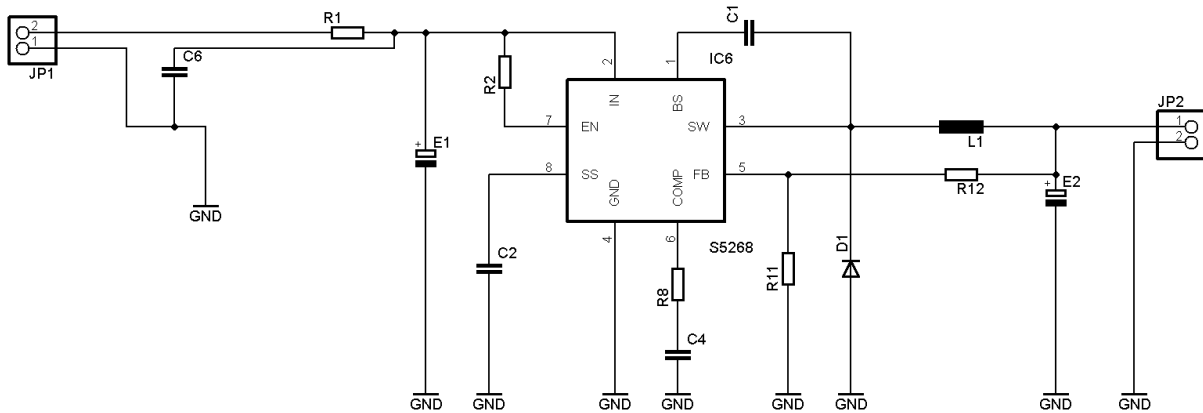



Realisierte Schaltung 12V LN USB Netzteil mit Schaltkreis AME5268

In Anlehnung an Datenblatt <https://www.dexsilicium.com/AME5268.pdf>, mit Verpolschutzdiode



erste Seite von Datenblatt:



3A, 28V, 340KHz Synchronous Rectified Step-Down Converter

AME5268

■ General Description

The AME5268 is a fixed frequency monolithic synchronous buck regulator that accepts input voltage from 4.75V to 28V. Two NMOS switches with low on-resistance are integrated on the die. Current mode topology is used for fast transient response and good loop stability.

Shutdown mode reduces the input supply current to less than 1µA. An adjustable soft-start prevents inrush current at turn-on.

This device is available in SOP-8/PP package with exposed pad for low thermal resistance.

■ Applications

- Distributed Power System
- Networking System
- FPGA, DSP, ASIC Power Supplies
- Notebook Computers

