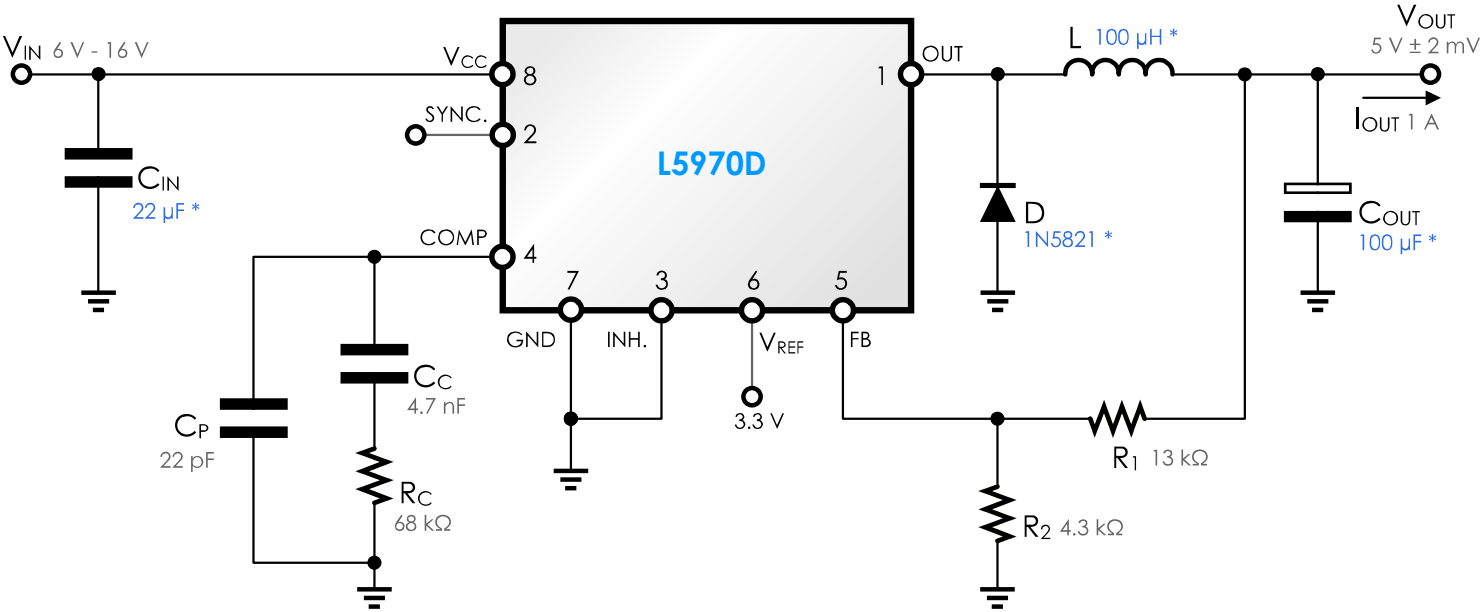


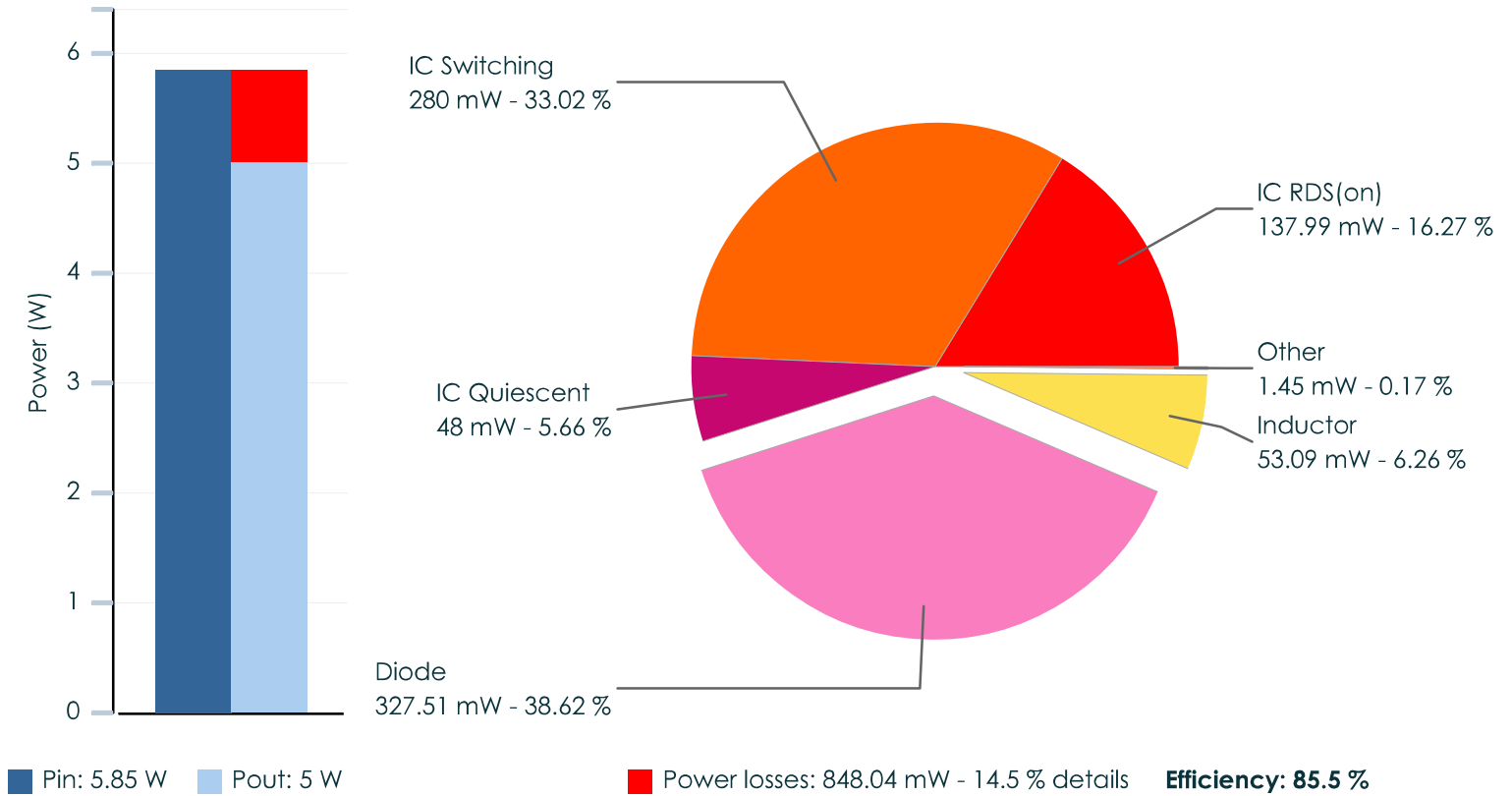
**V<sub>in</sub>:** 6 V - 16 V **V<sub>out</sub>:** 5 V ± 2 mV **I<sub>out</sub>:** 1 A  
**Switch Frequency:** 250 kHz  
**IC:** L5970D - SO 8  
**System Operating Condition:** **V<sub>in</sub>:** 16 V - **I<sub>out</sub>:** 1 A



