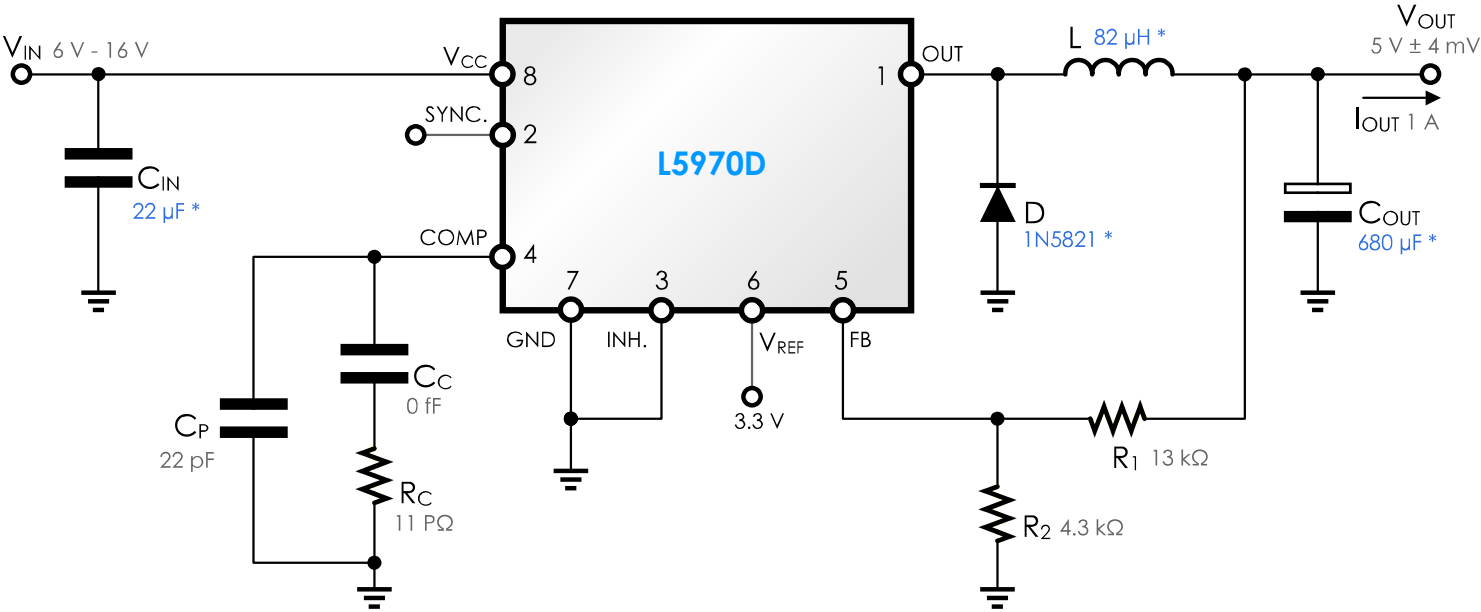


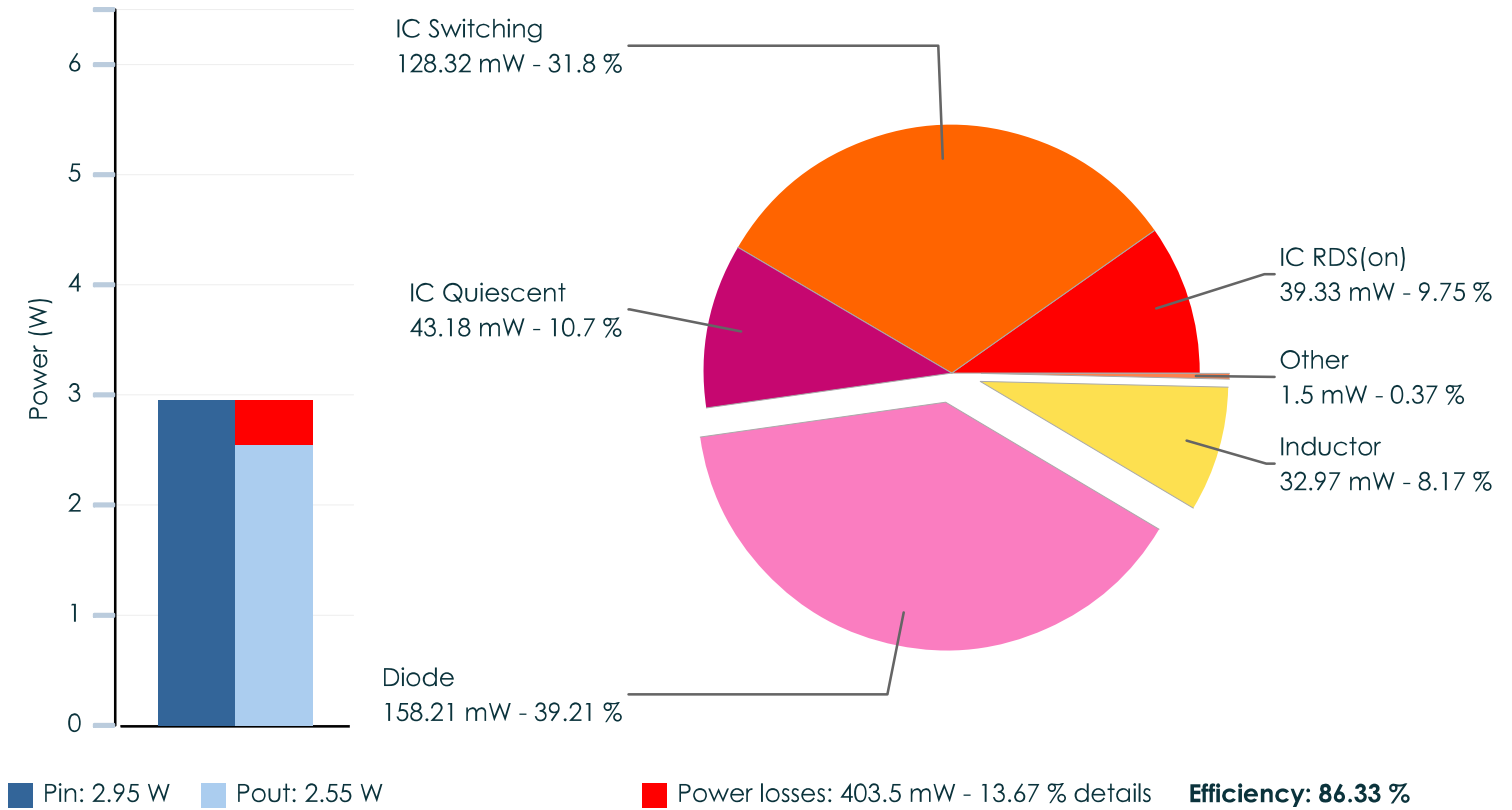
**V<sub>in</sub>:** 6 V - 16 V **V<sub>out</sub>:** 5 V ± 4 mV **I<sub>out</sub>:** 1 A  
**Switch Frequency:** 250 kHz  
**IC:** L5970D - SO 8  
**System Operating Condition:** **V<sub>in</sub>:** 14.39 V - **I<sub>out</sub>:** 509.44 mA



