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**Regulation / Efficiency / Thermal****Input, output data and efficiency: (room ambient temperature)**

Vin Volts	Iin mA	Vout Volts	Iout mA	% Efficiency
16.04	702	4.96	2008	88.5
16.01	526	4.96	1506	88.7
16.02	353.5	4.96	1007	88.2
16.03	181	4.95	499	85.1
16.00	77.0	4.95	200	80.4
16.15	1.71	4.95	0	N/A
14.03	805	4.96	2029	89.1
13.99	597	4.96	1506	89.4
14.01	399	4.96	1007	89.4
14.04	203	4.95	499	86.7
14.00	86.4	4.95	200	81.8
13.98	1.65	4.95	0	N/A
12.01	932	4.96	2030	90.0
12.03	687	4.96	1507	90.4
11.97	461.5	4.96	1007	90.4
11.98	233	4.96	499	88.7
11.97	98.5	4.95	200	84.0
11.96	1.61	4.95	0	N/A

Thermal: Input at 16VDC and channel at full 2A load:

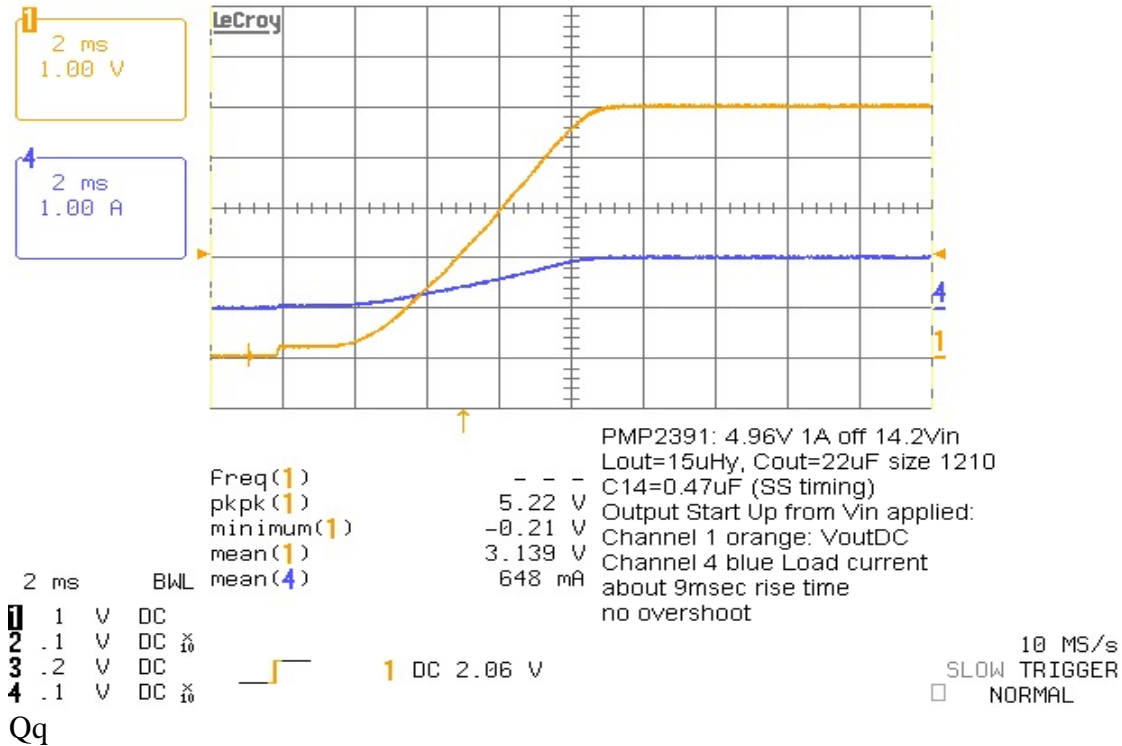
Ambient: 24 degrees Celsius: all values in degrees Celsius

