

**Test Report of PMP9436
(with LM5022)**

6 Aug. 2014



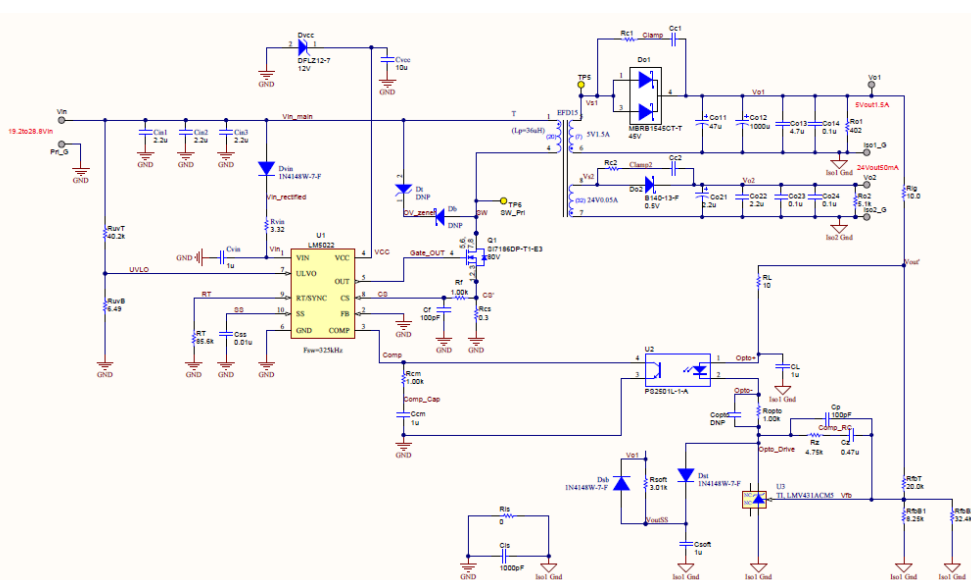
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1. Design Specifications