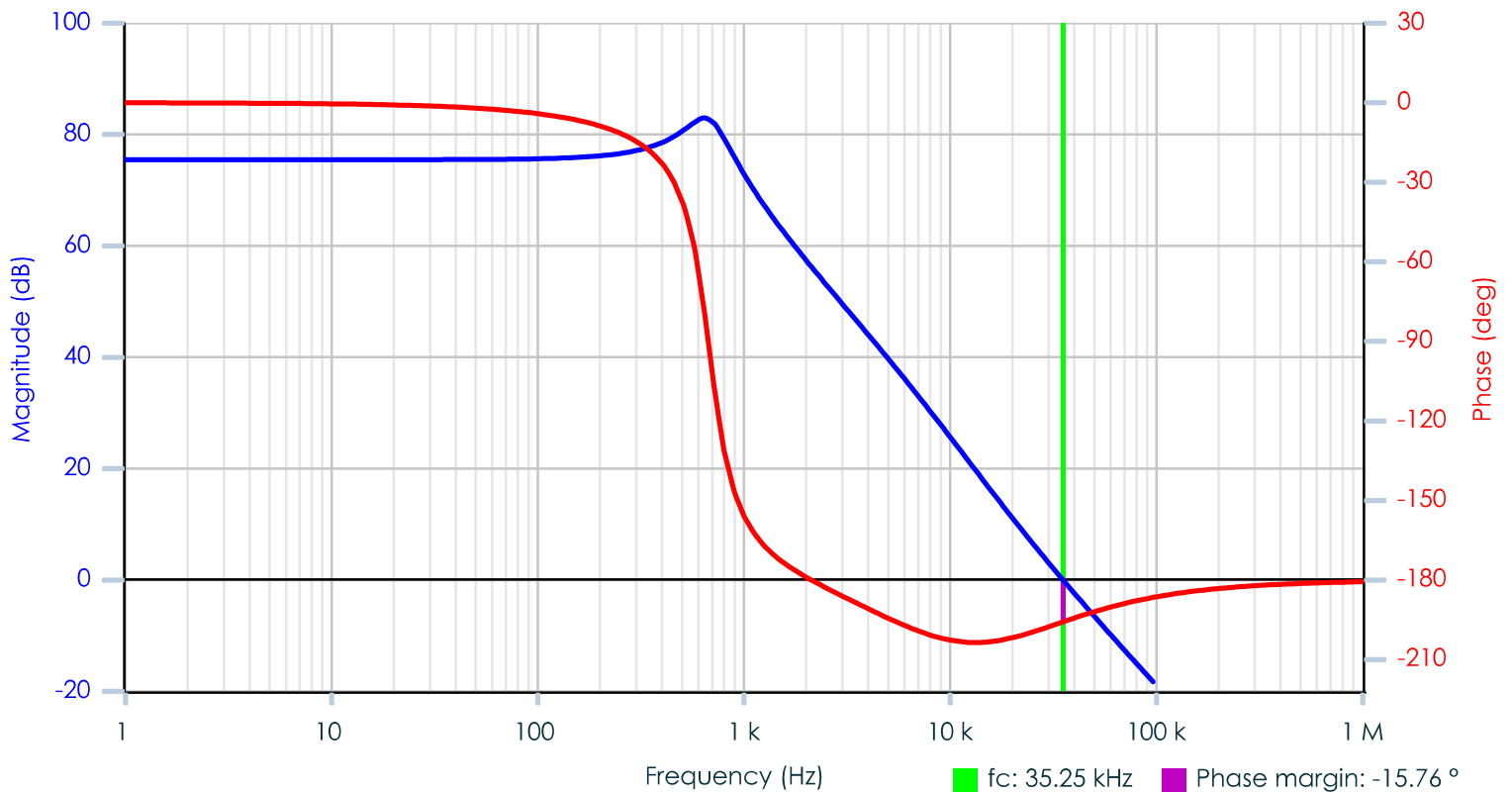
### Bill of Materials

Type	Reference	Value	Description
IC	IC	L5970D	L5970D - SO 8
Capacitor	Cin	22 µF	25 V - 20% - TDK - C4532X7R1E226M
Capacitor	Cout	680 µF	6.3 V - 20% - AVX - TPME687M006R0023
Inductor	L	82 µH	3.8 A - Coilcraft - MSS1278-823
Diode	D	1N5821	3 A, 30 V - STMicroelectronics
Resistor	R1	13 kΩ	13 kΩ
Resistor	R2	4.3 kΩ	4.3 kΩ
Capacitor	Cc	0 fF	0 fF
Resistor	Rc	11 PΩ	11 PΩ
Capacitor	Cp	22 pF	22 pF