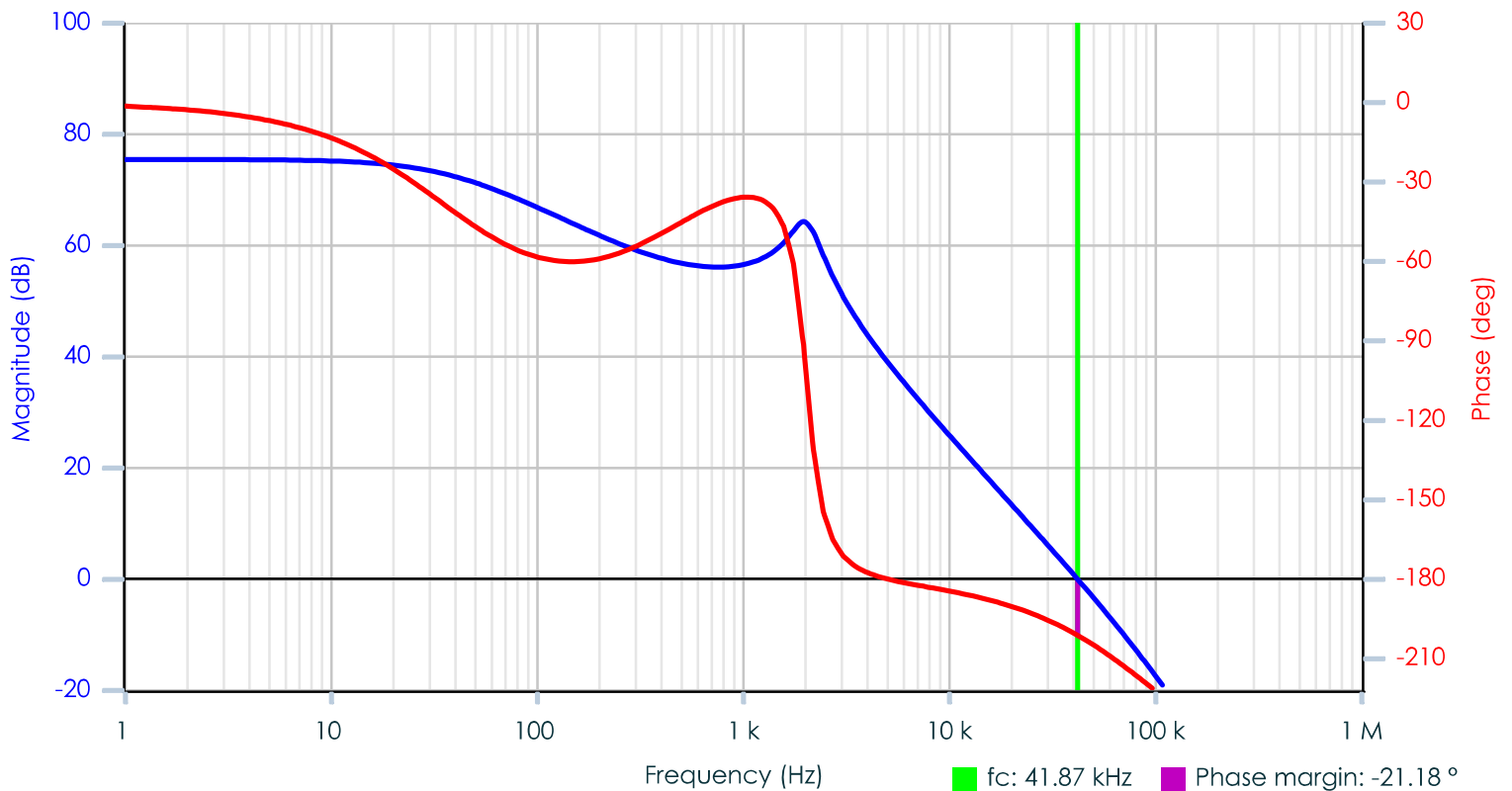
### Bill of Materials

Type	Reference	Value	Description
IC	IC	L5970D	L5970D - SO 8
Capacitor	C <sub>in</sub>	22 µF	25 V - 20% - TDK - C4532X7R1E226M
Capacitor	C <sub>out</sub>	100 µF	6.3 V - 20% - TDK - C3225X5R0J107M
Inductor	L	100 µH	4.4 A - Coiltronics - CTX100-2-52
Diode	D	1N5821	3 A, 30 V - STMicroelectronics
Resistor	R <sub>1</sub>	13 kΩ	13 kΩ
Resistor	R <sub>2</sub>	4.3 kΩ	4.3 kΩ
Capacitor	C <sub>c</sub>	4.7 nF	4.7 nF
Resistor	R <sub>c</sub>	68 kΩ	68 kΩ
Capacitor	C <sub>p</sub>	22 pF	22 pF