Vin Min.	19.2Vdc
Vin Max.	28.8Vdc
Vout1	5Vdc
Iout1	1.5A
Vout2	24Vdc
Iout2	0.05A

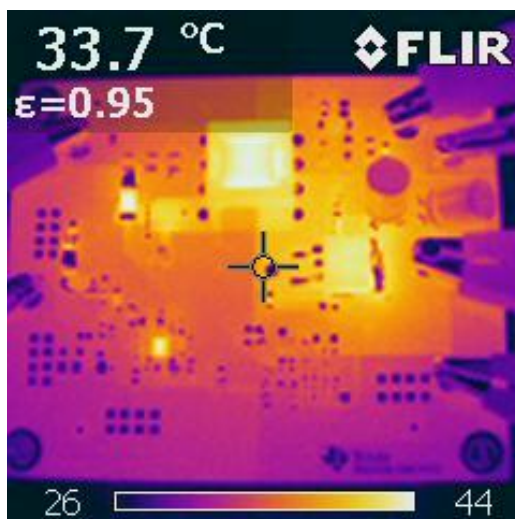
2. Circuit Schematic and Board



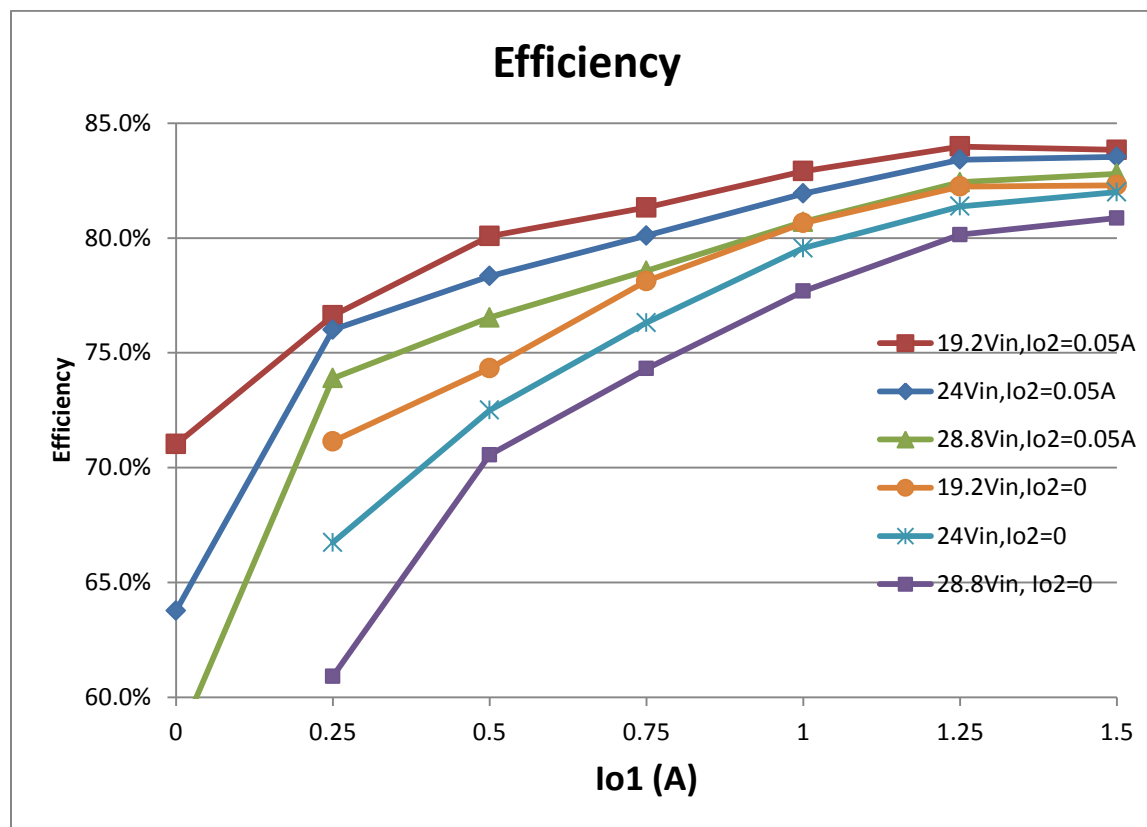


3. Typical Performances

3.1) Thermal



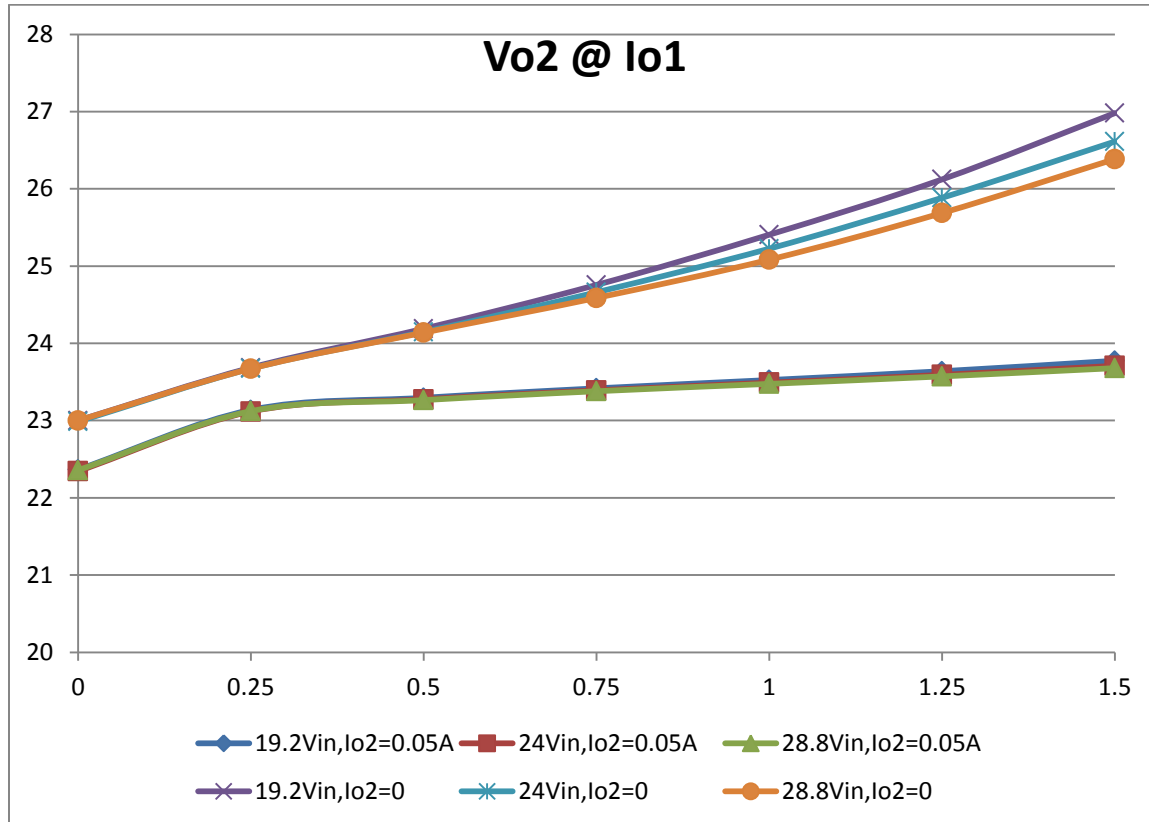
3.2) Efficiency



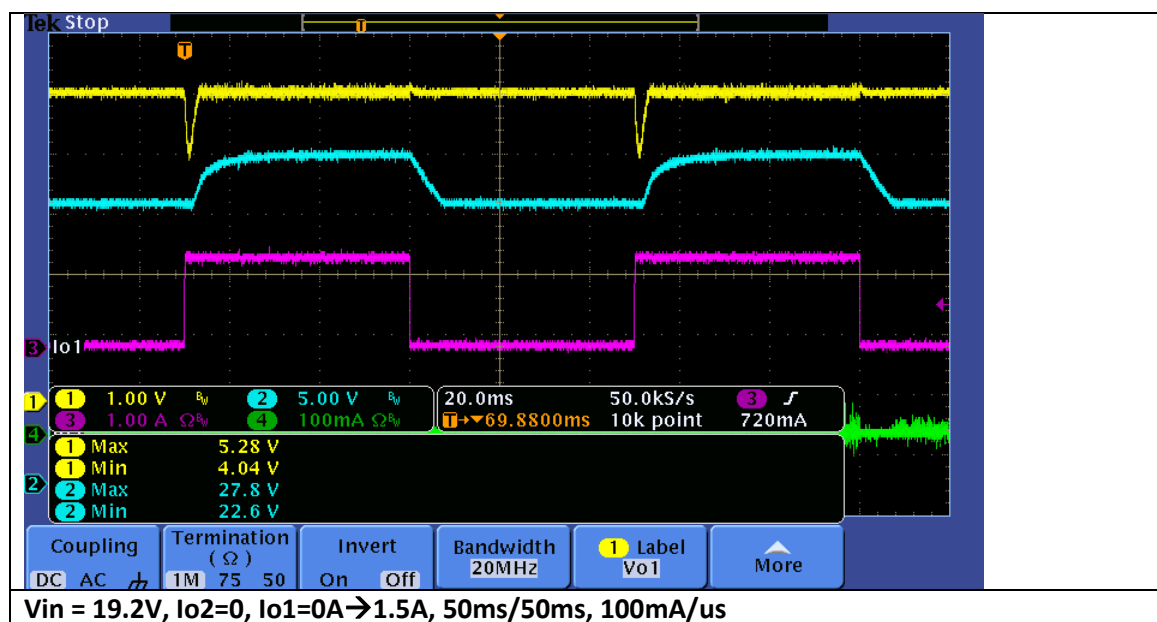
Vin	Iin	Pin	Vo1	Io1	Vo2	Io2	Po	effi.
19.2	0.082	1.574	5.083	0	22.365	0.05	1.118	71.0%
19.2	0.165	3.168	5.082	0.25	23.138	0.05	2.427	76.6%
19.2	0.241	4.627	5.081	0.5	23.295	0.05	3.705	80.1%
19.2	0.319	6.125	5.080	0.75	23.417	0.05	4.981	81.3%
19.2	0.393	7.546	5.080	1	23.525	0.05	6.256	82.9%
19.2	0.467	8.966	5.079	1.25	23.639	0.05	7.530	84.0%
19.2	0.547	10.502	5.078	1.5	23.774	0.05	8.805	83.8%
24	0.073	1.752	5.082	0	22.345	0.05	1.117	63.8%
24	0.133	3.192	5.081	0.25	23.117	0.05	2.426	76.0%
24	0.197	4.728	5.080	0.5	23.275	0.05	3.704	78.3%
24	0.259	6.216	5.080	0.75	23.391	0.05	4.979	80.1%
24	0.318	7.632	5.079	1	23.491	0.05	6.253	81.9%

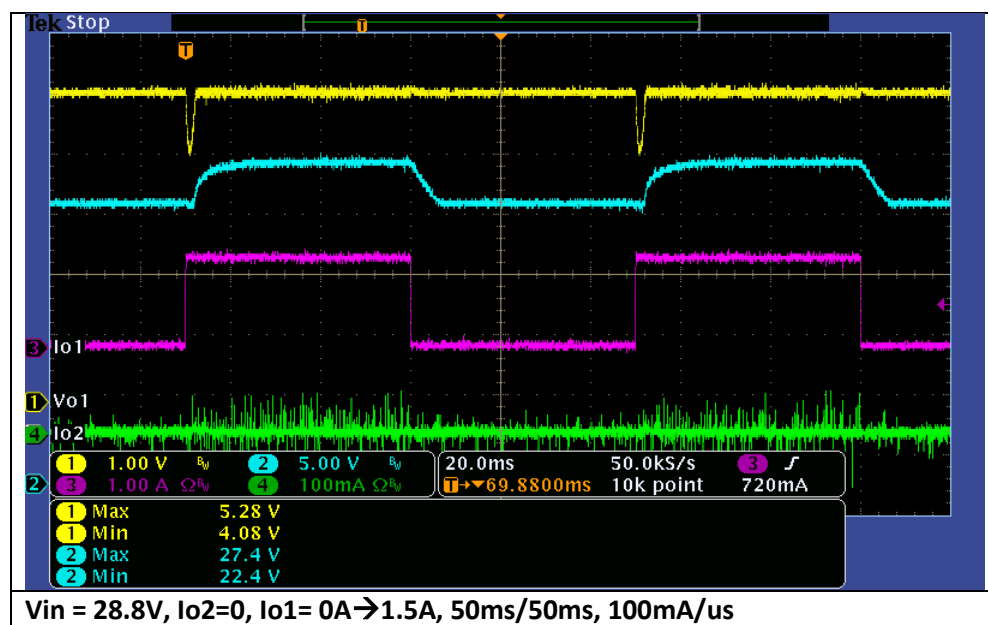
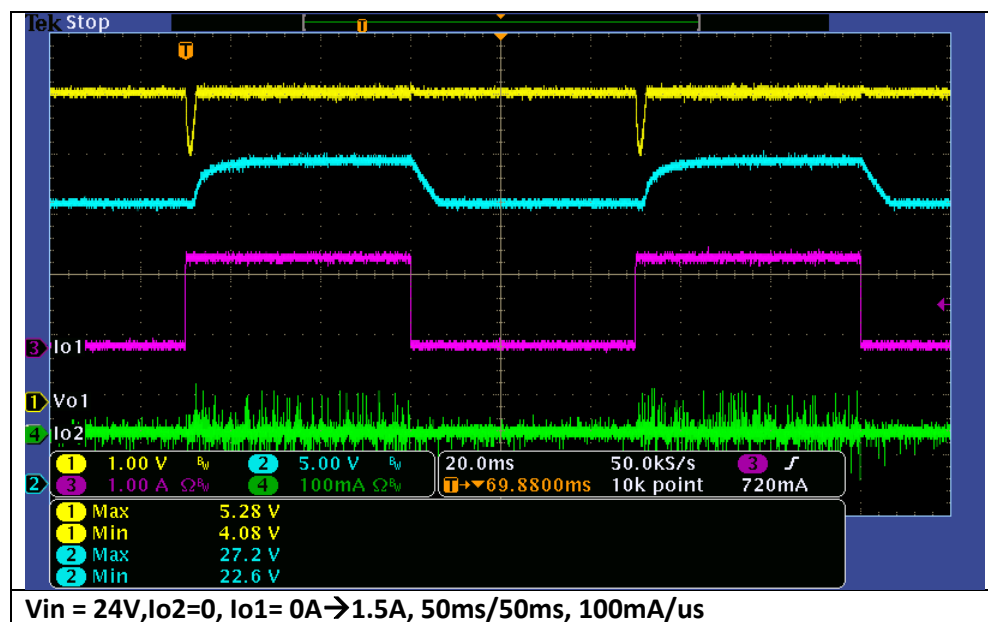
24	0.376	9.024	5.078	1.25	23.592	0.05	7.527	83.4%
24	0.439	10.536	5.077	1.5	23.709	0.05	8.801	83.5%
28.8	0.067	1.930	5.081	0	22.358	0.05	1.118	57.9%
28.8	0.114	3.283	5.081	0.25	23.122	0.05	2.426	73.9%
28.8	0.168	4.838	5.080	0.5	23.265	0.05	3.703	76.5%
28.8	0.220	6.336	5.079	0.75	23.38	0.05	4.978	78.6%
28.8	0.269	7.747	5.078	1	23.475	0.05	6.252	80.7%
28.8	0.317	9.130	5.078	1.25	23.572	0.05	7.525	82.4%
28.8	0.369	10.627	5.077	1.5	23.679	0.05	8.799	82.8%
19.2	0.018	0.346	5.082	0	23	0	0.000	0.0%
19.2	0.093	1.786	5.081	0.25	23.685	0	1.270	71.1%
19.2	0.178	3.418	5.081	0.5	24.189	0	2.540	74.3%
19.2	0.254	4.877	5.080	0.75	24.756	0	3.810	78.1%
19.2	0.328	6.298	5.079	1	25.406	0	5.079	80.7%
19.2	0.402	7.718	5.078	1.25	26.122	0	6.348	82.2%
19.2	0.482	9.254	5.077	1.5	26.98	0	7.616	82.3%
24	0.018	0.432	5.082	0	22.986	0	0.000	0.0%
24	0.079	1.903	5.081	0.25	23.673	0	1.270	66.7%
24	0.146	3.504	5.081	0.5	24.148	0	2.541	72.5%
24	0.208	4.992	5.080	0.75	24.661	0	3.810	76.3%
24	0.266	6.384	5.079	1	25.225	0	5.079	79.6%
24	0.325	7.800	5.078	1.25	25.884	0	6.348	81.4%
24	0.387	9.288	5.077	1.5	26.612	0	7.616	82.0%
28.8	0.018	0.518	5.082	0	23	0	0.000	0.0%
28.8	0.072	2.085	5.081	0.25	23.672	0	1.270	60.9%
28.8	0.125	3.600	5.080	0.5	24.138	0	2.540	70.6%
28.8	0.178	5.126	5.080	0.75	24.588	0	3.810	74.3%
28.8	0.227	6.538	5.079	1	25.083	0	5.079	77.7%
28.8	0.275	7.920	5.078	1.25	25.687	0	6.348	80.1%
28.8	0.327	9.418	5.077	1.5	26.385	0	7.616	80.9%