Main Controller/Switch U1 at 38 degrees      Switch Q2 at 44 degrees C    Choke L1 at 53 degrees  
Diode D1 at 50 degrees

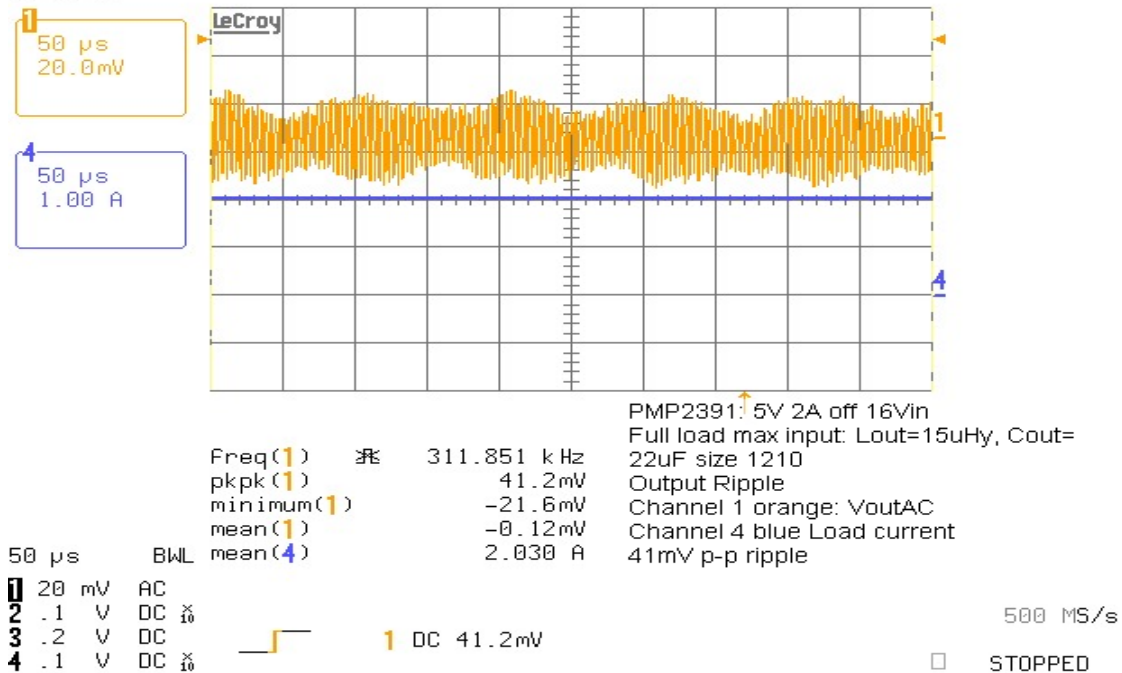
Thermal at overload: Input at 16V output at 4.96V at 2.726A: Ambient 25 degrees C

