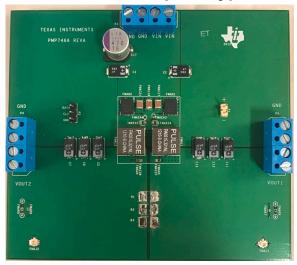
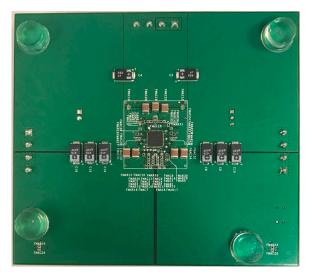


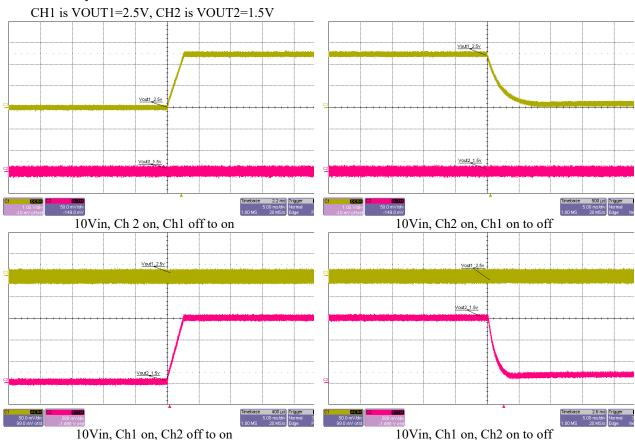
# Photo of the prototype







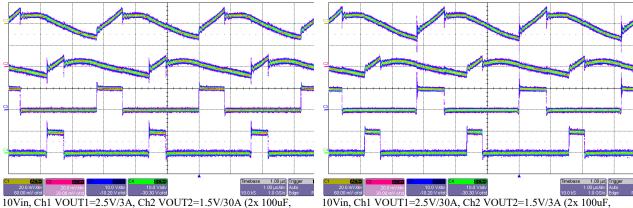
## 1 Startup and shutdown



## 2 Output Ripple

CH1 is VOUT1=2.5V, CH2 is VOUT2=1.5V

Trace C1: VOUT1 Trace C2: VOUT2 Trace C3: VSW1 Trace C4: VSW2

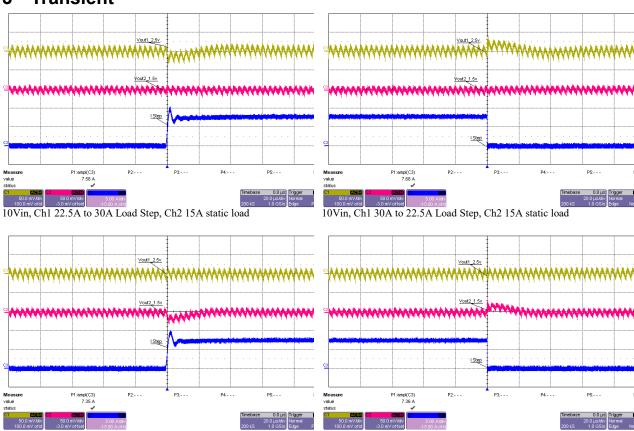


10Vin, Ch1 VOUT1=2.5V/3A, Ch2 VOUT2=1.5V/30A (2x 100uF, 6.3V, 1210+6x470uF, 6.3V, 10mohm, 7343)

10Vin, Ch1 VOUT1=2.5V/30A, Ch2 VOUT2=1.5V/3A (2x 100uF, 6.3V, 1210+6x470uF, 4V, 10mohm, 7343)



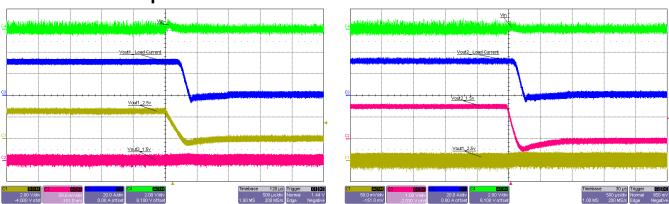
### 3 Transient



#### 10Vin, Ch2 22.5A to 30A Load Step, Ch1 15A static load

#### 10Vin, Ch2 30A to 22.5A Load Step, Ch1 15A static load

## 4 Over-Current protection

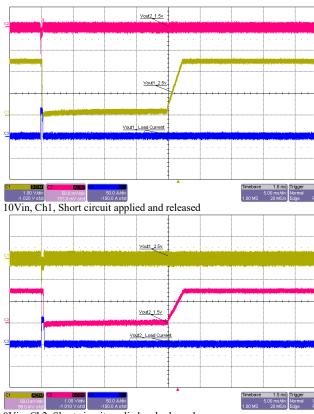


10Vin, Ch1 load regulation and over-current protection, Ch2 15A load

10Vin, Ch2 load regulation and over-current protection, Ch1 15A load

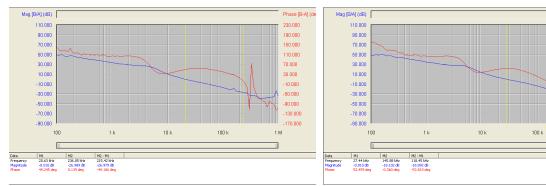


### **5 Short-Circuit Protection**



0Vin, Ch2, Short circuit applied and released

### 6 Bode Plot



10Vin, 2.5Vout, 30A Load (Fc=20.6kHz, PM=49.2, GM=27.0dB)

10Vin, 1.5Vout, 30A Load (Fc=27.4kHz, PM=53.5, GM=18.1dB)

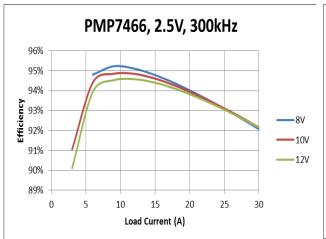
70.000 30.000

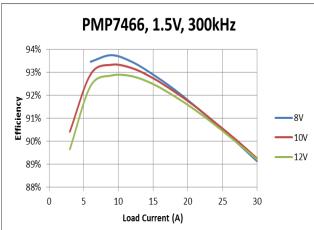
-10.000

-50.000 -90.000 -130.000

# 7 Efficiency







2.5V efficiency @300kHz

1.5V efficiency @300kHz

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