

Shamrock Micro Devices Profile

Shamrock Micro Devices, based in Taipei Taiwan, is a Power ICs and LED Driver ICs design house. We are also PCBA solutions provider for EC Motor/EC Fan and LED Lighting

We've established in 2006 and successfully grew with our customers by our power ICs and PCBA design services in applications of :

- LED Lighting
- AC powered BLDC Motor / BLDC Fan
- DC Fan
- Power Adaptor

We have engineering support office in Shenzhen China and Sales Rep. in India.

LED Driver IC and BLDC Motor/Fan Power IC

Led Lightinf Driver IC

Product	O/P	Function	Application	Stage
SMD802B	CC	8V~450V Peak Current Mode PWM/Linear Dimmable Buck IC	DCDC Lighting	MP
SMD804	CC	60V/1.5A MOS inside PWM/Linear Dimmable Peak Current Mode Buck IC	DCDC Lighting	MP
SMD861D	CC	8V~450V Average Current Mode Buck IC	DCDC Lighting	MP

Power IC for BLDC Motor/Fan

Product	O/P	Function	Application	Stage
SMD911	CV	Non-Isolated AC/DC CV Buck Controller IC	AC/DC Power	MP
SMD916	CV	Non-Isolated AC/DC CV Buck Converter IC Integrated MOSFET	AUX Power	MP
SMD630	CV	Active Power Factor Controller	Active PFC for Power Adaptor	MP

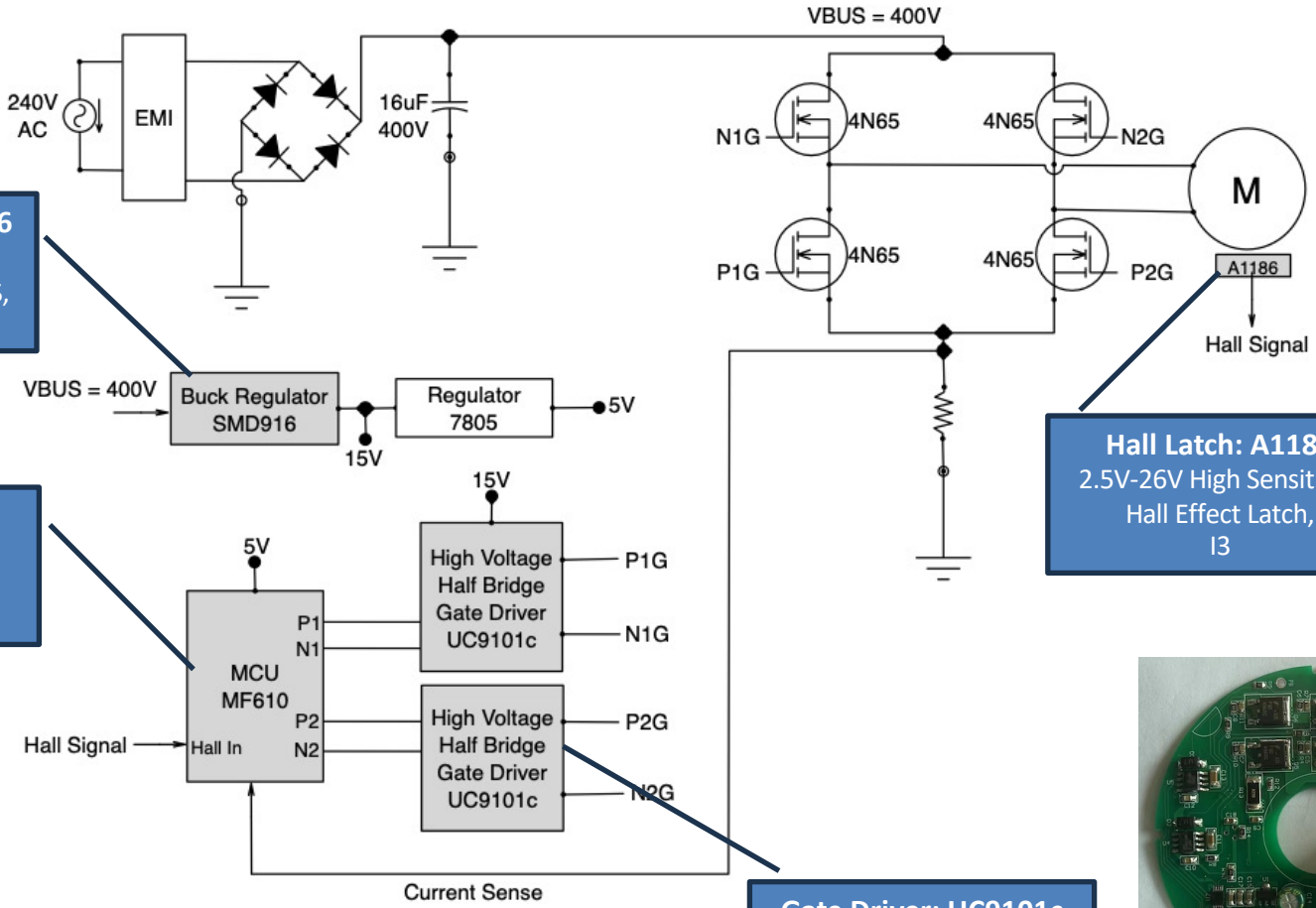
Shamrock's Solution on Single-Phase BLDC Motor/BLDC Fan

