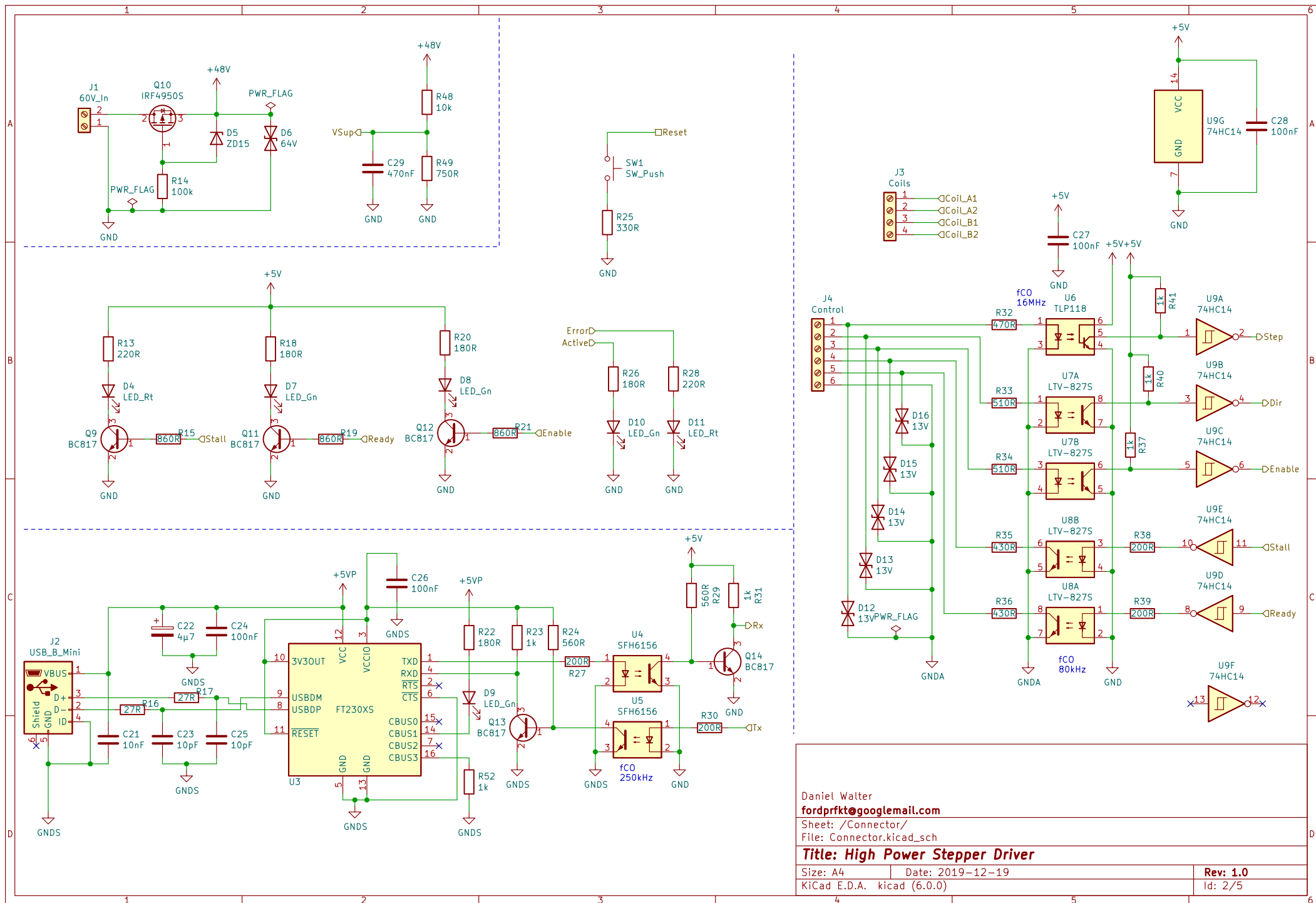


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Sheet: /
File: HPDriver.kicad_sch

Title: High Power Stepper Driver

Size: A4	Date: 2019-12-19	Rev: 1.0
KiCad E.D.A. kicad (6.0.0)		Id: 1/5



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Sheet: /Connector/
File: Connector.kicad_sch

