

# TL1451 Switching Startup Scope Captures

Wednesday, November 18, 2015 11:01 AM

## 2K resistors into TL1451 pin 4/5

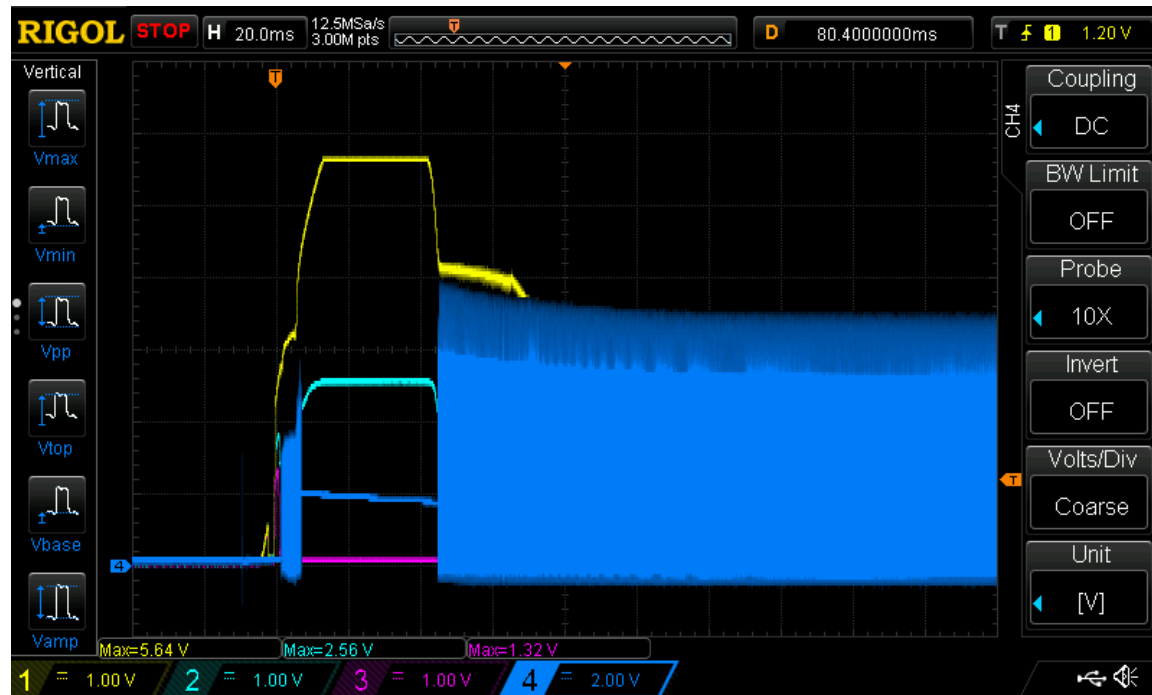
Channel 1 LM6144 Pin 8

Channel 2: TL1451 pin 4/5