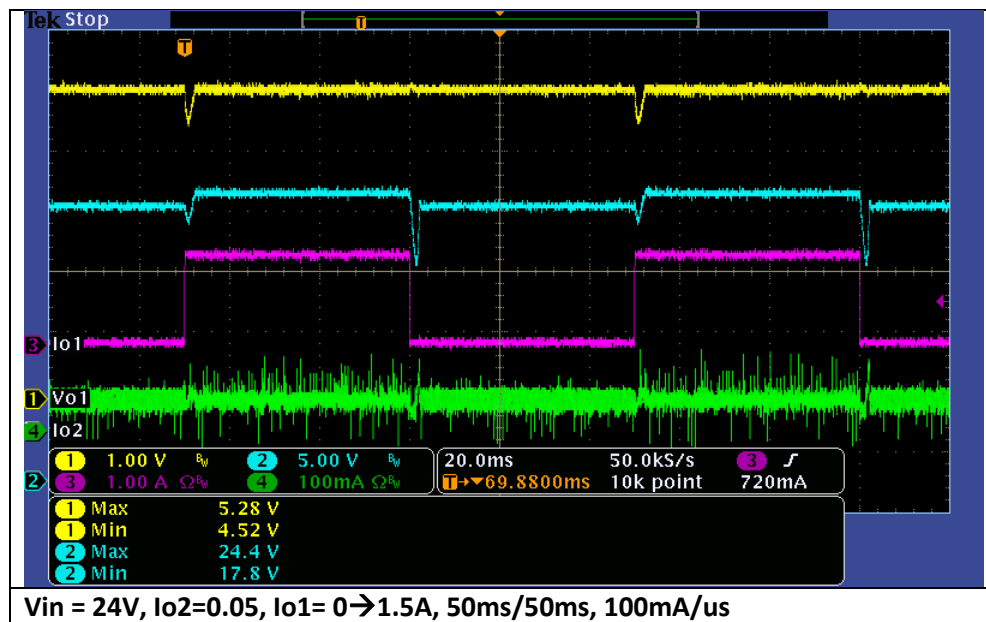
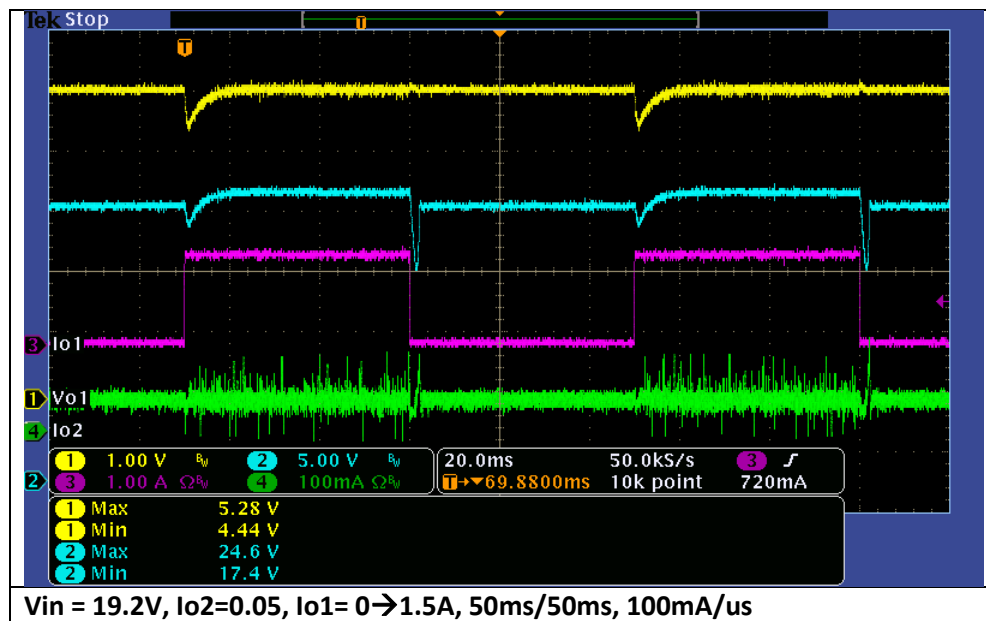
3.3) Cross Regulation

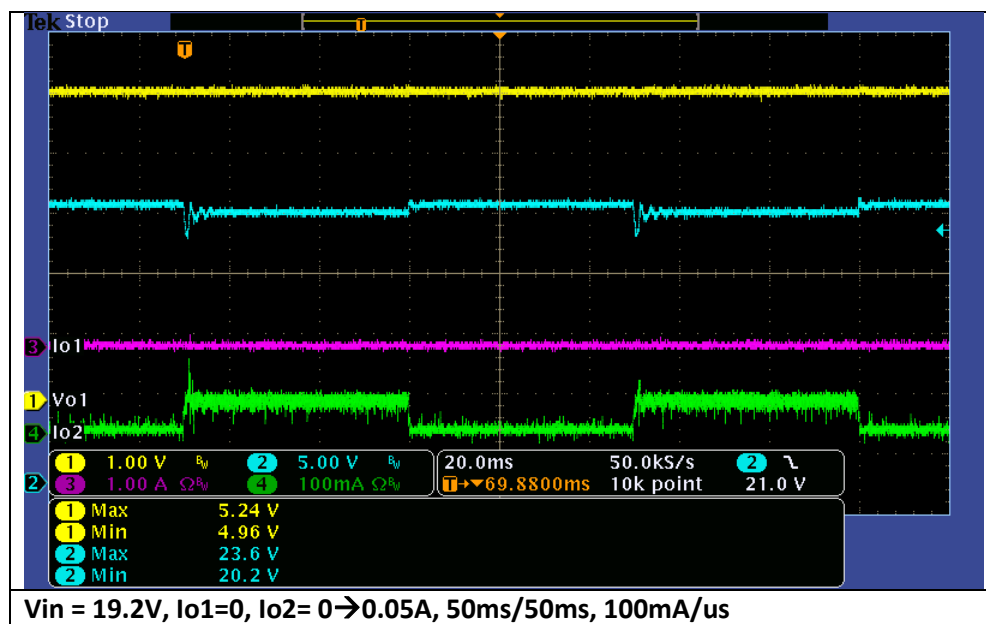
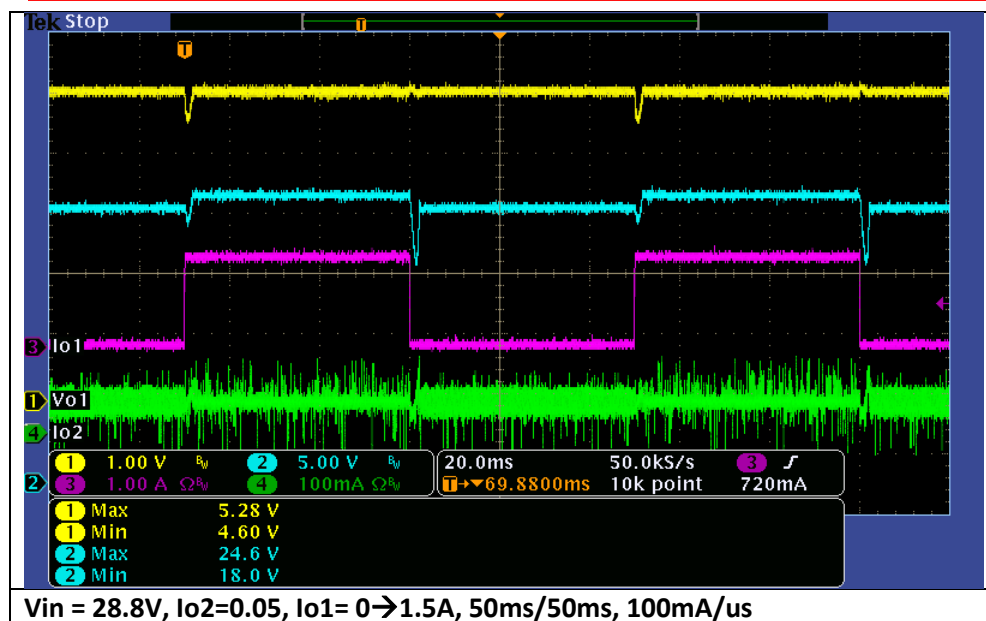