Switch Q2 at 53 degrees C    Choke L1 at 66 degrees    Diode D1 at 58 degrees

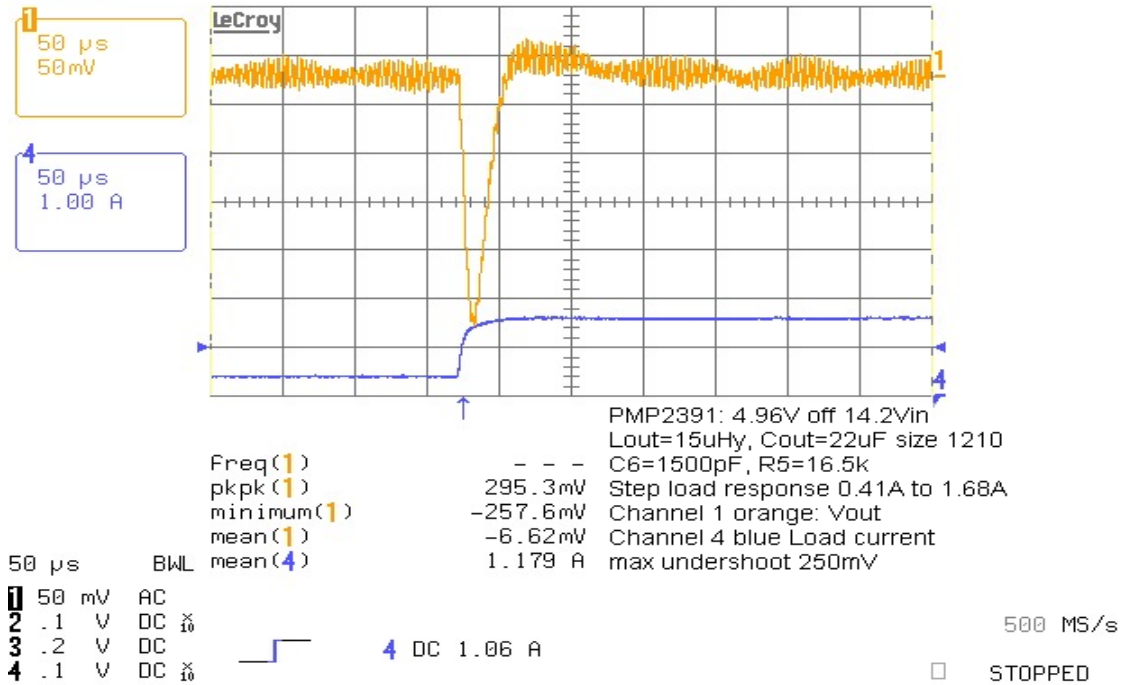
## Start Up: 14.2Vin Vout 4.96V at 1005mA