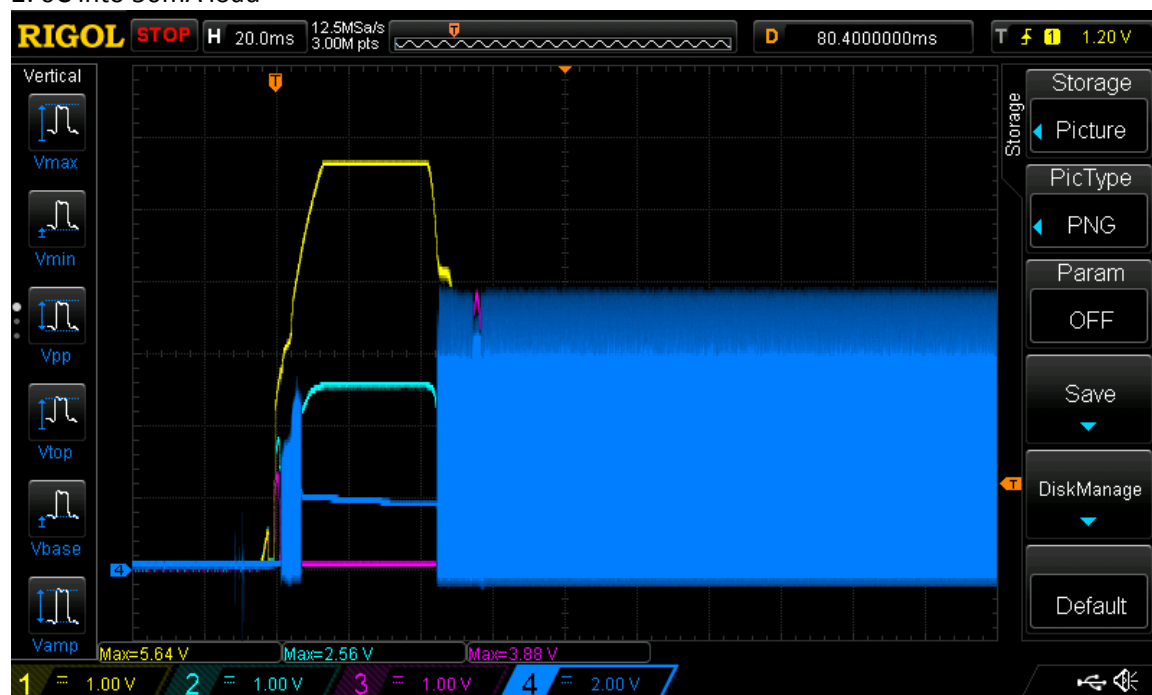
Channel 3 LM6144 pin 7

Channel 4: VSwitch

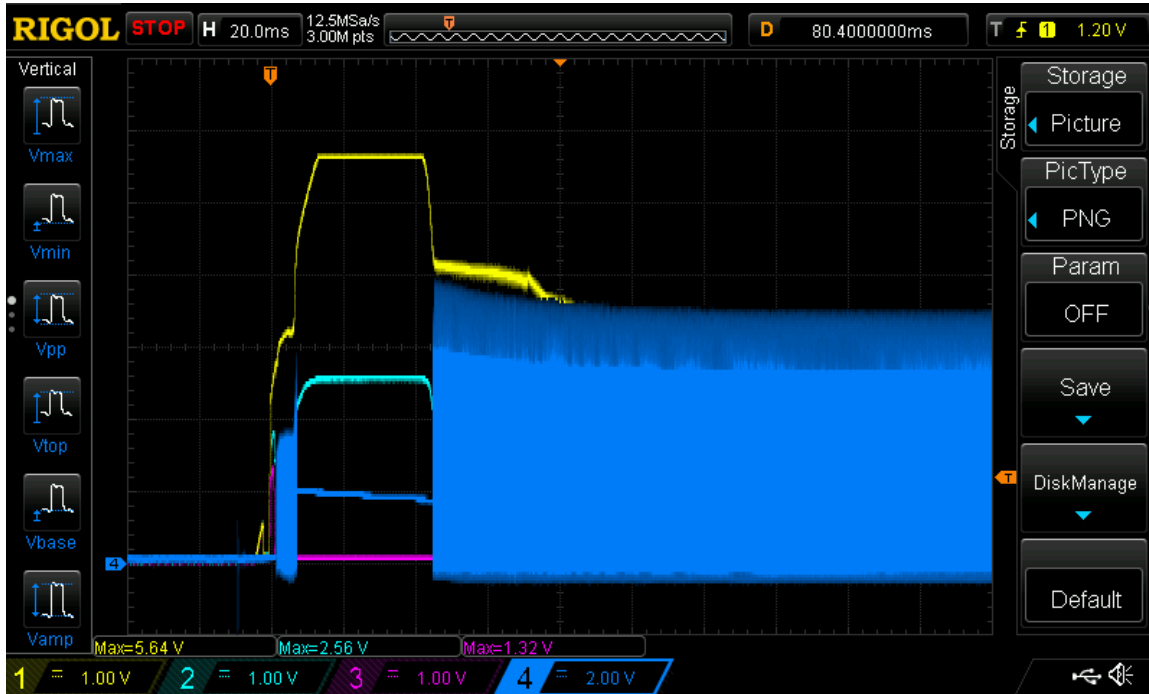
1: 0C into 3.3Vout



2: 0C into 50mA load



### 3: OC into 3.3Vout



### 2K resistors into TL1451 pin 3