AUX Power: SMD916
 450V Buck Converter
 Integrated 650V NMOS,
 SOP-8

MCU: MF610
 5V Single-Phase BLDC
 Motor Controller,
 MSOP-10

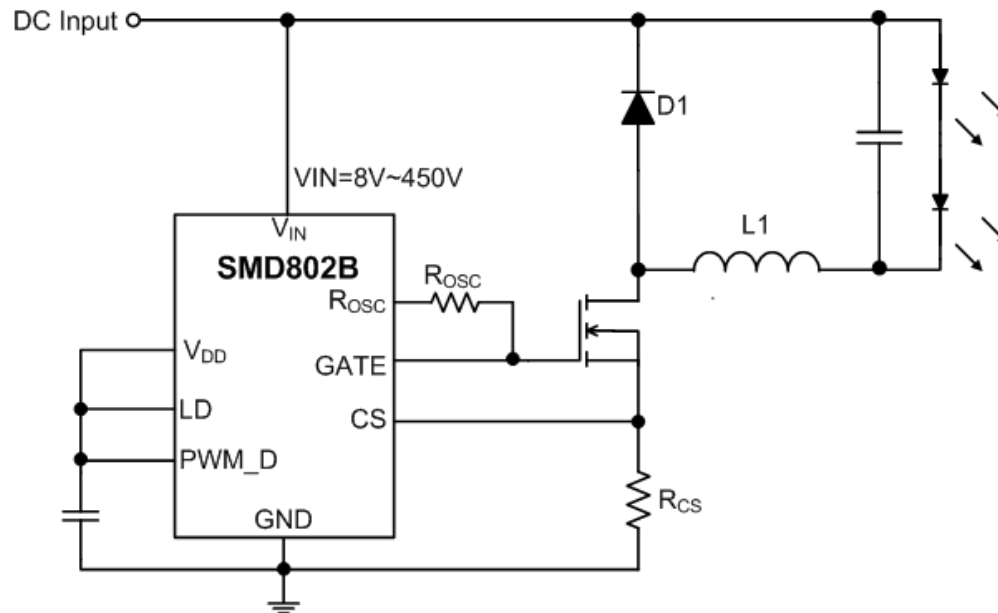
Hall Latch: A1186
 2.5V-26V High Sensitivity
 Hall Effect Latch,
 I3