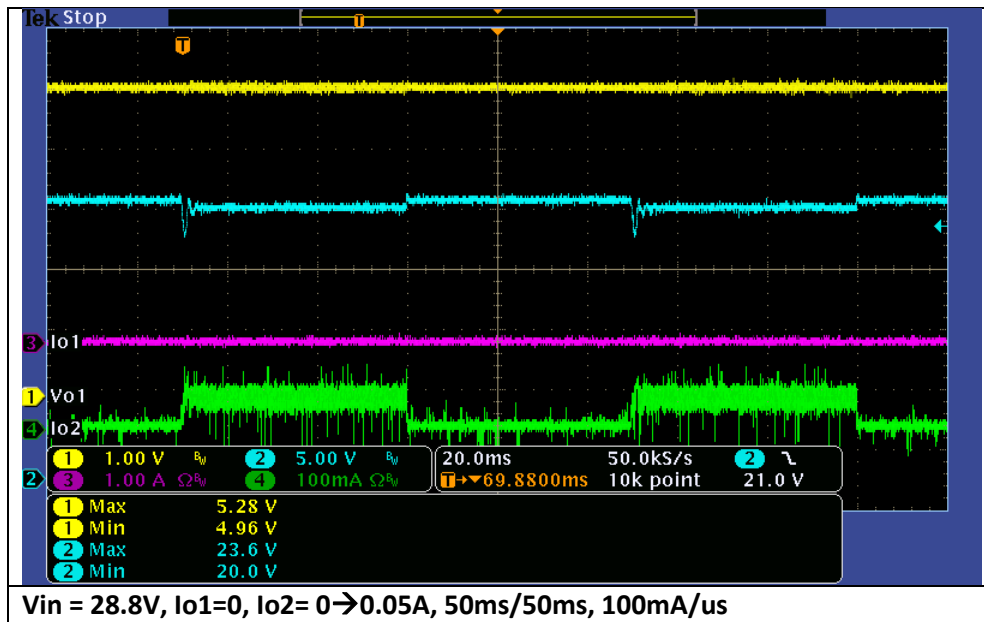
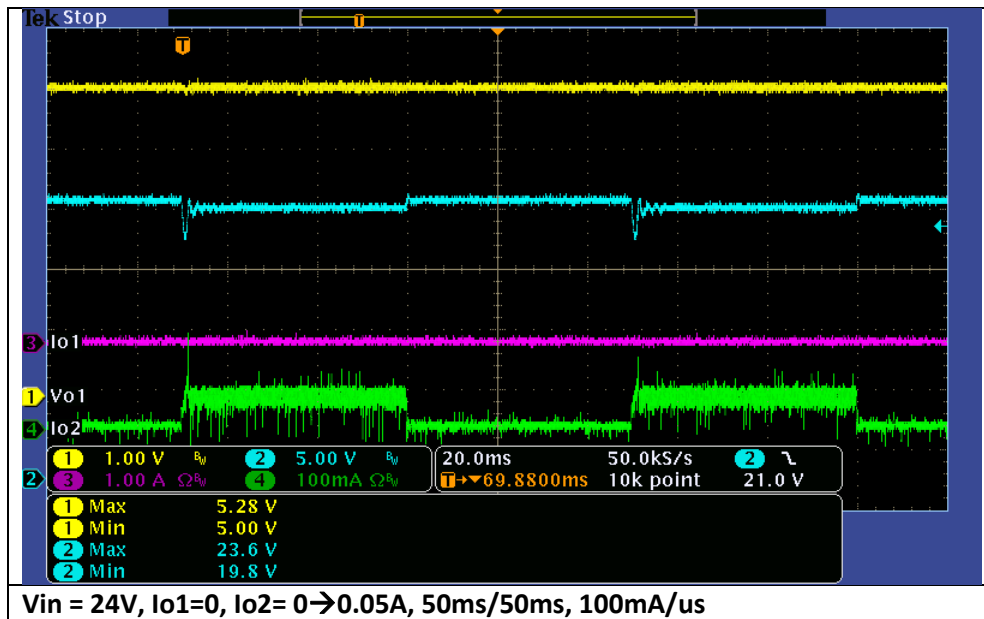
3.4) Dynamic Response

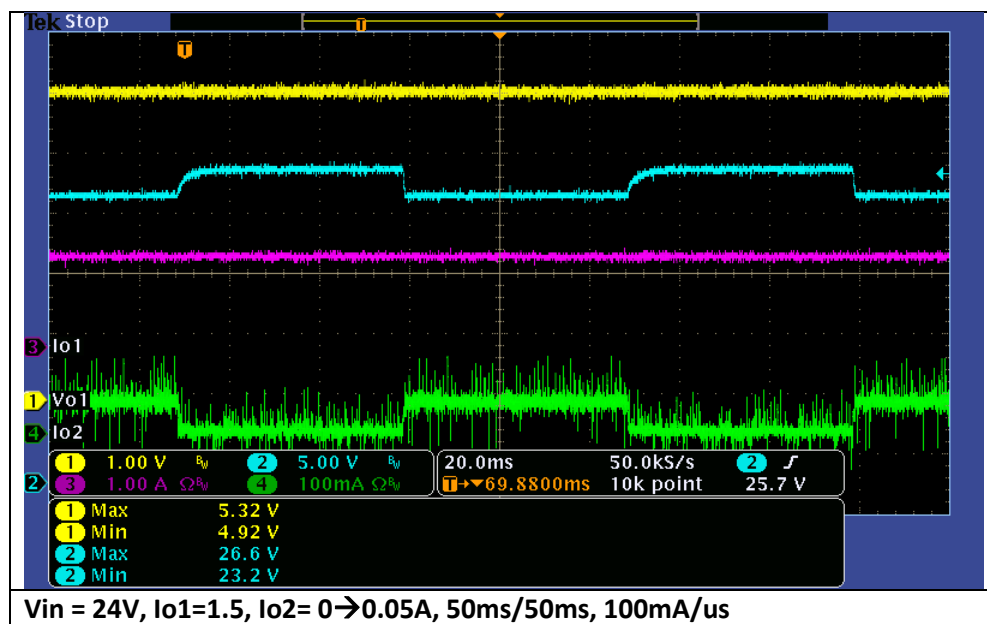
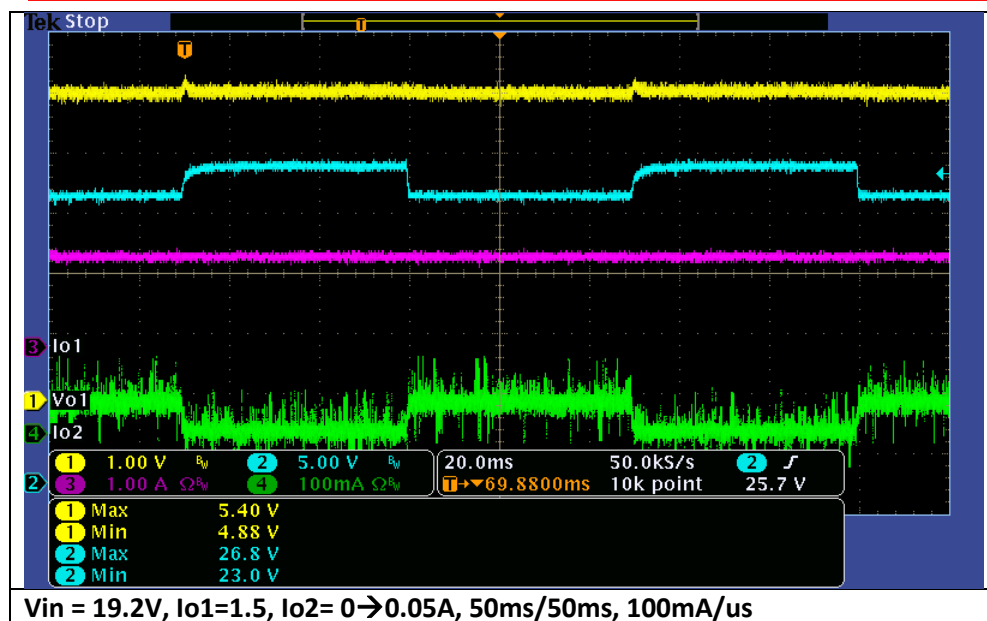