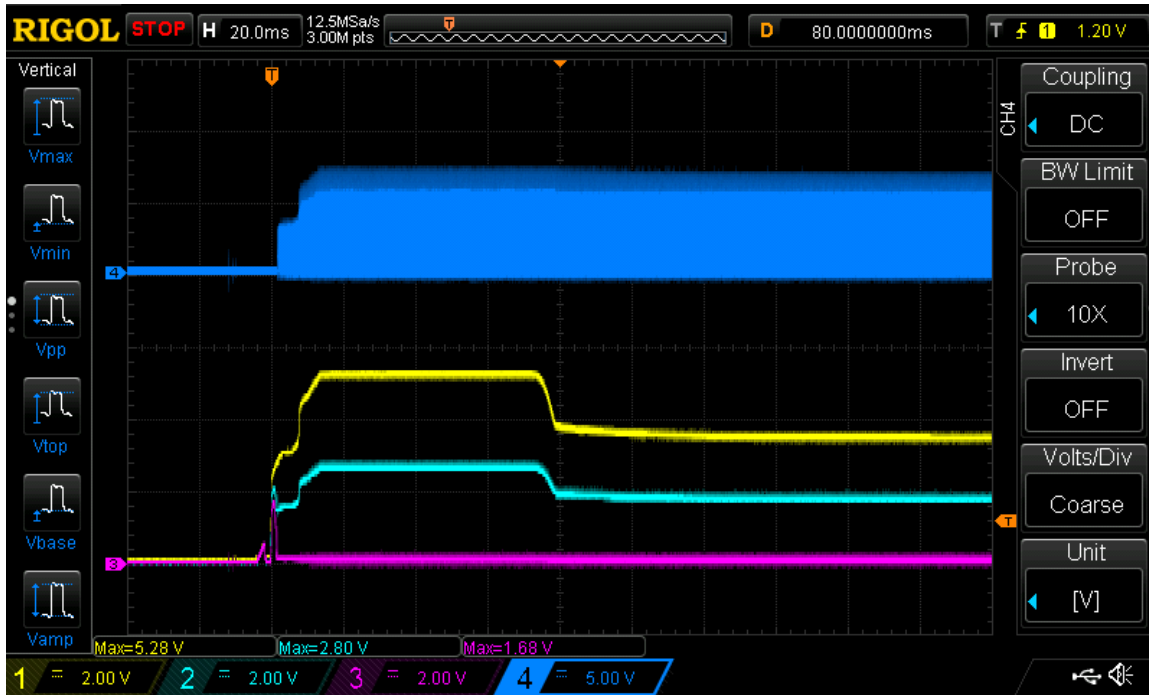
Channel 1 LM6144 Pin 8

Channel 2: TL1451 pin 3

Channel 3 LM6144 pin 7

Channel 4: VSwitch

### 4: OC into 3.3Vout load



### 5: OC into 50mA load



6: -60C into 3.3Vout load (no start)