9-May-07  
13:57:56

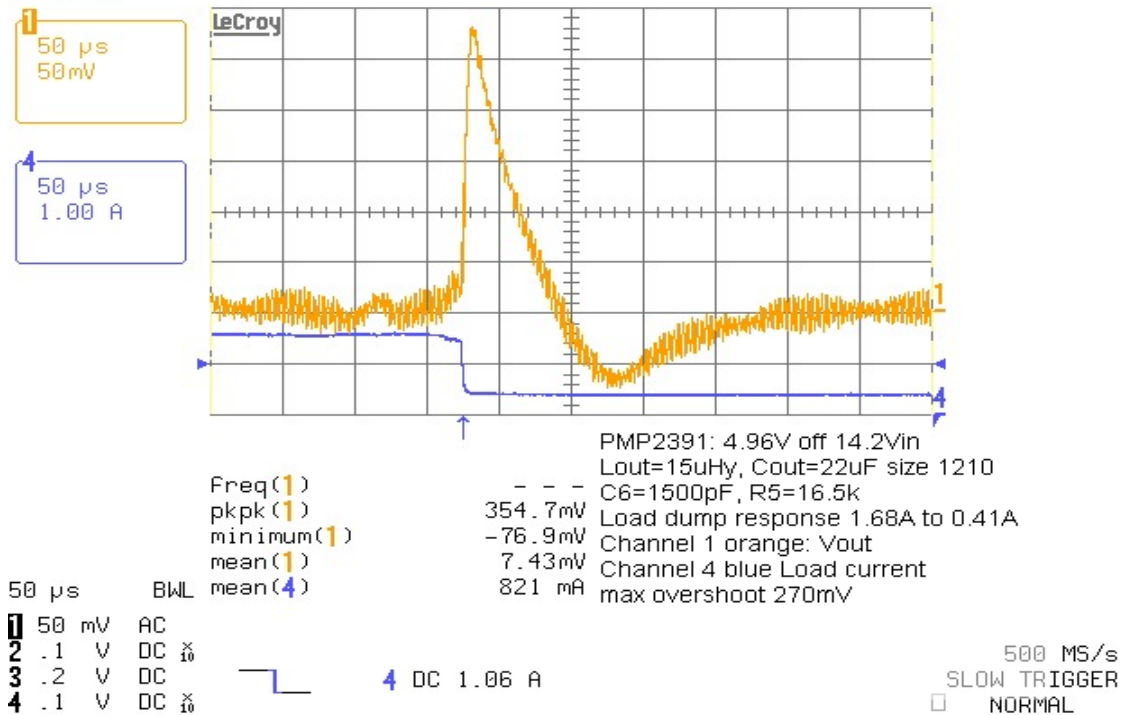
## Output ripple: Full load 16Vin

9-May-07  
11:31:28

## Load Step:

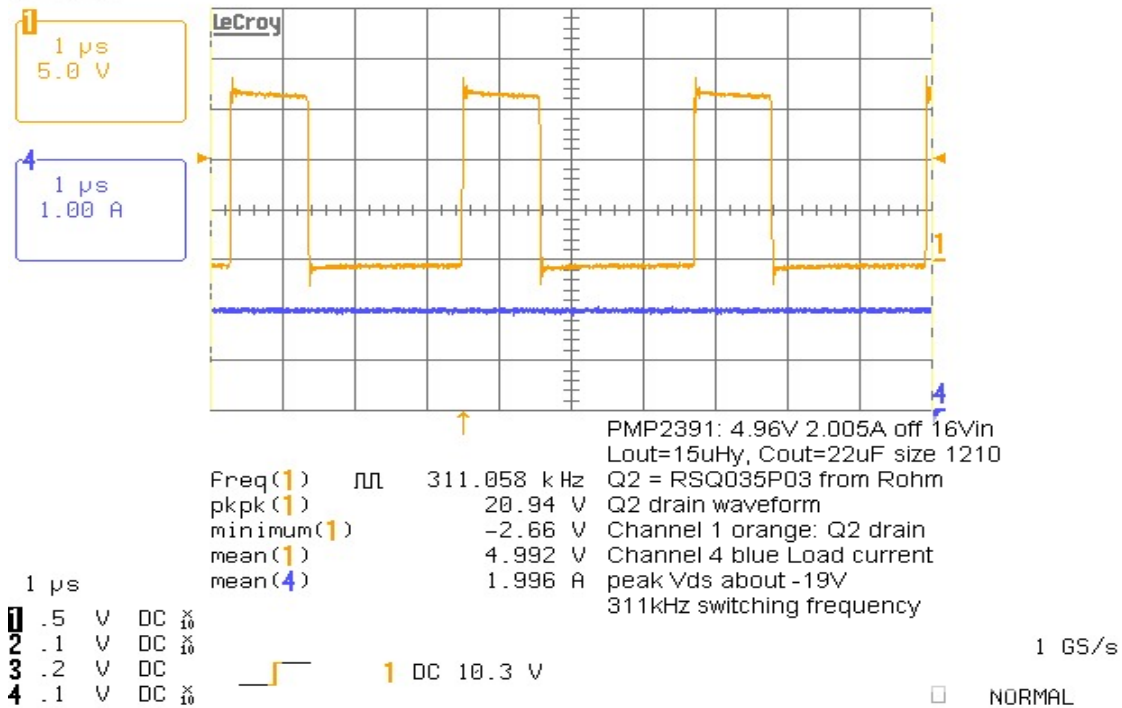
9-May-07  
14:01:19