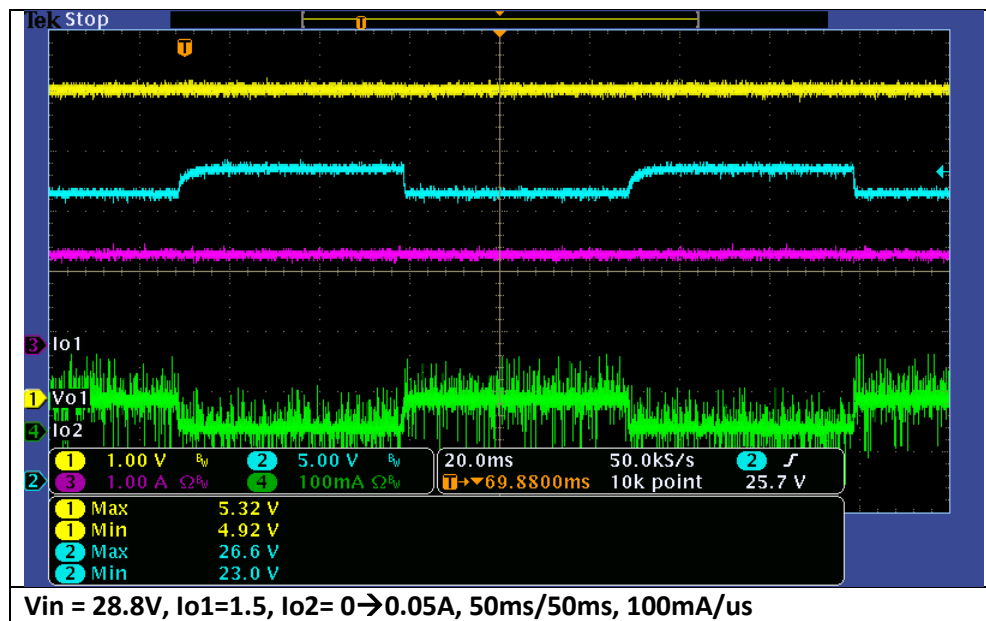




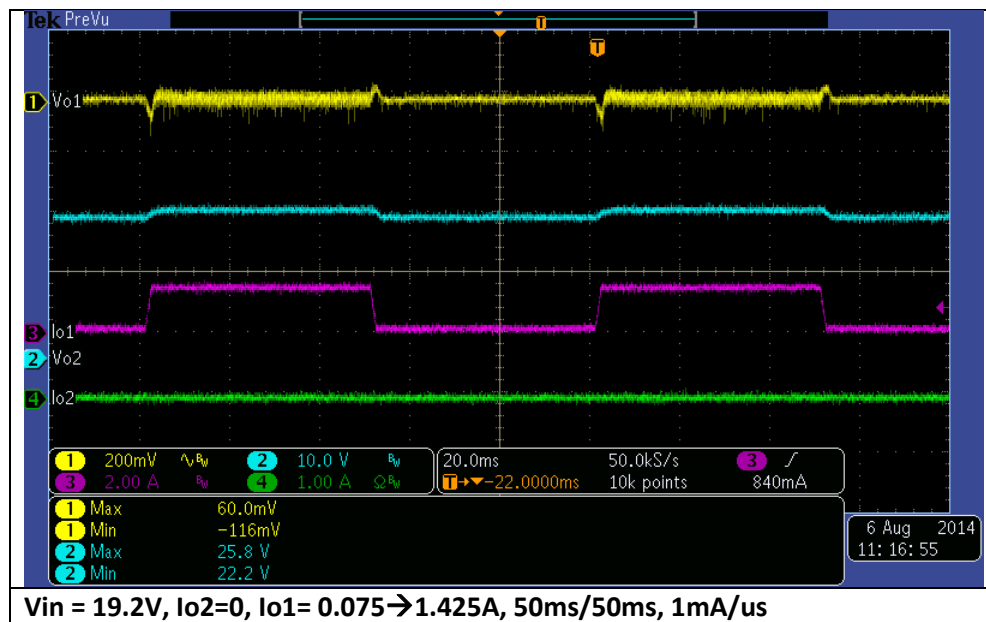


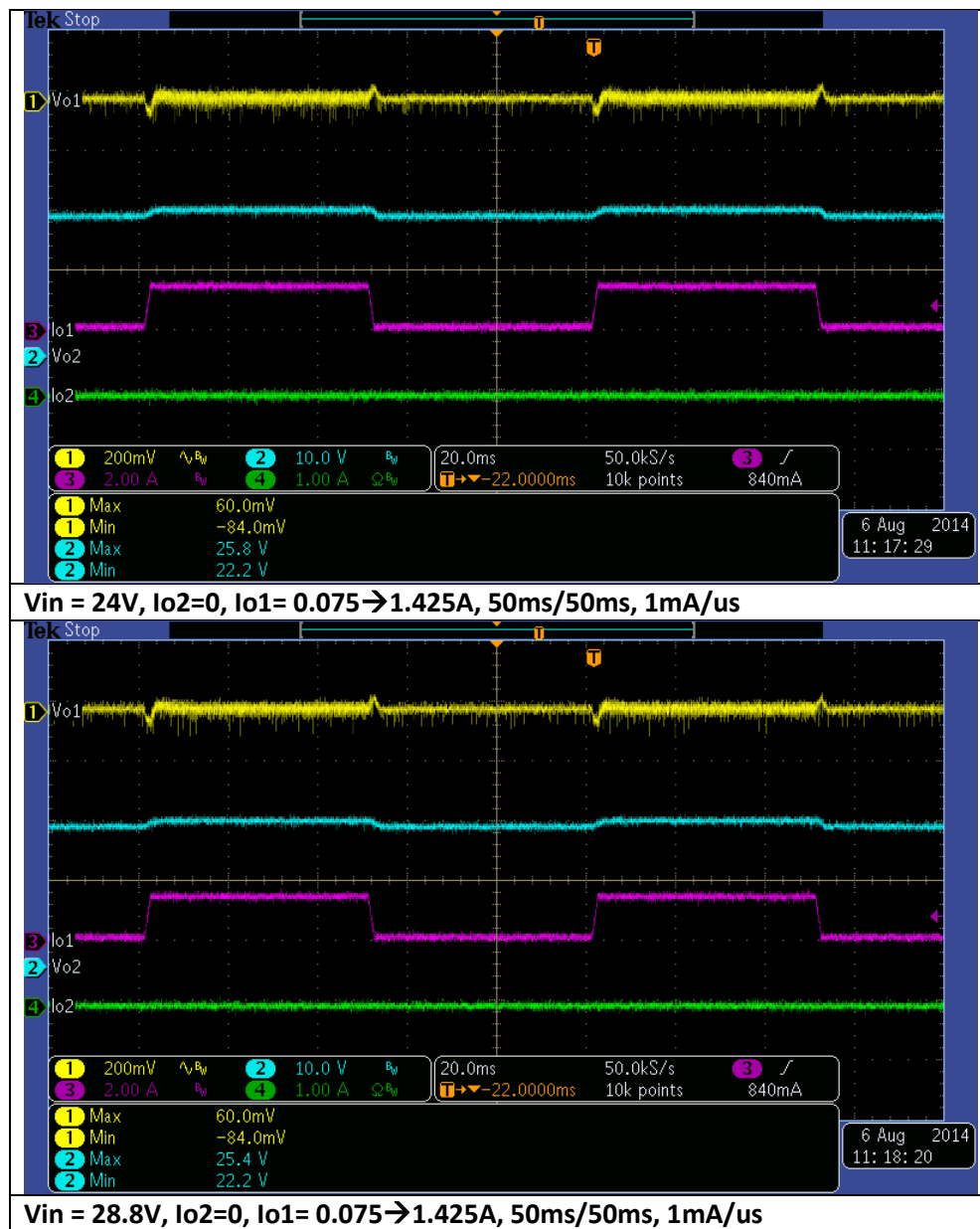


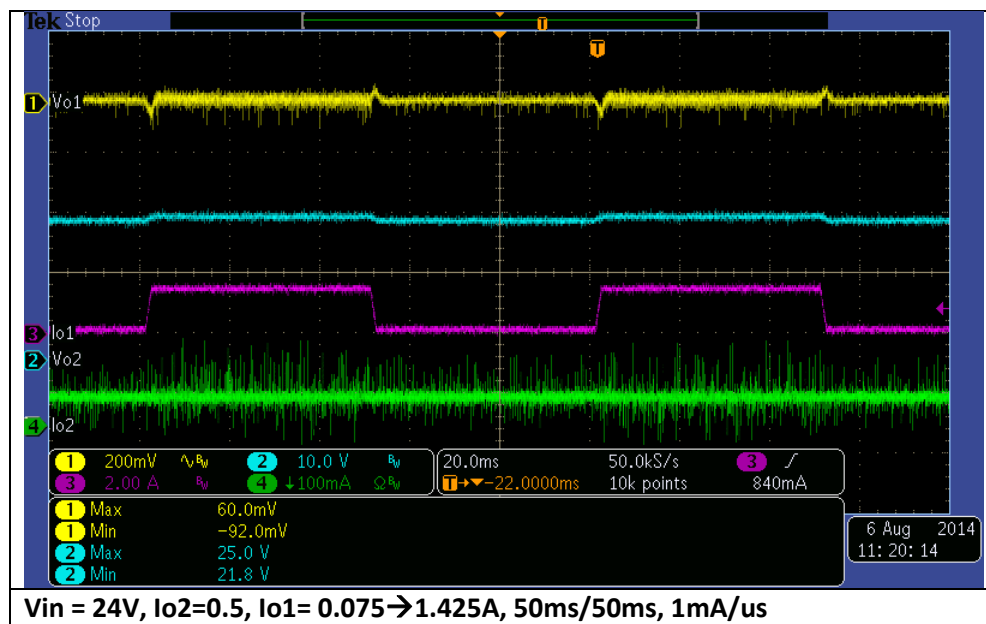
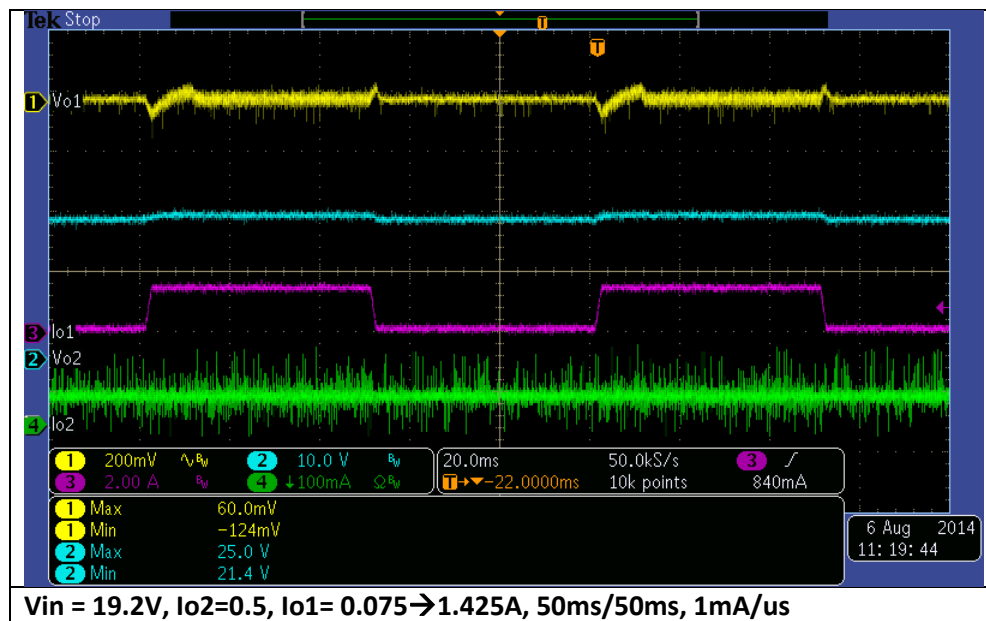