7: -60C into 50mA load



8: -60C into 3.3Vout load (zoomed) no start



2K resistors into TL1451 pin 3

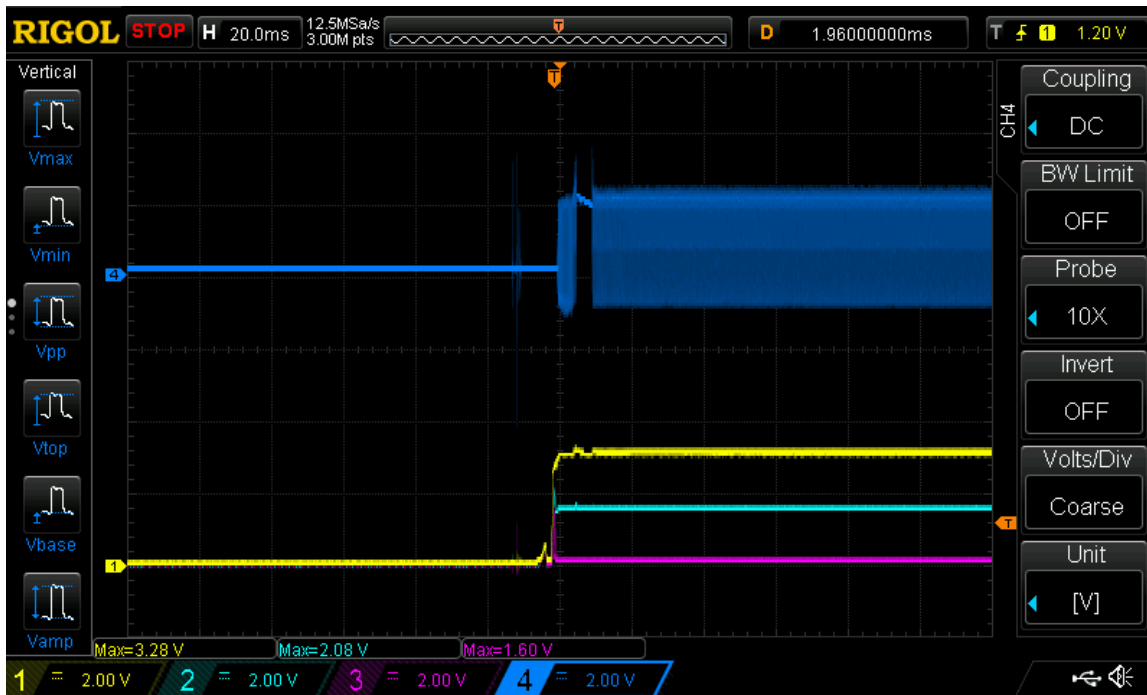
Channel 1 LM6144 Pin 8

Channel 2: TL1451 pin 3

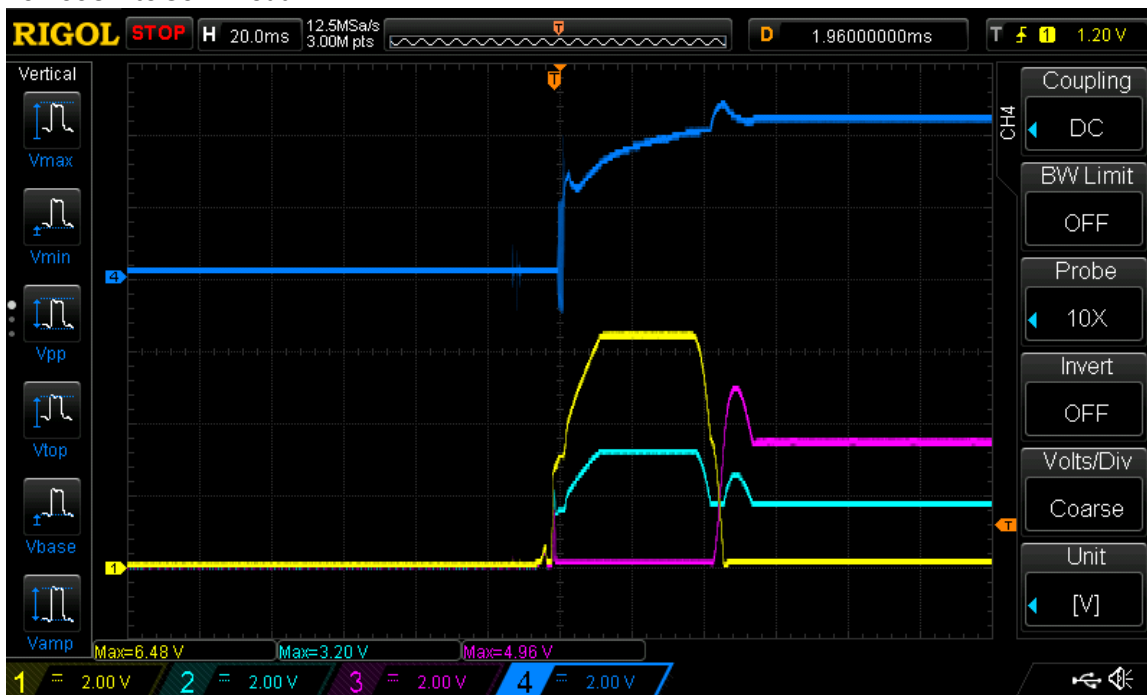
Channel 3 LM6144 pin 7

Channel 4: Pin 5 of LT4413

9: -60C into 3.3Vout load (no start)