Gate Driver: UC9101c
 15V/600V Half-Bridge
 Power MOSFET pre-Driver,
 SOP-8



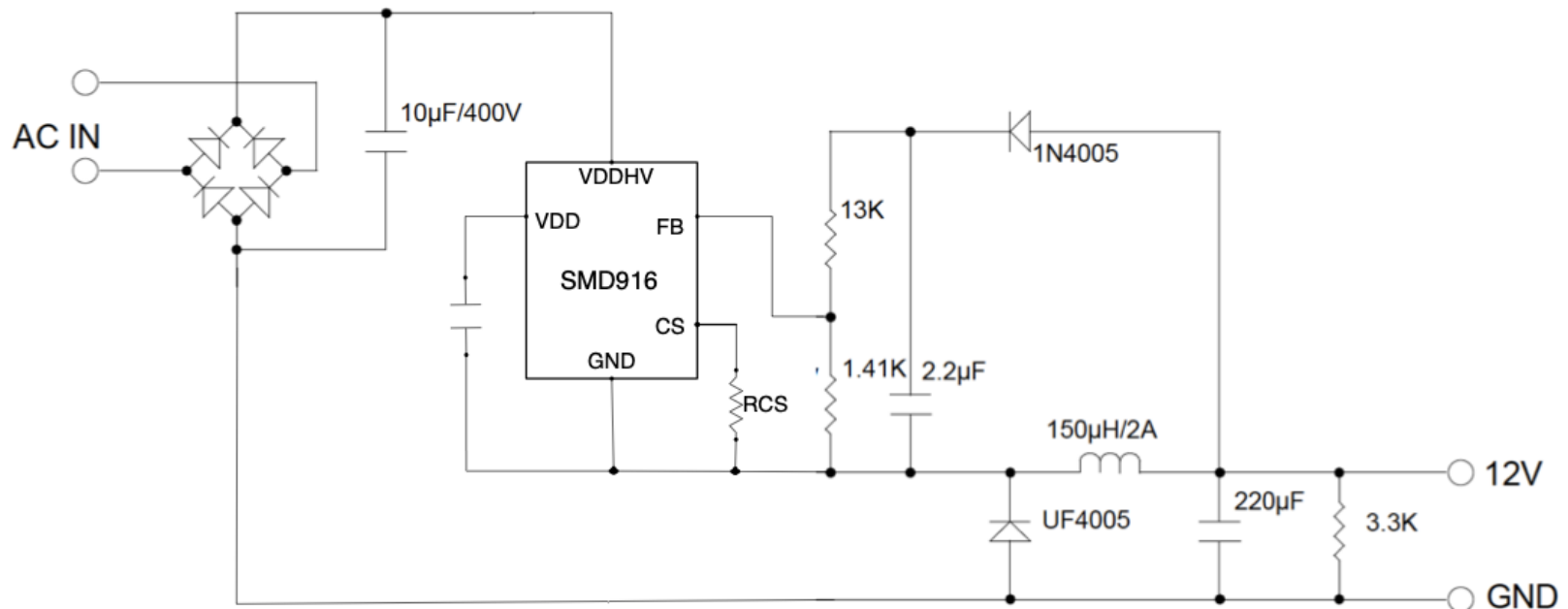
SMD802B High-V High Power LED Lighting

- Common Anode Floating Buck Topology
- Input voltage regulator up to 450V
- Peak Current Mode without loop back path
- Constant-off time frequency mode with maximal 95% Duty cycle
- Peak current mode VCS threshold 240mV~260mV
- PWM dimming
- OTP= typ. 150°C
- SOP-8

