

Mechadino based board with better drivers and some additional improvements
Thomas Pointhuber

Sheet: /
 File: HighPower-Mechadino.sch

Title: Main Schematic of HighPower-Mechadino

Size: A4 Date: 2016-12-03

KiCad E.D.A. kicad (2017-02-08 revision 0dc11936a)-master

Rev: v0.1

Id: 1/7



ISSET

$I_{GATE_HS} = 42.8\text{mA}$
 $I_{GATE_LS} = 80.7\text{mA}$

RC

$T_{OFF} = 49.4\mu\text{s}$
 $T_{BLANK} = 6.7\mu\text{s}$

Current Limiter

$I_{MAX} = 10\text{A}$
 $V_{REF_MAX} = 0.5\text{V}$

I_GATE_HS = 42.8mA
I_GATE_LS = 80.7mA

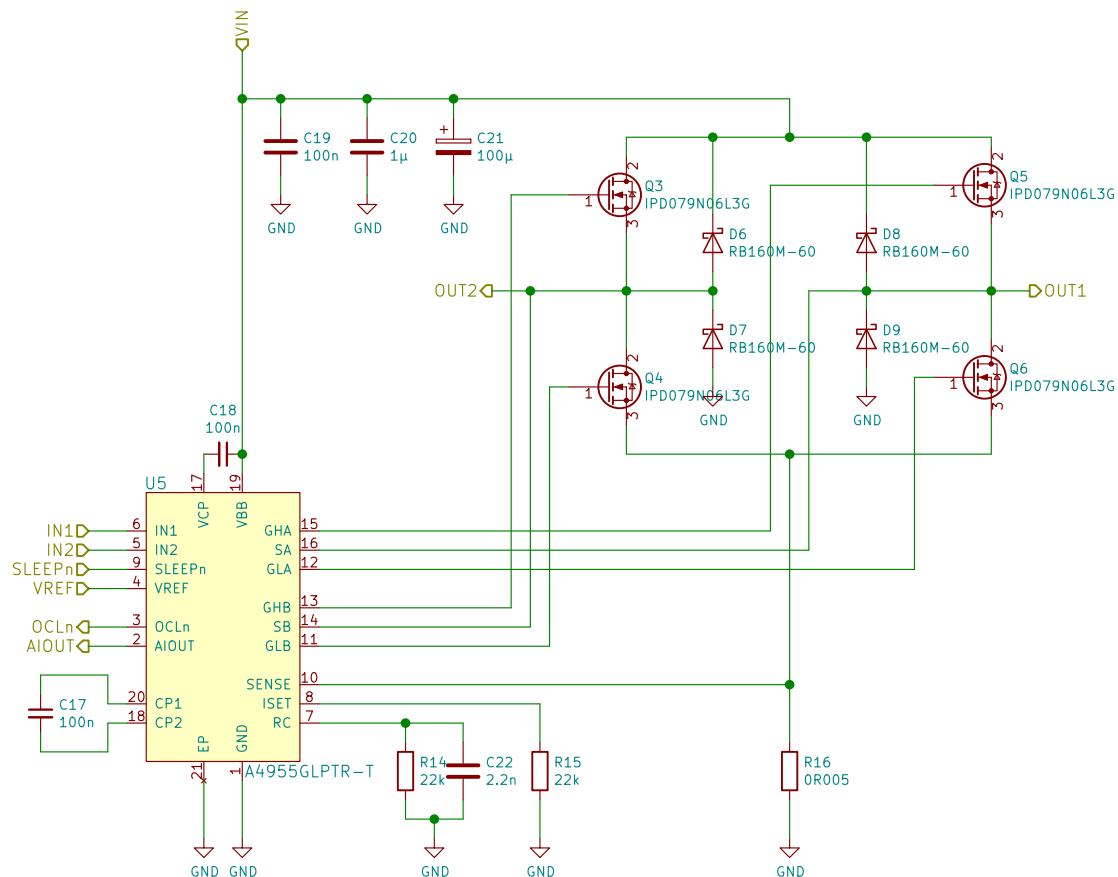
I_GATE_HS = 42.8mA
I_GATE_LS = 80.7mA

T_OFF = 49,4μs
T_BLANK = 6,7μs

T_OFF = 49,4μs
T_BLANK = 6,7μs

I_MAX = 10A
VREF_MAX = 0.5V

I_MAX = 10A
VREF_MAX = 0.5V



Sheet: /PWM_Bridge_A4955-A/
File: PWM_Bridge_A4955.sch

Size: A4	Date: 2016-11-11
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Size: A4	Date: 2016-12-03
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ISSET