## Load dump:

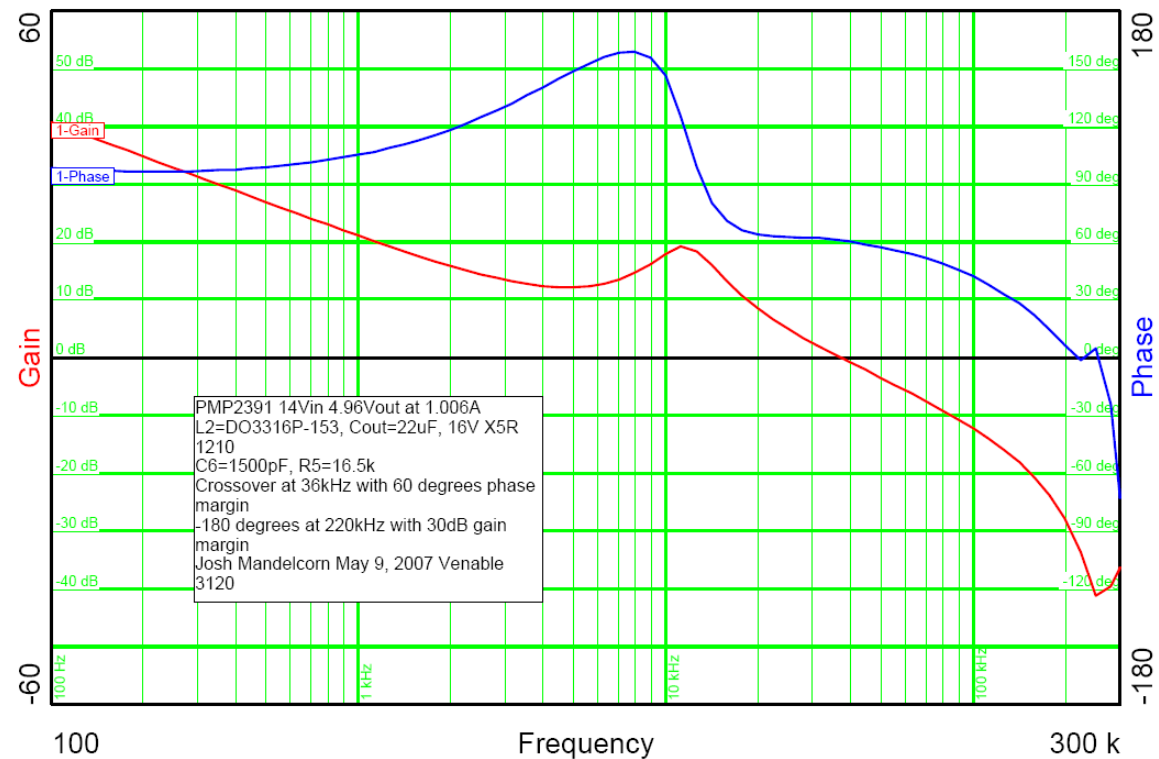
9-May-07  
14:03:12

Qq

## Major waveform: 16Vin:

9-May-07  
14:05:56

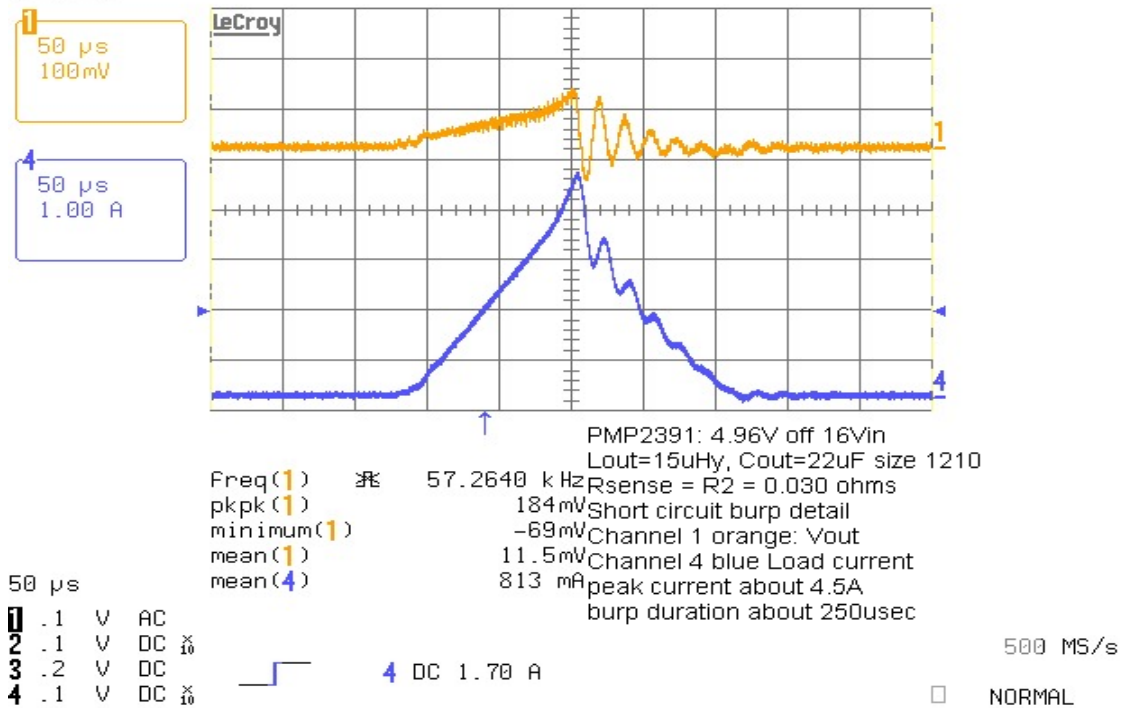
## Bode Plot:



