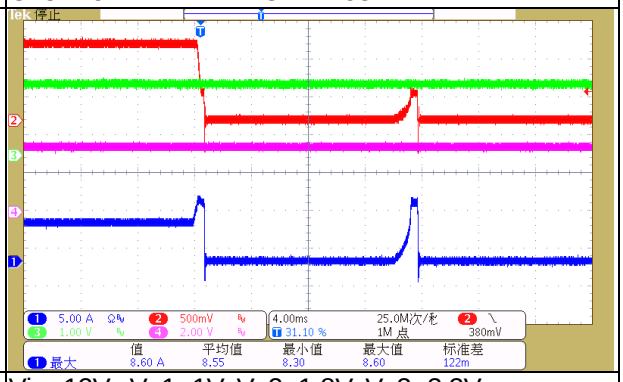
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1 OCP, Io2=3A, Io3=2A
Ch1: Io1 Ch2: Vo1
Ch3: Vo2 Ch4: Vo3



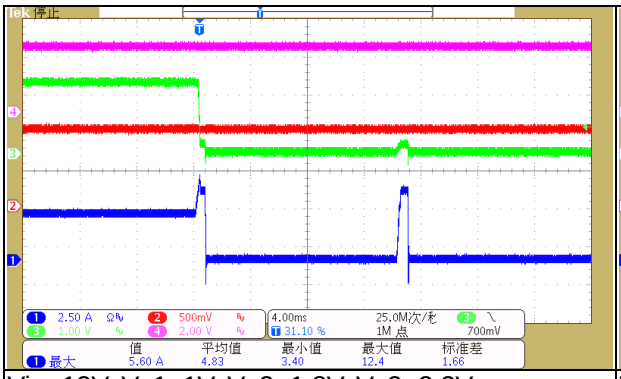
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2 OCP, Io3=2A
Ch1: Io2 Ch2: Vo1
Ch3: Vo2 Ch4: Vo3



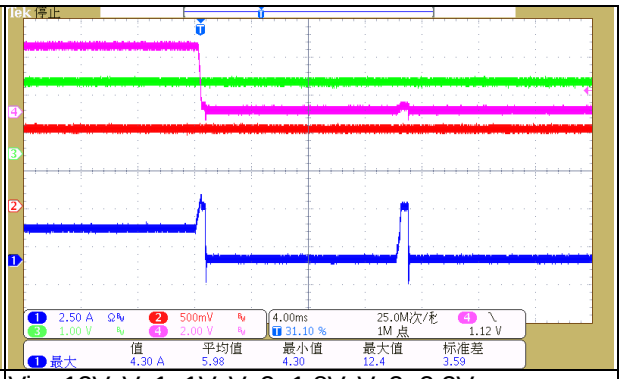
Vin=5.5V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3 OCP
Ch1: Io3 Ch2: Vo1
Ch3: Vo2 Ch4: Vo3



Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1 OCP, Io2=3A, Io3=2A
Ch1: Io1 Ch2: Vo1
Ch3: Vo2 Ch4: Vo3

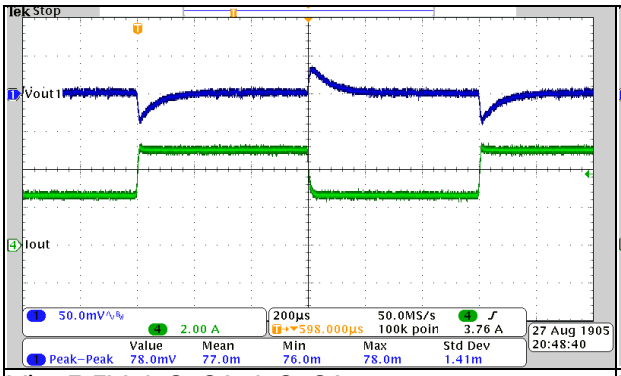


Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2 OCP, Io3=2A
Ch1: Io2 Ch2: Vo1
Ch3: Vo2 Ch4: Vo3

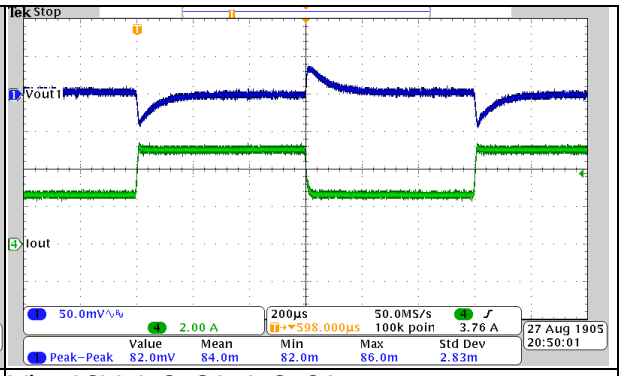


Vin=12V, Vo1=1V, Vo2=1.8V, Vo3=3.3V
Io1=5A, Io2=3A, Io3 OCP
Ch1: Io3 Ch2: Vo1
Ch3: Vo2 Ch4: Vo3