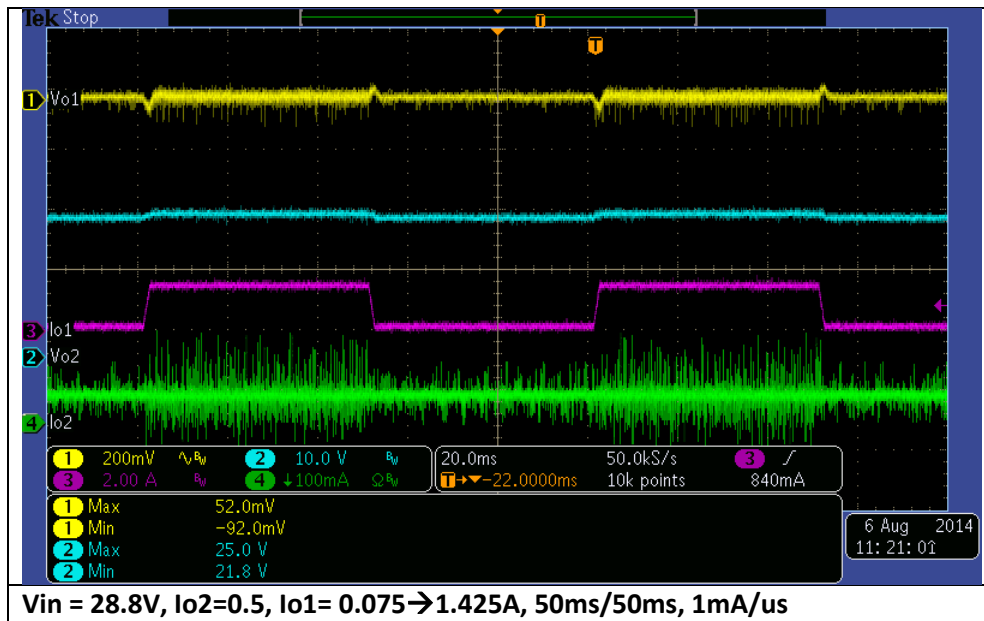


3.5) Dynamic function (with Io1=5% $\rightarrow$ 95%)