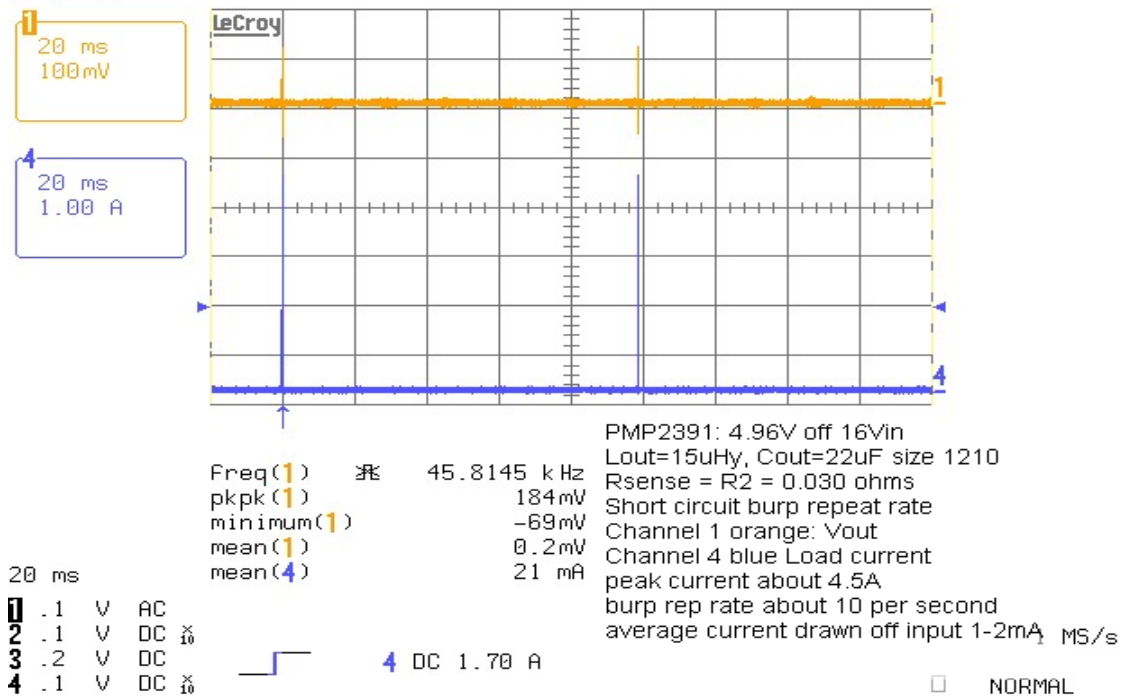
## Short Circuit: 16Vin

9-May-07  
14:26:14

Reading Floppy Disk Drive



## Short circuit: 16Vin with time scaled to show repeat restart attempt rate:

9-May-07  
14:27:20

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