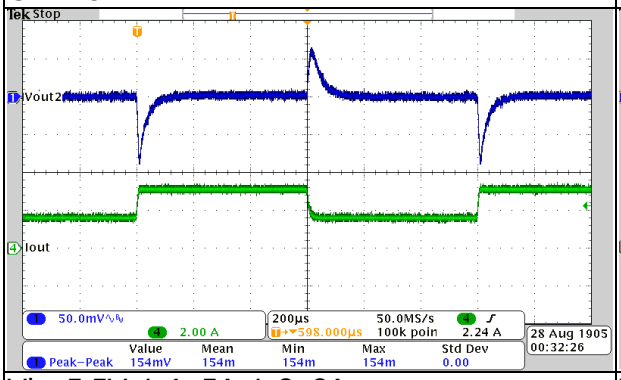
7. Load Transient



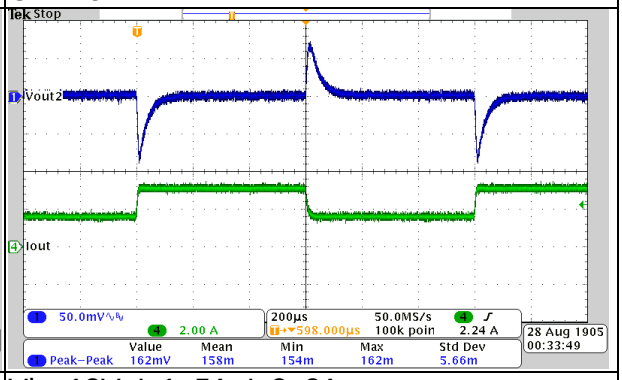
Vin=5.5V, Io2=3A, Io3=2A
Io1 from 2.5A to 5A, Slew Rate: 2.5A/uS
Ch1: Vo1
Ch4: Io1



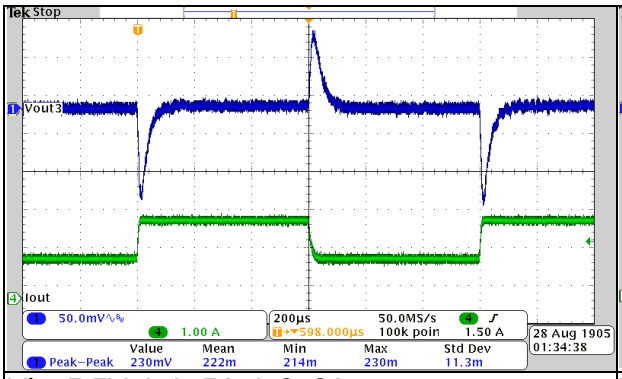
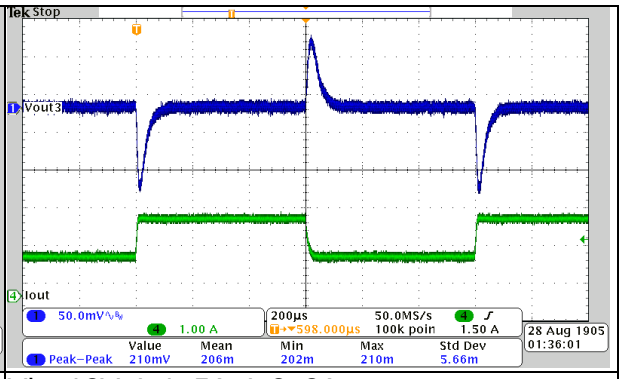
Vin=12V, Io2=3A, Io3=2A
Io1 from 2.5A to 5A, Slew Rate: 2.5A/uS
Ch1: Vo1
Ch4: Io1