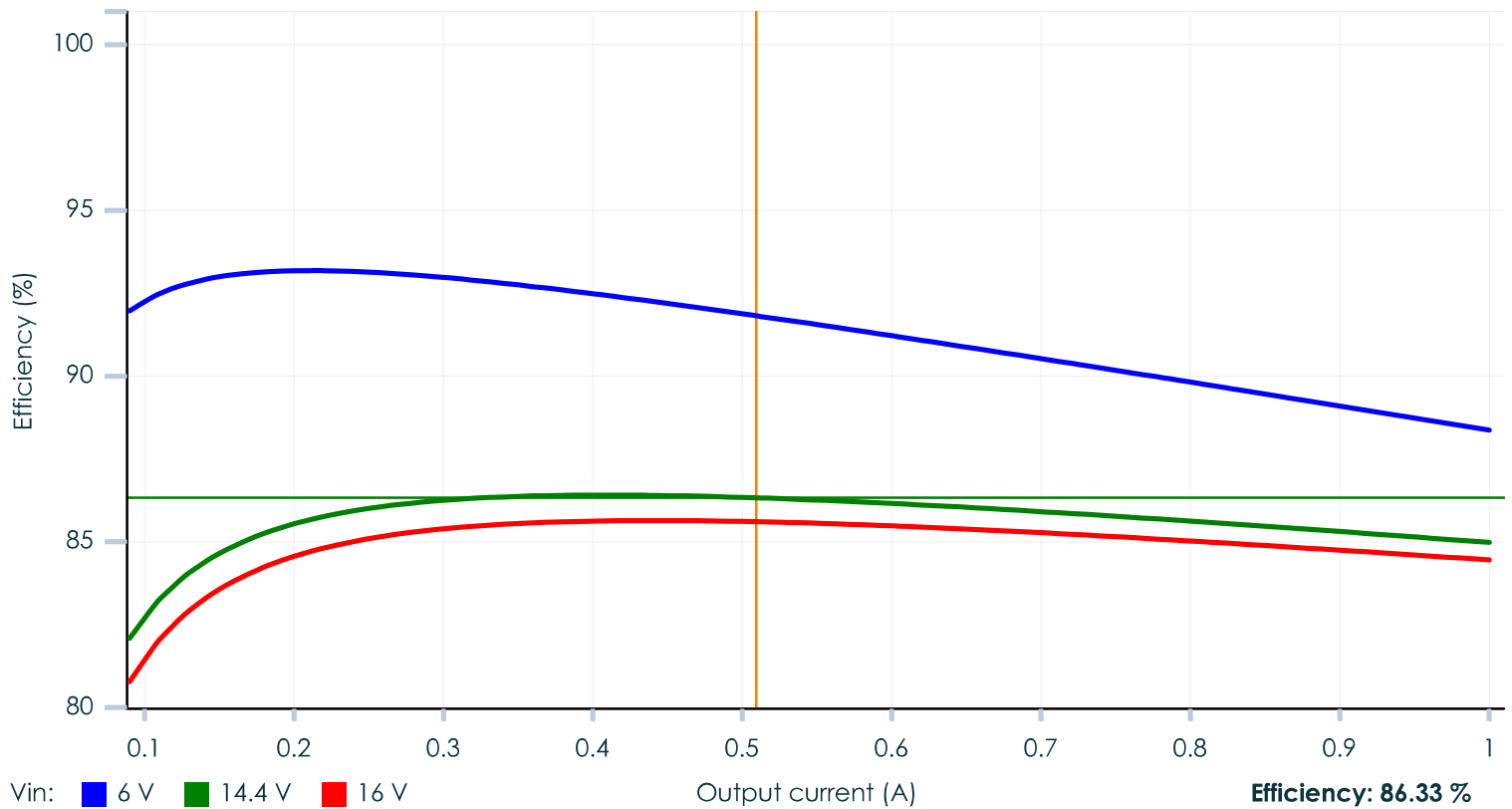
## Power Losses



## Bode



## Efficiency



## Simulation