$I_{GATE_HS} = 42.8\text{mA}$
 $I_{GATE_LS} = 80.7\text{mA}$

RC

$T_{OFF} = 49.4\mu\text{s}$
 $T_{BLANK} = 6.7\mu\text{s}$

Current Limiter

$I_{MAX} = 10\text{A}$
 $V_{REF_MAX} = 0.5\text{V}$

I_GATE_HS = 42.8mA
I_GATE_LS = 80.7mA

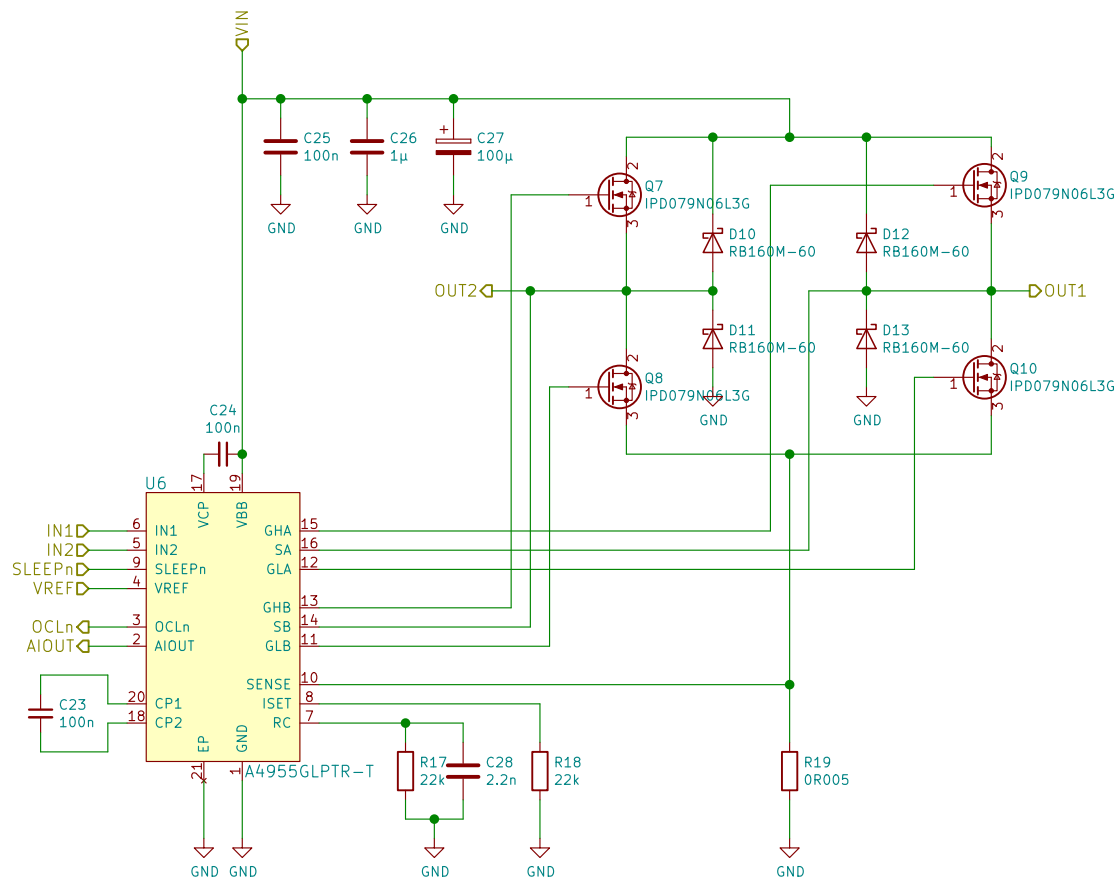
I_GATE_HS = 42.8mA
I_GATE_LS = 80.7mA

T_OFF = 49,4μs
T_BLANK = 6,7μs

T_OFF = 49,4μs
T_BLANK = 6,7μs

I_MAX = 10A
VREF_MAX = 0.5V

I_MAX = 10A
VREF_MAX = 0.5V

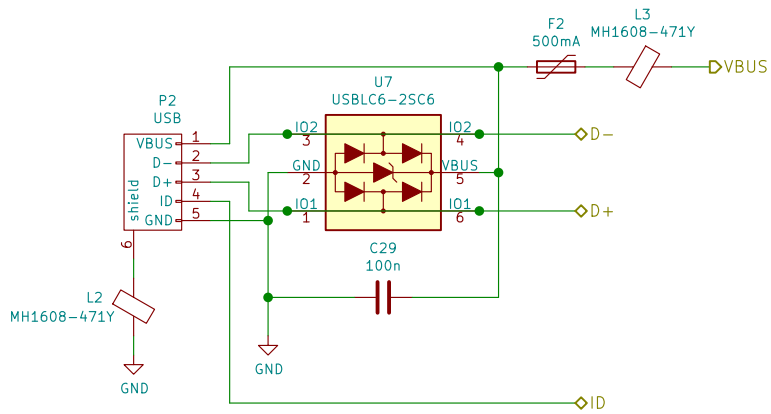


Sheet: /PWM_Bridge_A4955-B/
File: PWM_Bridge_A4955.sch

Size: A4	Date: 2016-11-11
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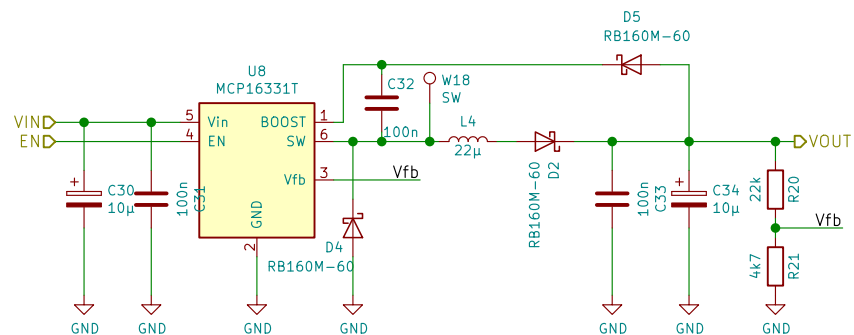
Sheet: /Protected_USB_Supply/
File: Protected_USB_Supply.sch

Title: USB input including protection circuit

Size: A4	Date: 2016-12-03	Rev: v0.1
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OUTPUT VOLTAGE

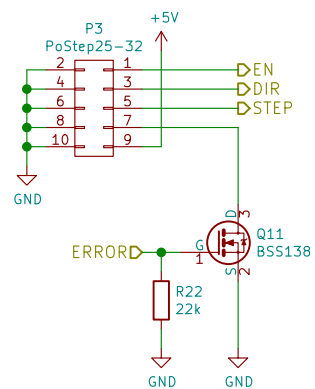
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R_TOLERANCE = 1%
U_OUT_MIN = 4.47V
U_OUT_MAX = 4.62V
```



Sheet: /MCP16331_5V/
File: MCP16331_5V.sch

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Sheet: /PoStep25-32_galvanic/
File: PoStep25-32_galvanic.sch

Title: ProStep25-32 input including optional galvanic separation

Size: A4 Date: 2016-12-03 Rev: v0.1

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