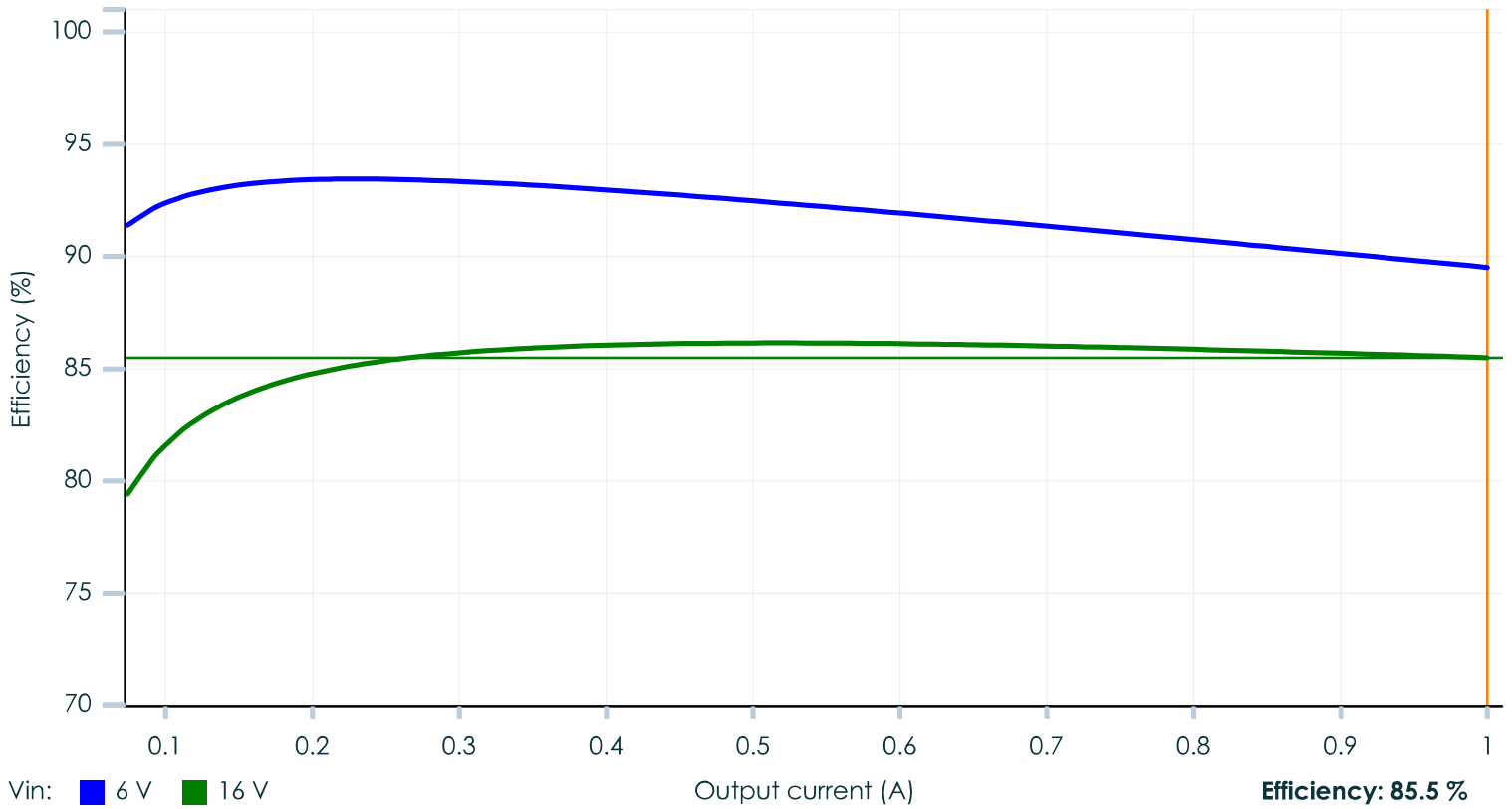
## Power Losses



## Bode



## Efficiency



## Simulation