■ Features

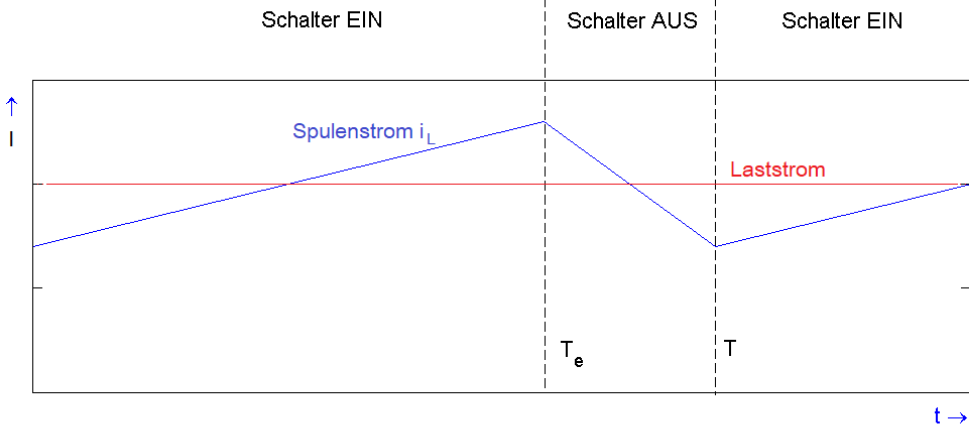
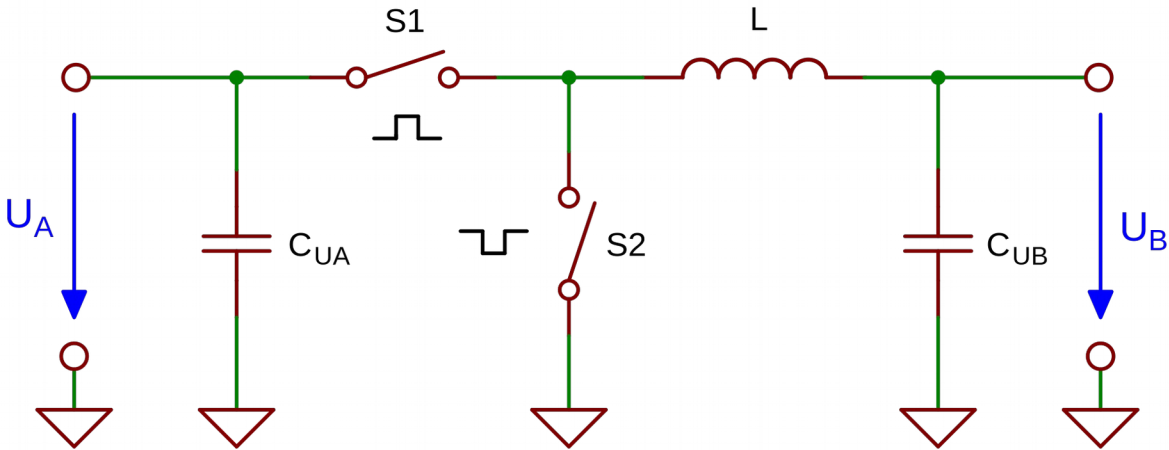
- 3A Output Current
- Wide 4.75V to 28V Operating Input Range
- Integrated Power MOSFET Switches
- Output Adjustable from 0.925V to 25V
- Up to 95% Efficiency
- Programmable Soft Start
- Stable with Low ESR Ceramic Output Capacitors
- Cycle-by Cycle Over Current Protection
- Fixed 340KHz Frequency
- Input Under Voltage Lockout
- System Protected by Over-current Limiting, Over-voltage Protection and Thermal Shutdown
- Thermally Enhanced SOP-8/PP Package
- Green Products Meet RoHS Standards