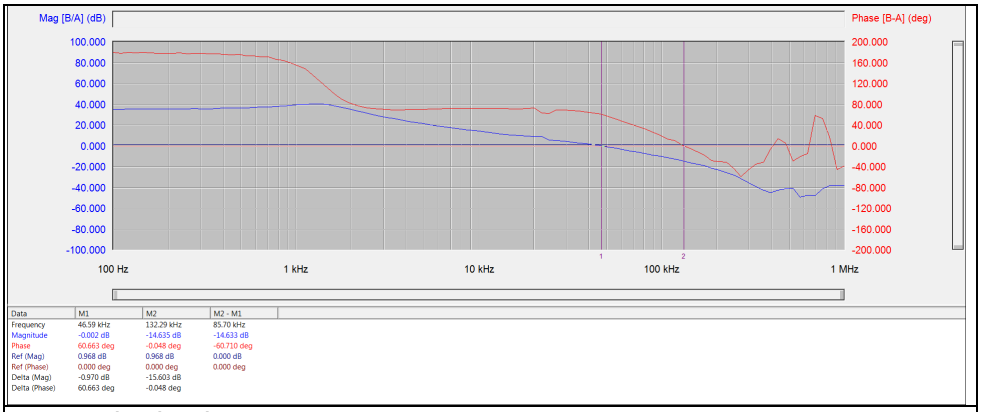
Vin=5.5V, Io1=5A, Io3=2A
Io2 from 1.5A to 3A, Slew Rate: 2.5A/uS
Ch1: Vo2
Ch4: Io2



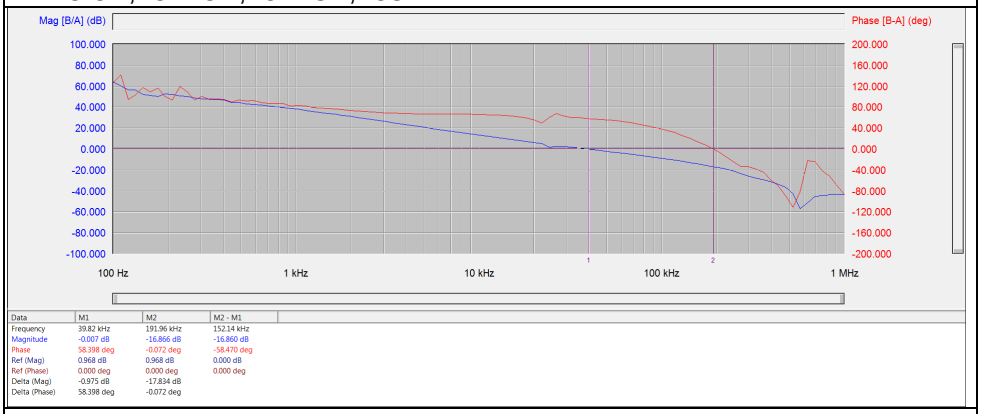
Vin=12V, Io1=5A, Io3=2A
Io2 from 1.5A to 3A, Slew Rate: 2.5A/uS
Ch1: Vo2
Ch4: Io2

	
Vin=5.5V, Io1=5A, Io2=3A Io3 from 1A to 2A, Slew Rate: 2.5A/uS Ch1: Vo3 Ch4: Io3	Vin=12V, Io1=5A, Io2=3A Io3 from 1A to 2A, Slew Rate: 2.5A/uS Ch1: Vo3 Ch4: Io3

