Output ripple test results summary as below

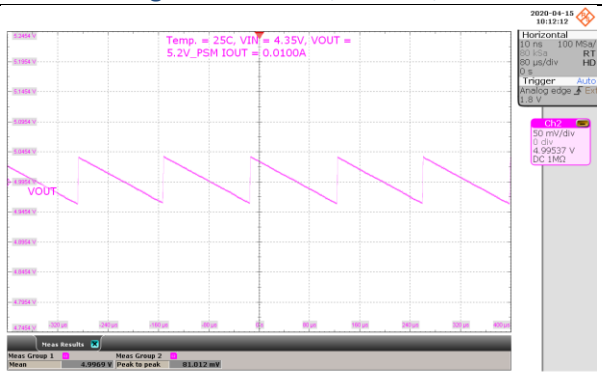
Vin [V]	Vout [V]	Iout [A]	Vout_ac_pp [mV]		
			Customer	TI	
3.8	3.8	0.01	102	48	98
3.8	3.8	0.62	161	72	158
4.35	1.8	0.01	118	30	57
4.35	1.8	0.54	178	36	77
4.35	5.2	0.01	170	81	196
4.35	5.2	0.46	220	110	257
		Cout:	4x 10uF	2x 47uF	4x 10uF
			Effective Cout		
			11uF	23uF	11uF
			24uF	48uF	24uF
			7.5uF	16uF	7.5uF

Based on datasheet spec, there is recommended Cout capacitance. Please kindly design the actual circuit to meet the spec.

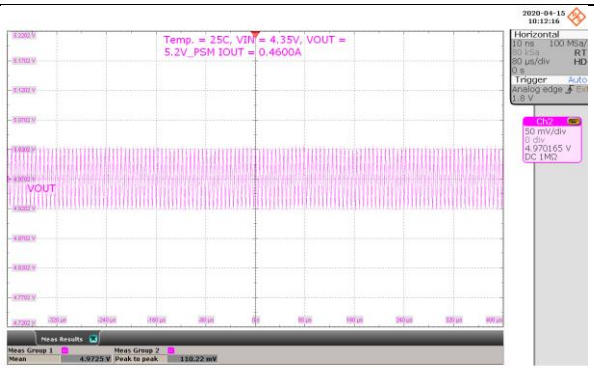
C_O	Output capacitance[2]	13	16	µF

Test waveforms on EVM

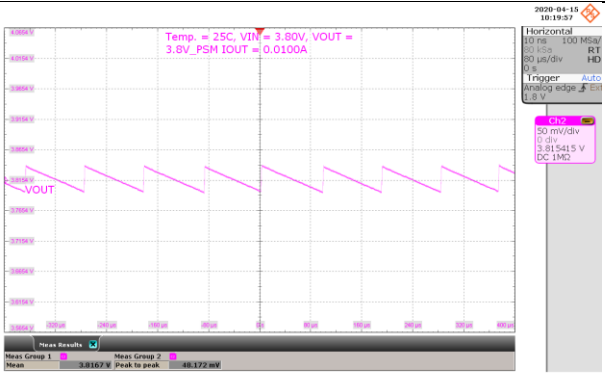
1. Using default Cout, 2x47uf, GRM188R60J476ME15D



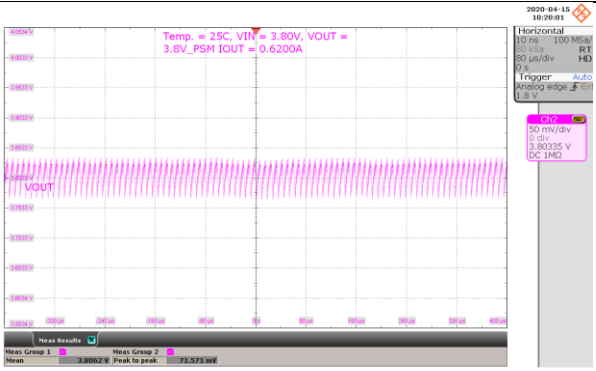
Vin=4.35V Vout=5.2V, Iout=0.01A



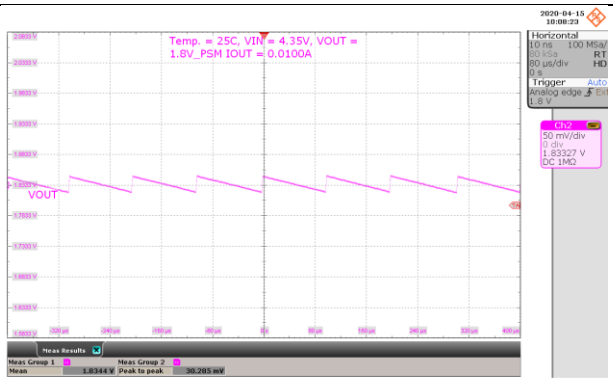
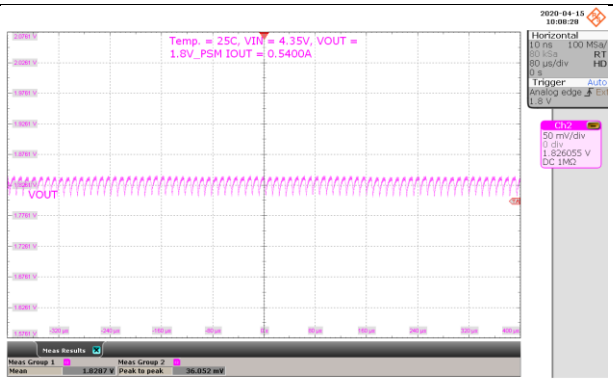
Vin=4.35V Vout=5.2V, Iout=0.46A