10: -60C into 50mA load



## 2K resistors into TL1451 pin 3, Ideal diode IN/OUT shorted

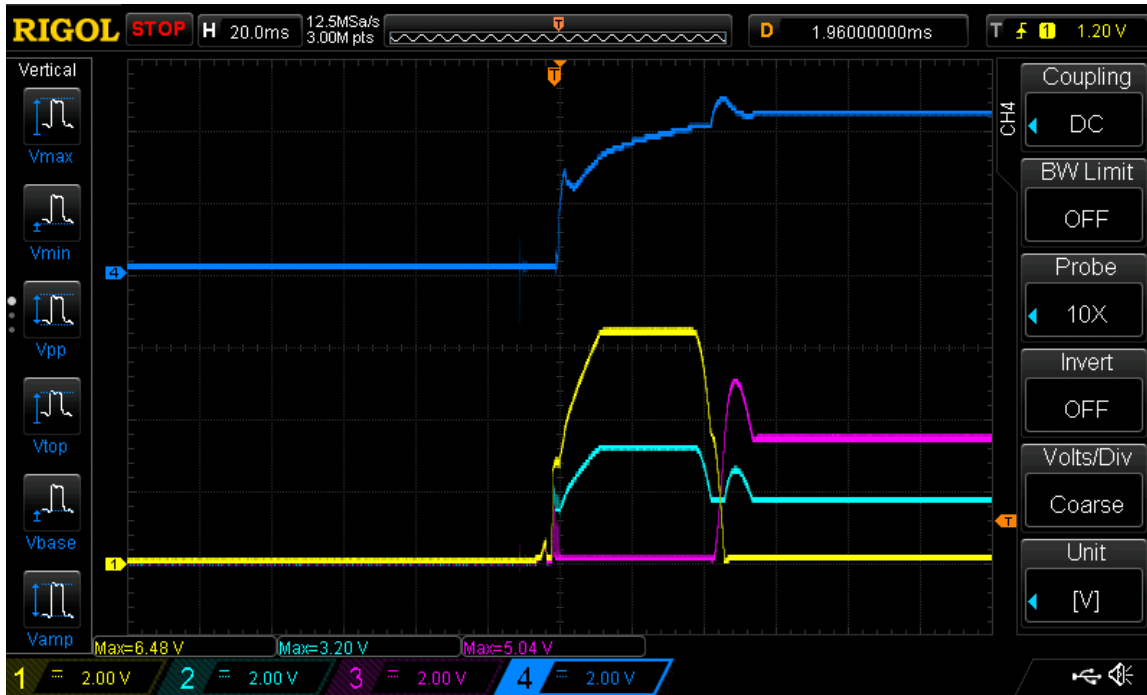
Channel 1 LM6144 Pin 8

Channel 2: TL1451 pin 3

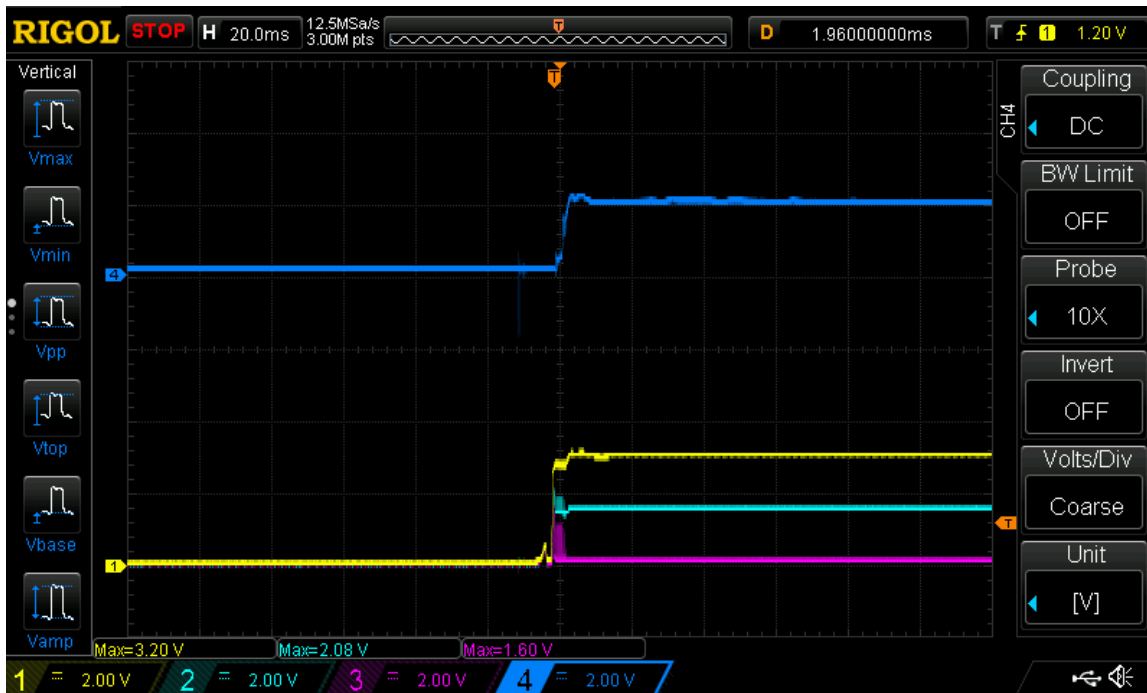
Channel 3 LM6144 pin 7

Channel 4: Pin 5 of LT4413

11: -60C into 50mA load



12: -60C into 3.3Vout load



Conclusion

Does not look like the ideal diode or 2.5V reference (not scope captured)