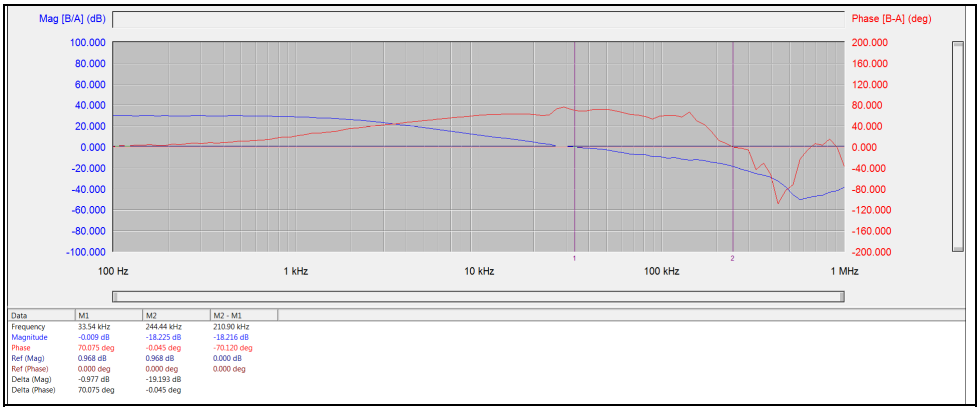
8. Bode Plot



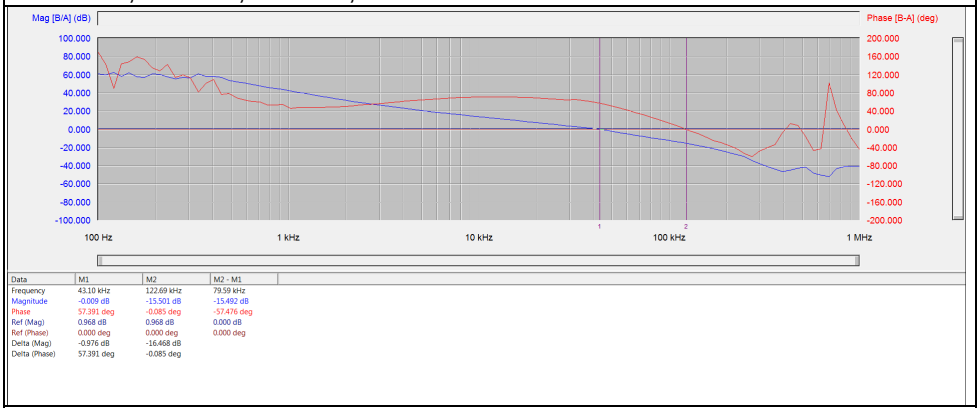
VOUT1 bode plot
Vin=5.5V, Io1=5A, Io2=3A, Io3=2A



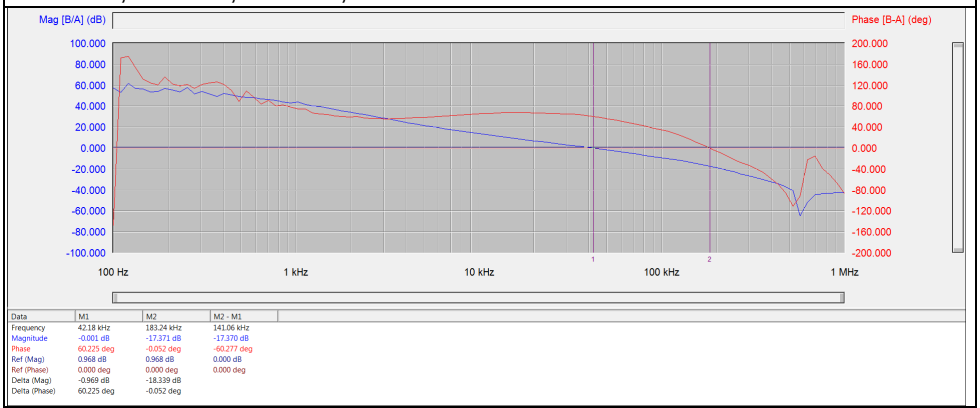
VOUT2 bode plot
Vin=5.5V, Io1=5A, Io2=3A, Io3=2A



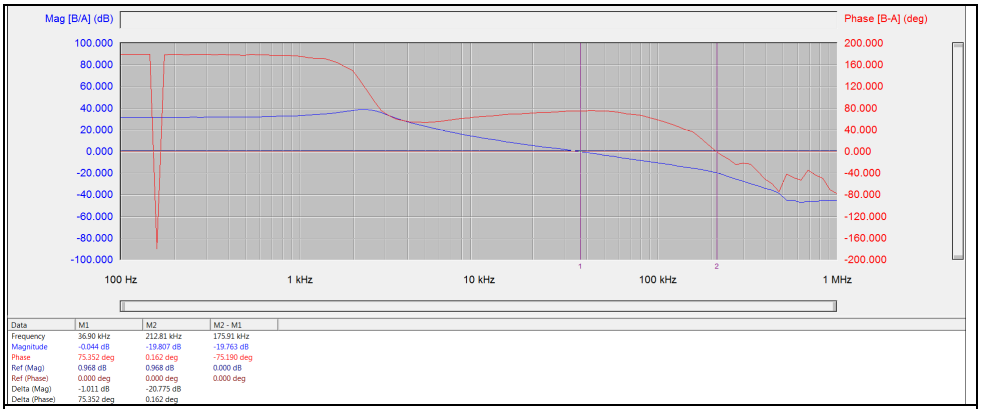
VOUT3 bode plot
Vin=5.5V, Io1=5A, Io2=3A, Io3=2A



VOUT1 bode plot
Vin=12V, Io1=5A, Io2=3A, Io3=2A



VOUT2 bode plot
Vin=12V, Io1=5A, Io2=3A, Io3=2A



VOUT3 bode plot
Vin=12V, Io1=5A, Io2=3A, Io3=2A

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