■ Typical Application

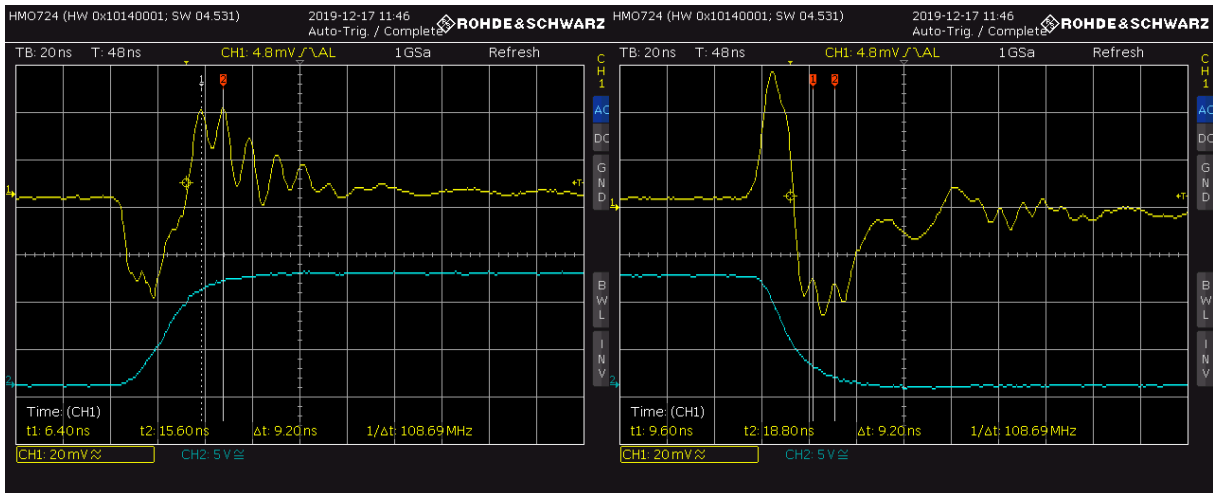
Synchronwandler

<https://de.wikipedia.org/wiki/Synchronwandler>

<https://de.wikipedia.org/wiki/Abw%C3%A4rtswandler>

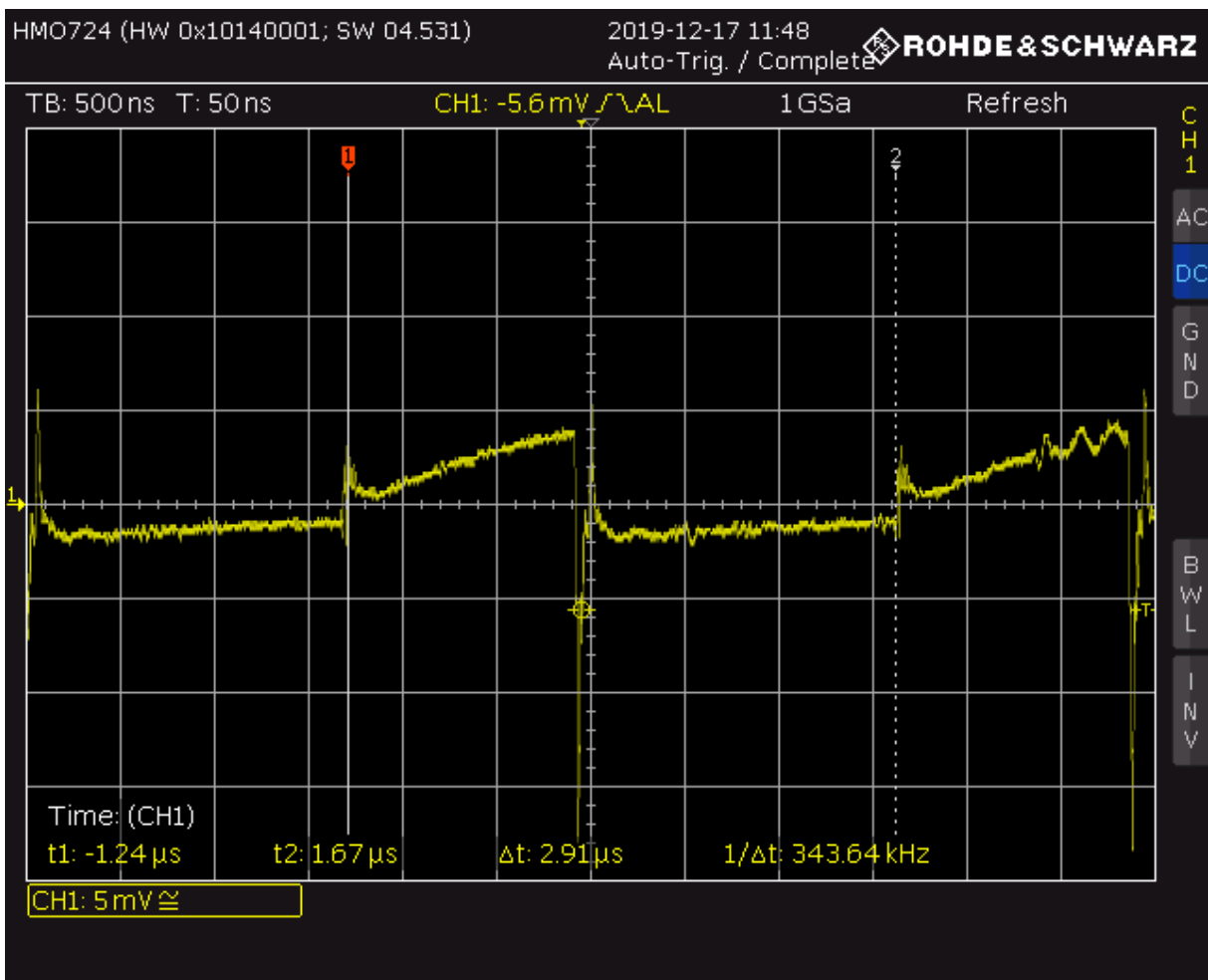


Spannung an SW und Diode GND



Ch 1 Fußpunkt Anode Diode 1

Ch 2 Pin3 Switch out



340 kHz Signal an Fußpunkt der Diode, erkennbar 340kHz Schaltsignal