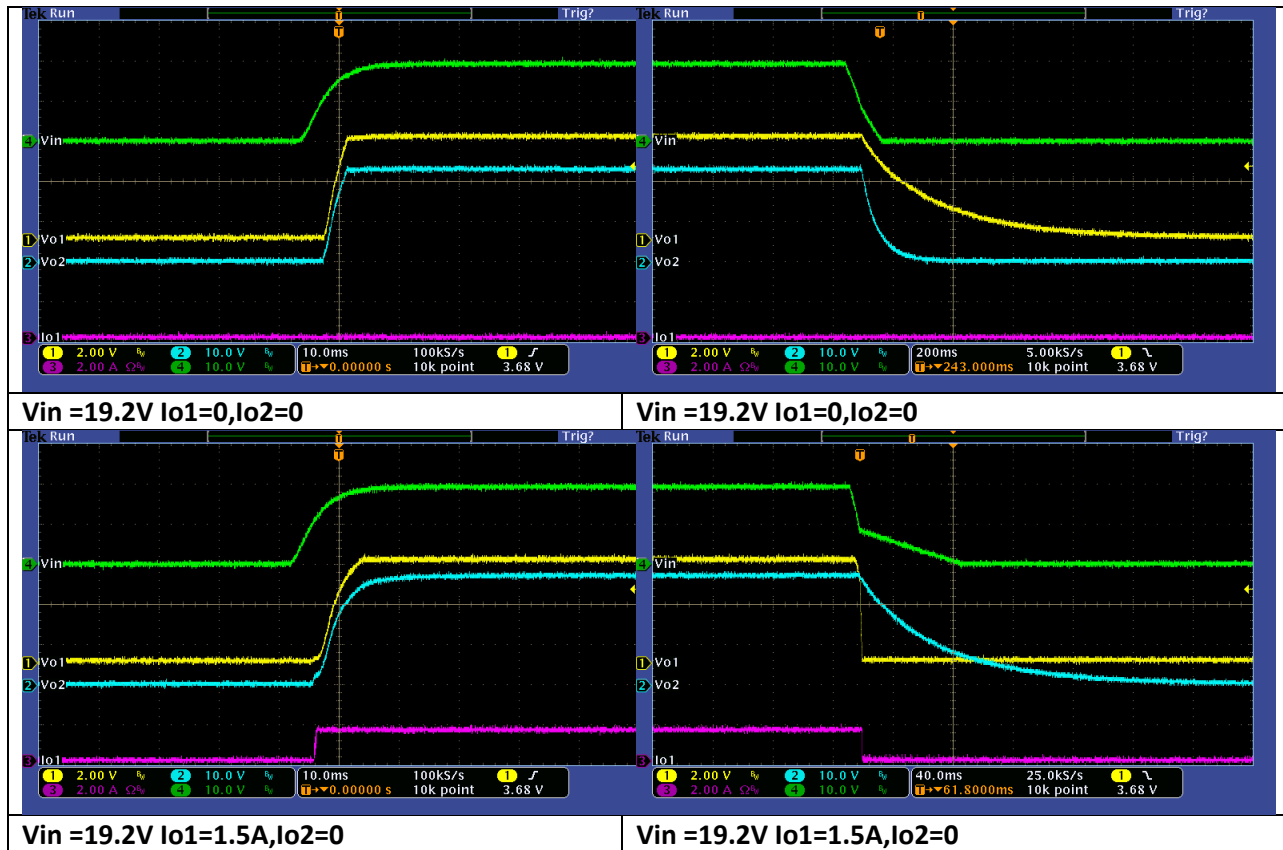


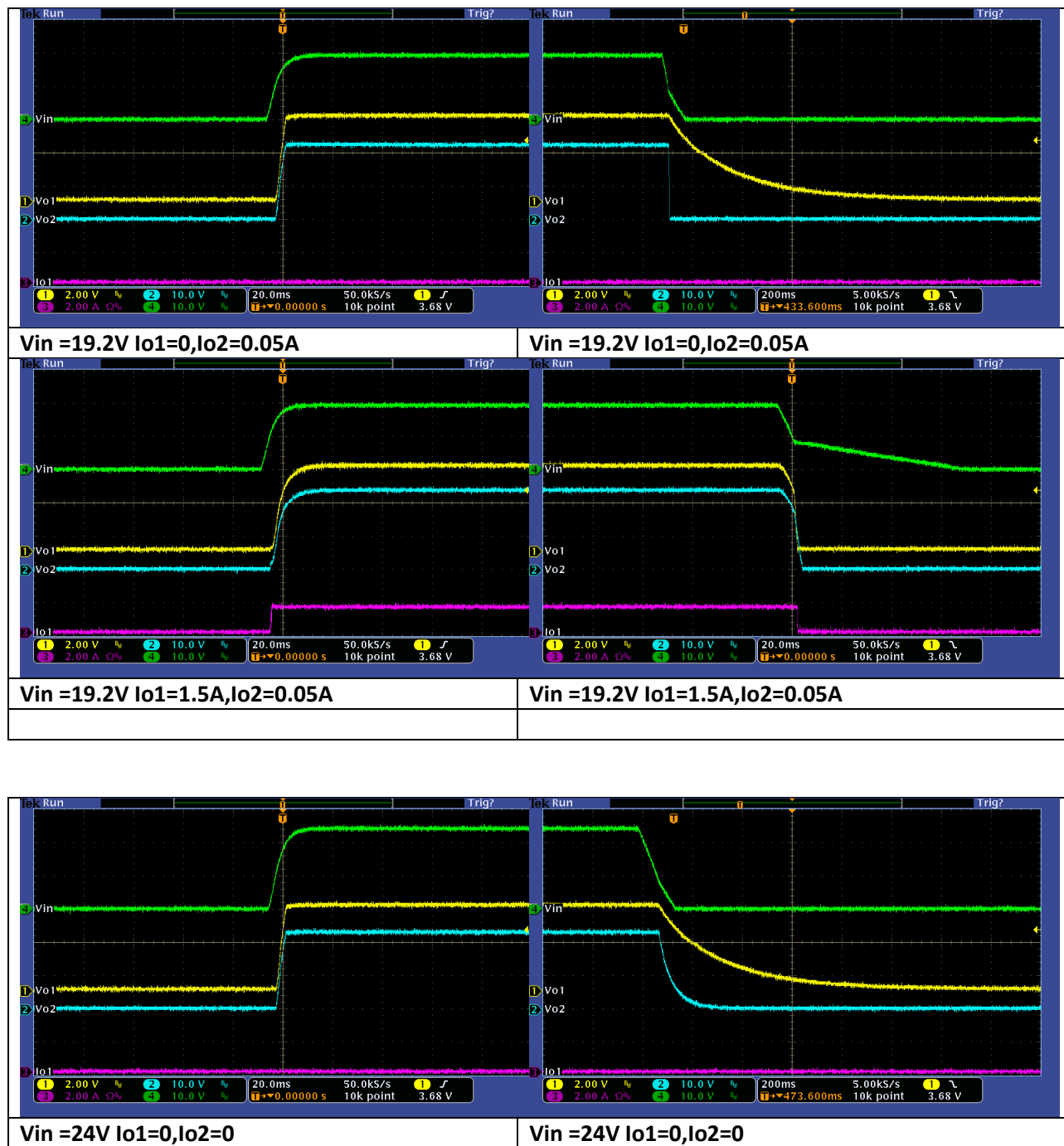


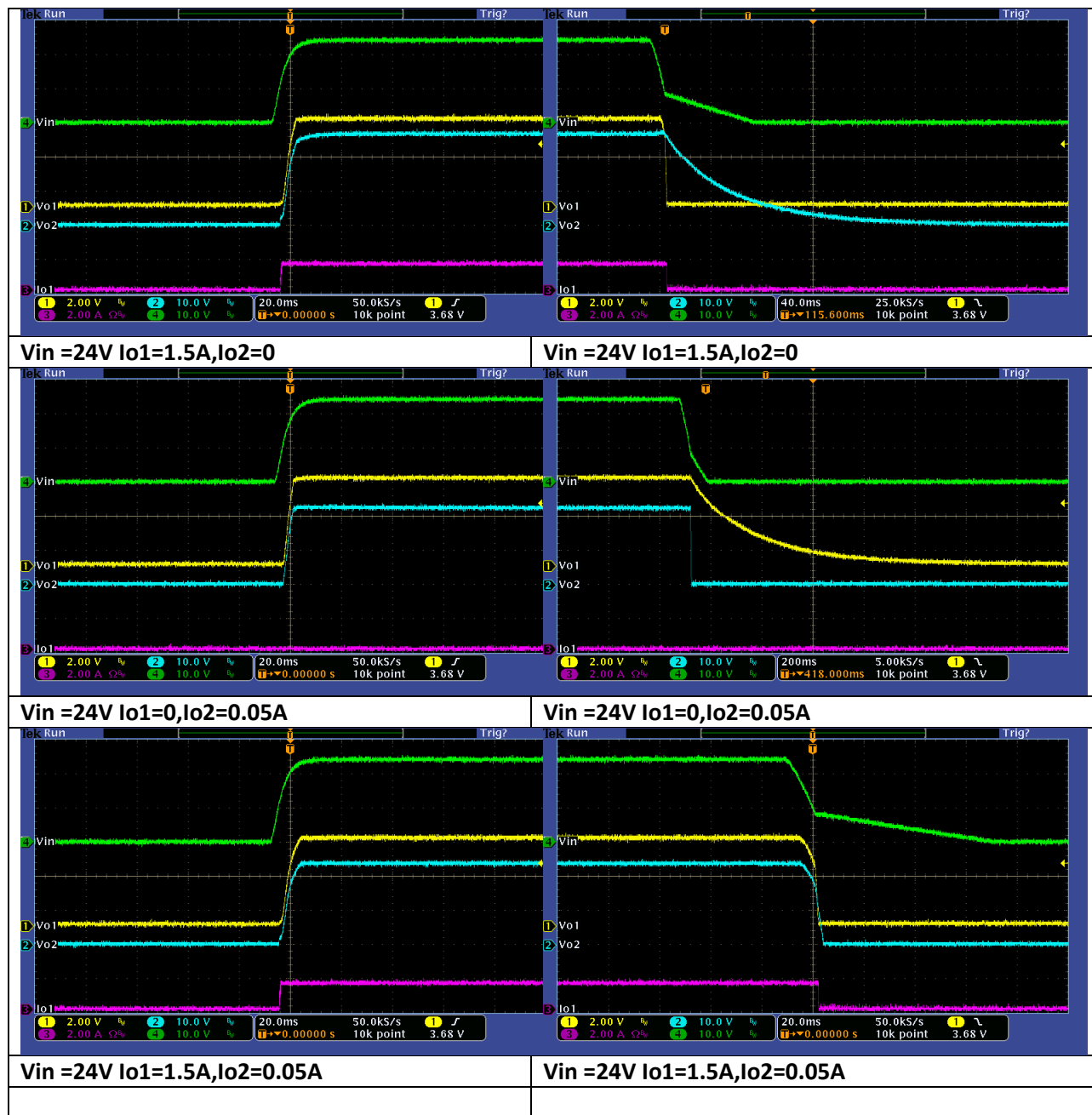


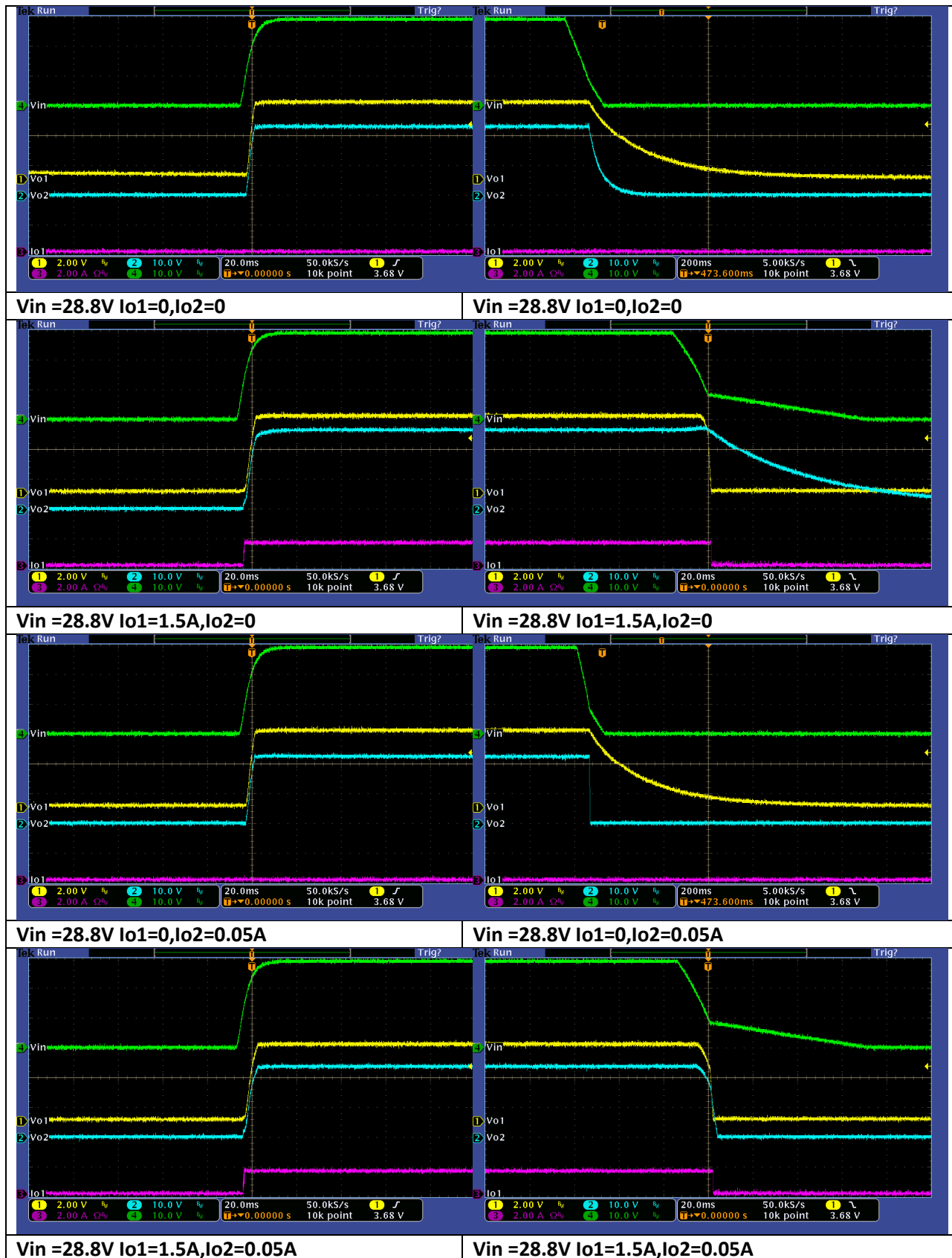


3.5) Start up and Shutdown

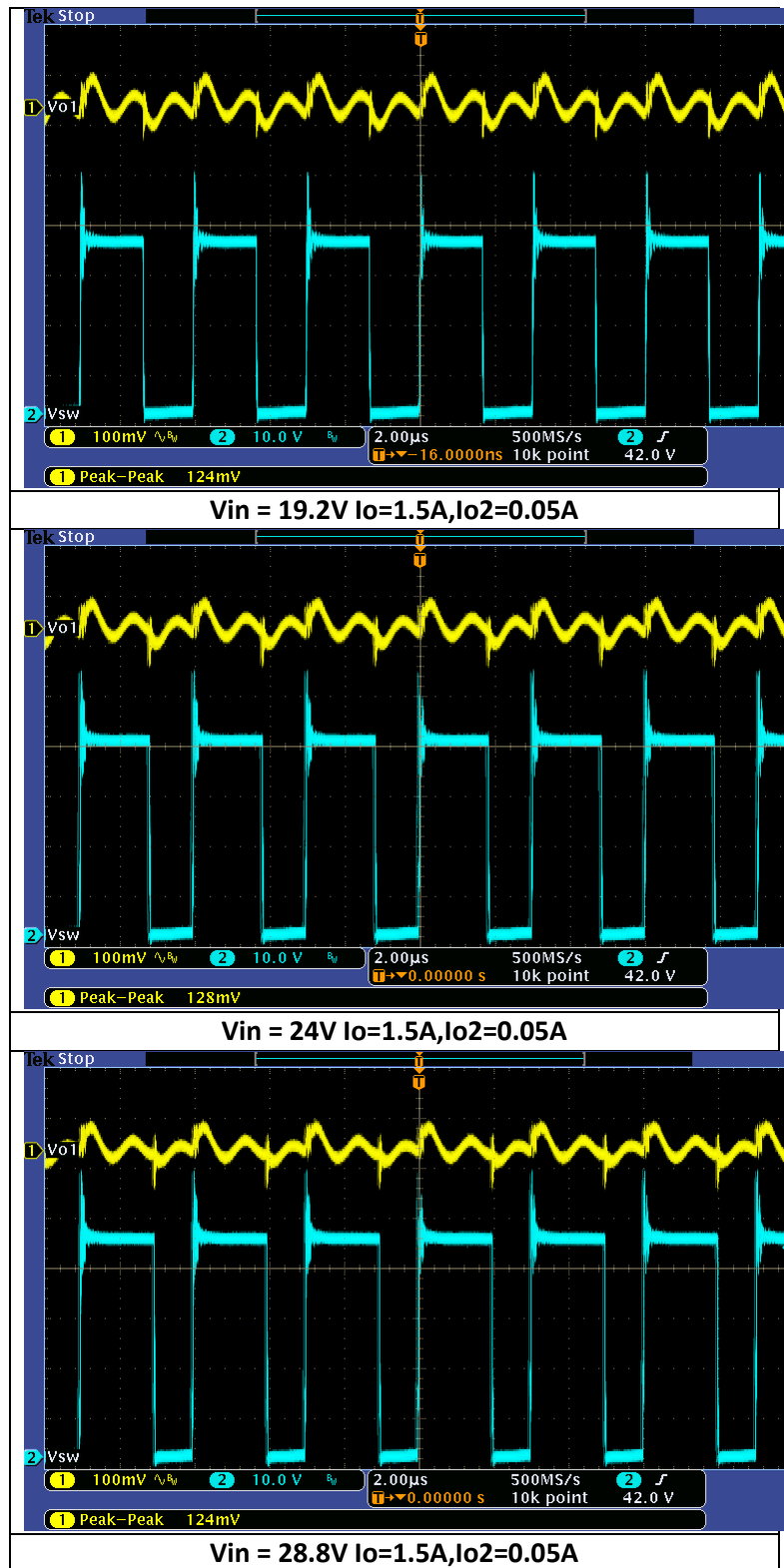




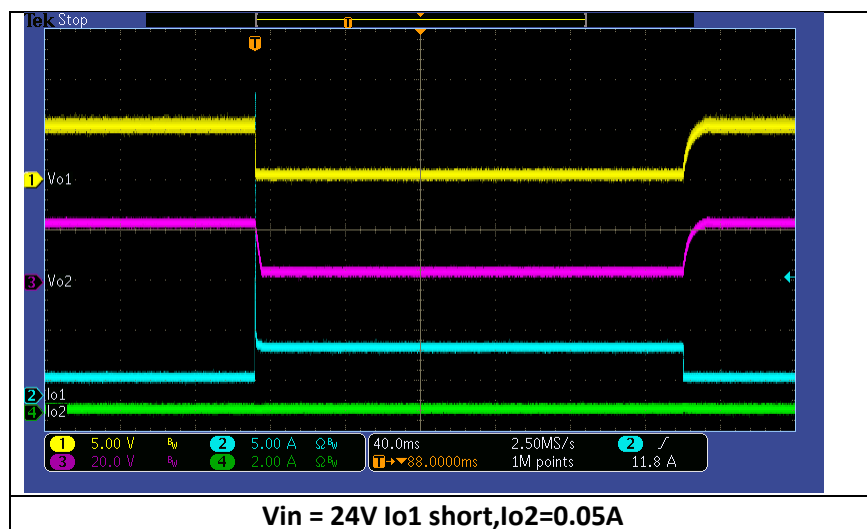