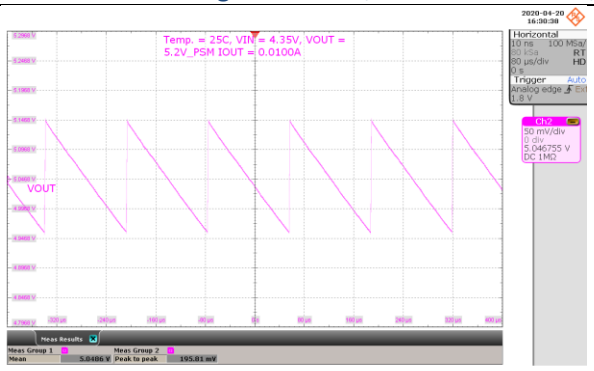
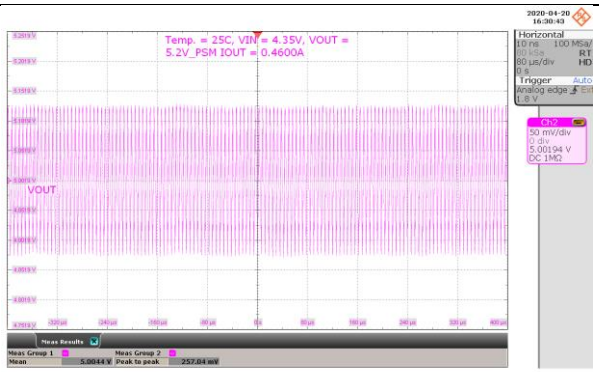
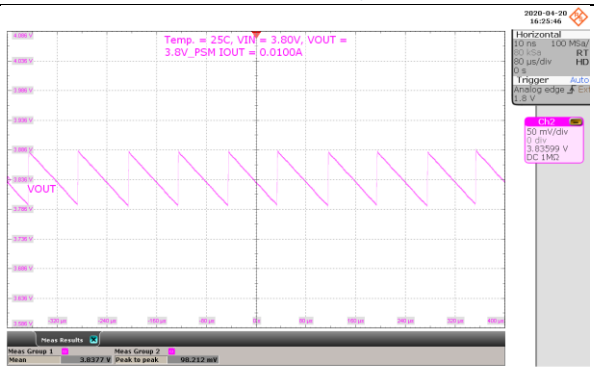
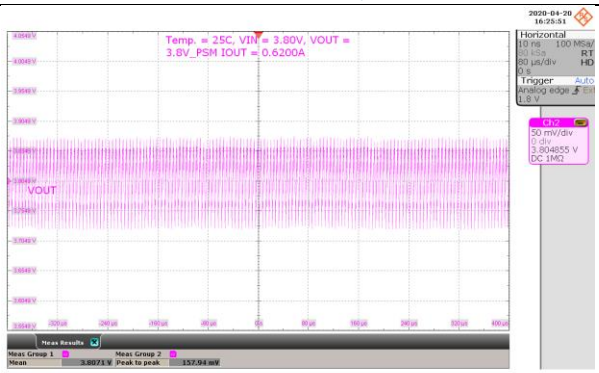
Vin=3.8V Vout=3.8V, Iout=0.01A

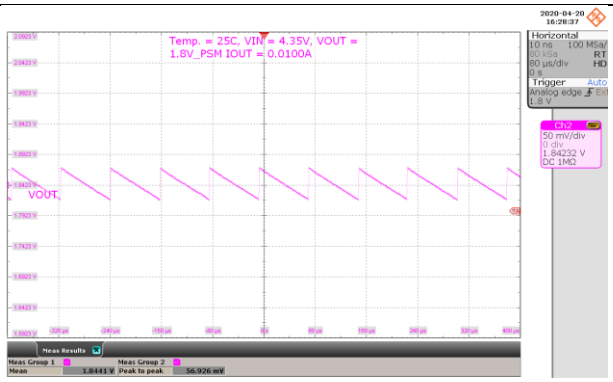
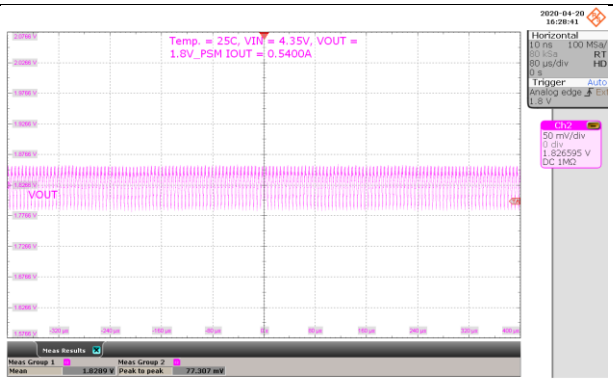


Vin=3.8V Vout=3.8V, Iout=0.62A

	
Vin=4.35V Vout=1.8V, Iout=0.01A	Vin=4.35V Vout=1.8V, Iout=0.54A

2. Cout change to 4x10uf, GRM185R60J106 , similar to the customer's GRM155R60J106

	
Vin=4.35V Vout=5.2V, Iout=0.01A	Vin=4.35V Vout=5.2V, Iout=0.46A
	
Vin=3.8V Vout=3.8V, Iout=0.01A	Vin=3.8V Vout=3.8V, Iout=0.62A

	
Vin=4.35V Vout=1.8V, Iout=0.01A	Vin=4.35V Vout=1.8V, Iout=0.54A