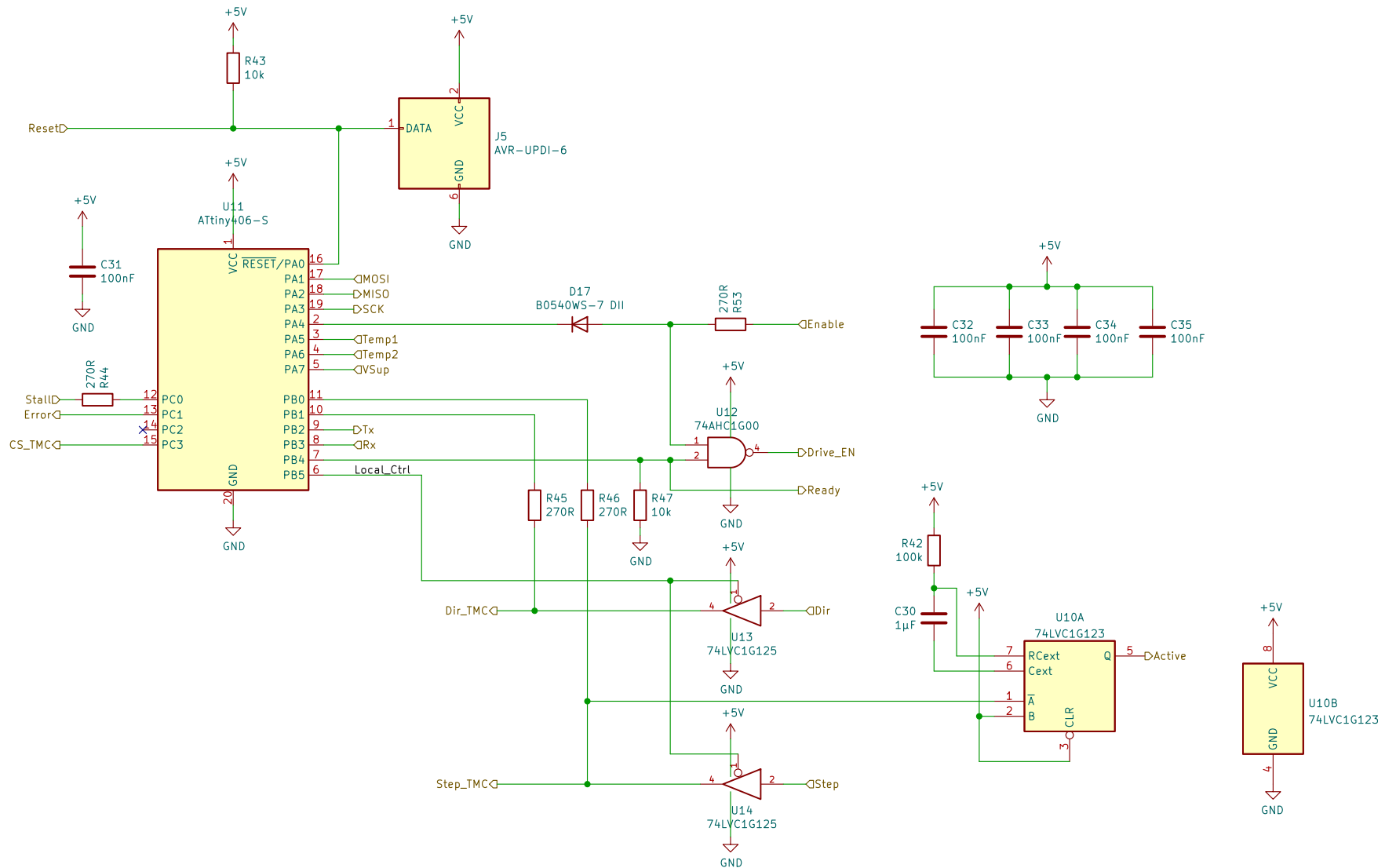
Title: High Power Stepper Driver

Size: A4 Date: 2019-12-19

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Rev: 1.0

Id: 2/5



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Sheet: /Controller/
 File: Controller.kicad_sch

Title: High Power Stepper Driver

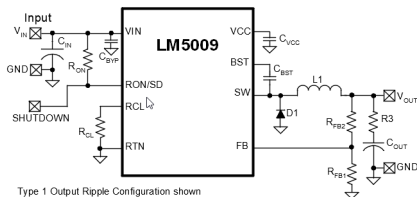
Size: A4 Date: 2019-12-19

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Rev: 1.0

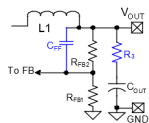
Id: 3/5

Typical Application, Basic Step-Down Regulator



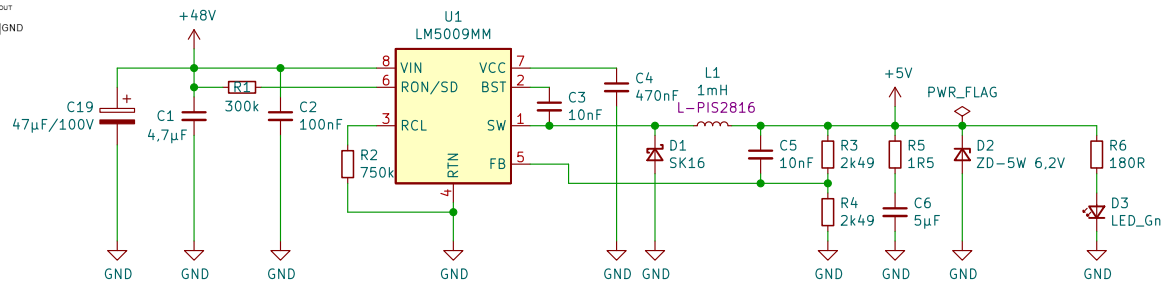
Type 1 Output Ripple Configuration shown

Type 2 Reduced Ripple Configuration



Step 9. Summary	R _{FB1} =	2.49	kohms	These two resistors set the output voltage.
	R _{FB2} =	2.49	kohms	
Output Ripple Configuration	R ₁ =	300	kohms	Sets the switching frequency.
	L ₁ =	1000	uH	Determines the ripple current.
	R _{CL} =	750	kohms	Sets the off-time in current limit.
	R ₃ =	1.5	Ohms	Affects the amount of ripple at V _{OUT} .
	C _{FB} =	10000	pF	Sets the ripple amplitude at V _{OUT} .
	C _{OUT} =	5	uF	Ripple bypass for Type 2
	C _{BST} =	3.3	uF	
	C _{IN} =	0.1	uF	See Note 1.
	C _{OUT} =	0.47	uF	
	C _{BST} =	0.01	uF	
	V _{OUT} =	5.00	Volts	
	Nominal Switching Frequency =	133	kHz	

Notes: 1) Values shown for C_{BST}, C_{IN}, and C_{OUT} are default values, and do not require calculation.



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Sheet: /Supply/
File: Supply.kicad_sch

Title: High Power Stepper Driver

Size: A4 Date: 2019-12-19

KiCad E.D.A. kicad (6.0.0)

Rev: 1.0

Id: 5/5