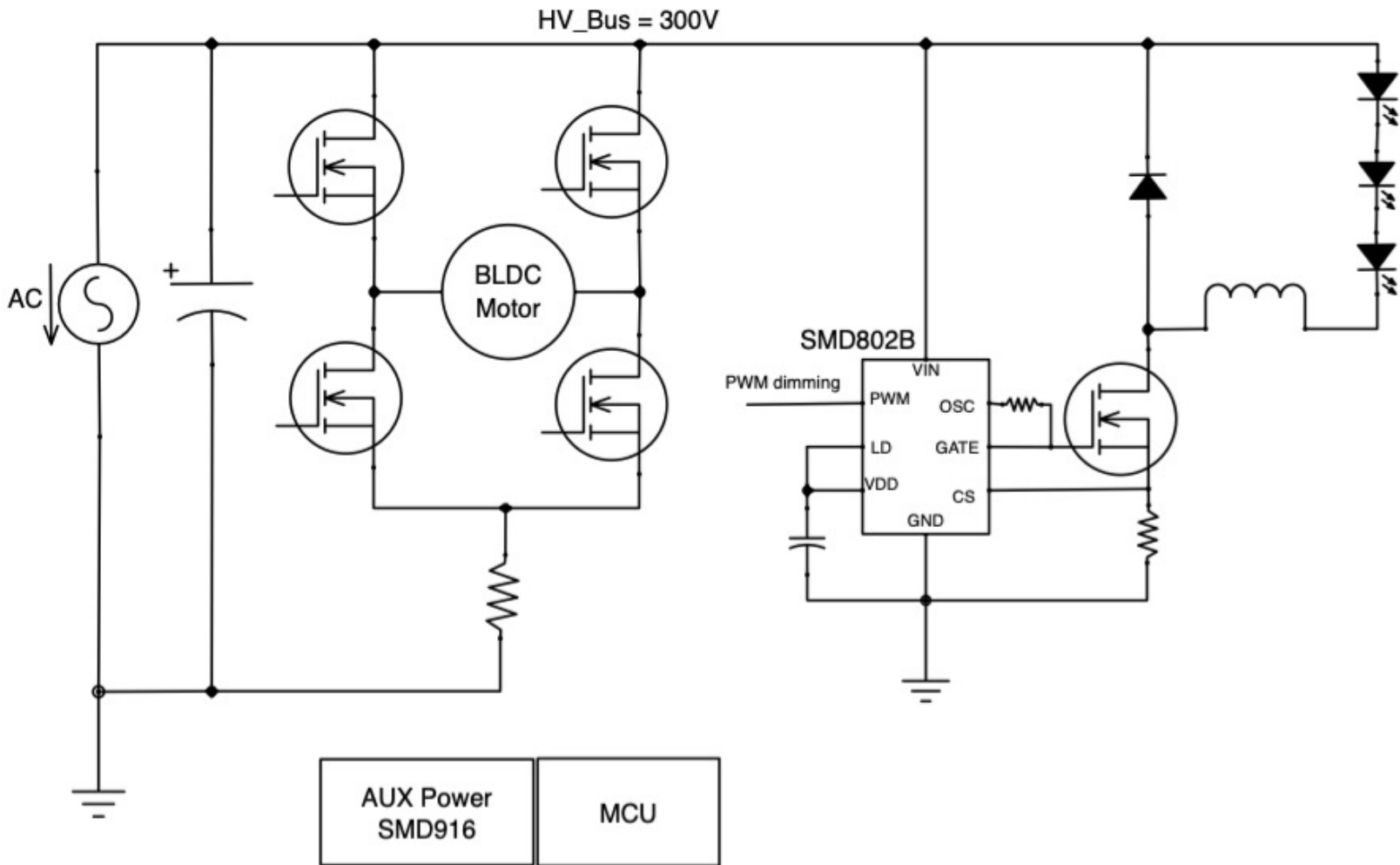


SMD916 AUX Power IC for AC Powered BLDC Motor/Fan

- Built-in 450V HV regulator, operate from a rectified 85~265 VAC line source
- Integrated 4.5Ω 650V Power MOSFET.
- Typical oscillation frequency: 90 kHz
- FB terminal voltage (VFB) 1.0 V.
- Duty ratio: 0% to 5% typ.- PFM control, 5% to 85% typ. - PWM control
- Built-in current limiting circuit: Assigned by external resistor
- Soft-start function: Built-in Soft-start circuit.
- Over Temperature Protection (OTP)



BLDC Fan with LED Lighting



Thank You !

Shamrock Micro Devices Corp.

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