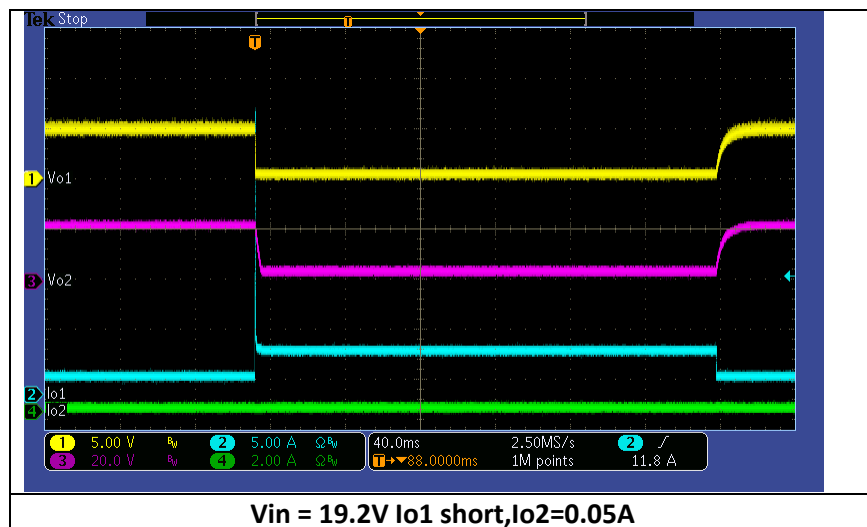


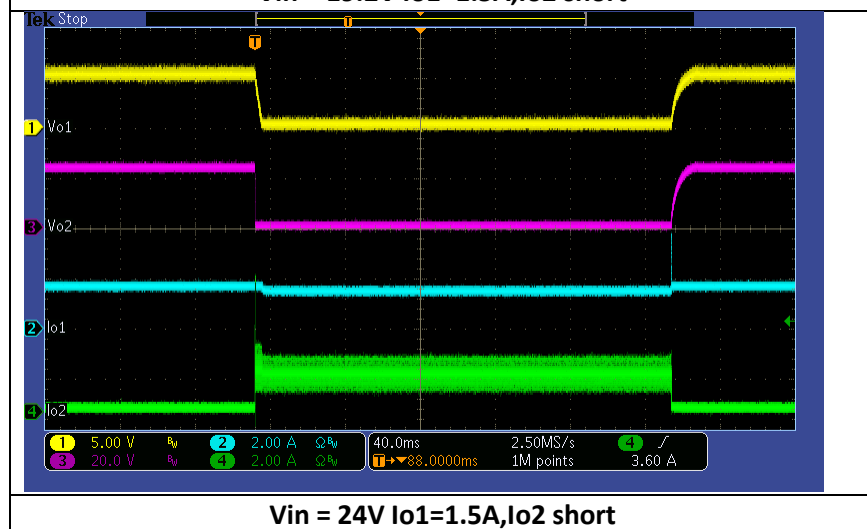
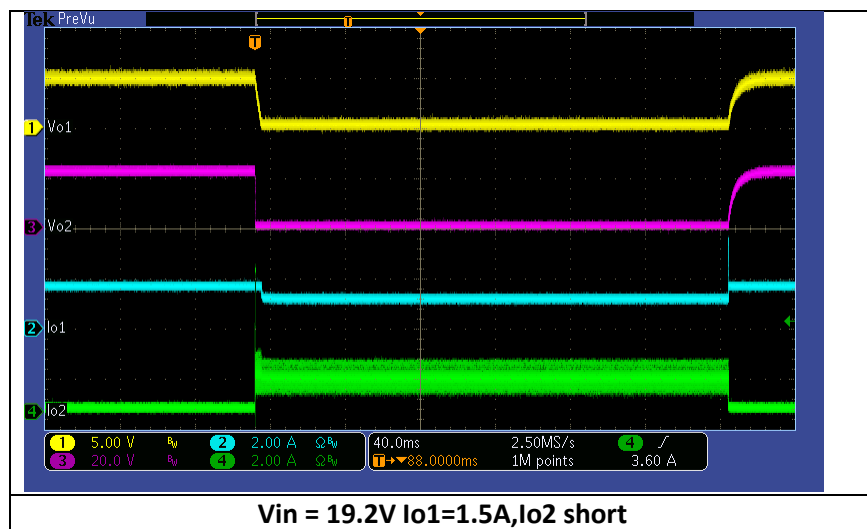
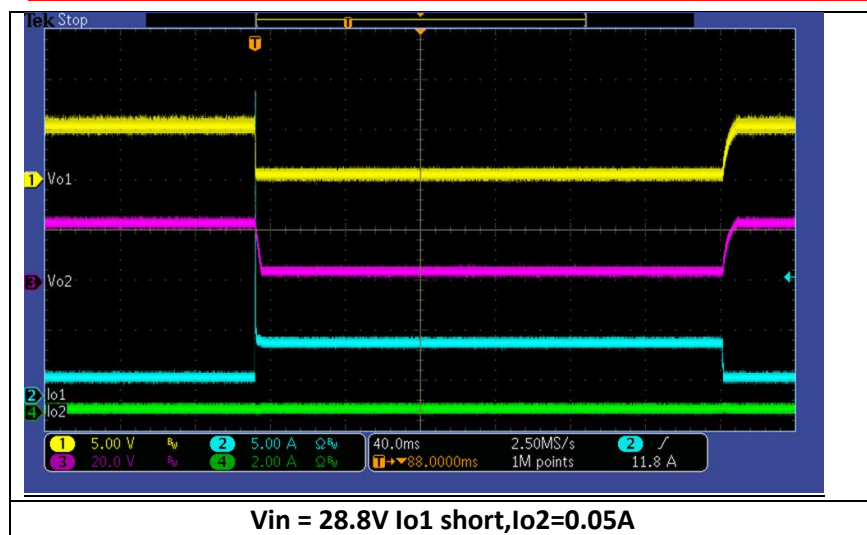


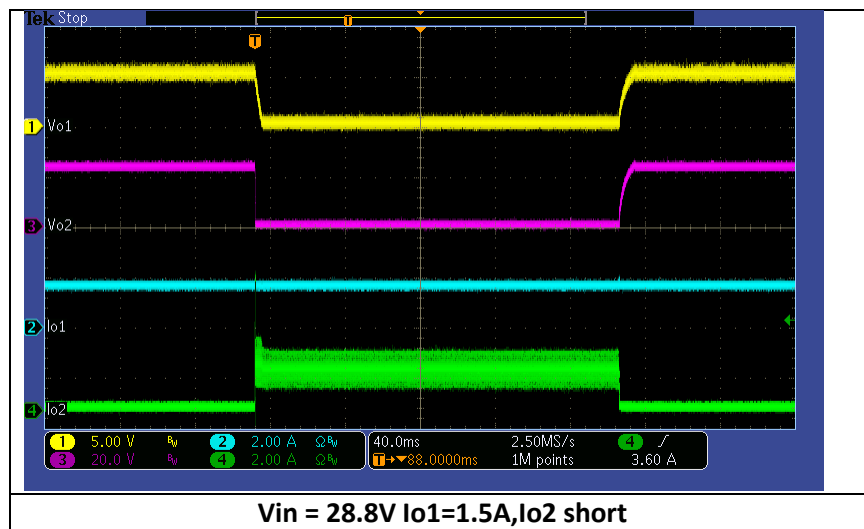
3.6) Output Ripple and SW



3.7) Short Circuit Protection







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