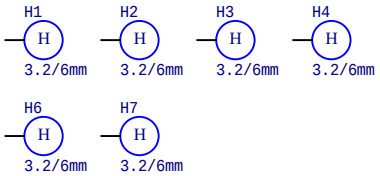
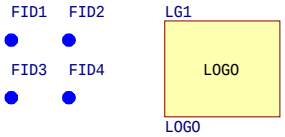
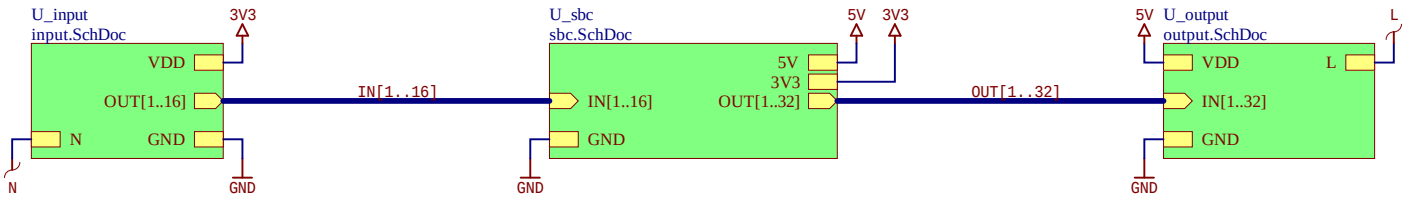
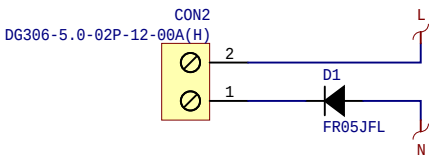


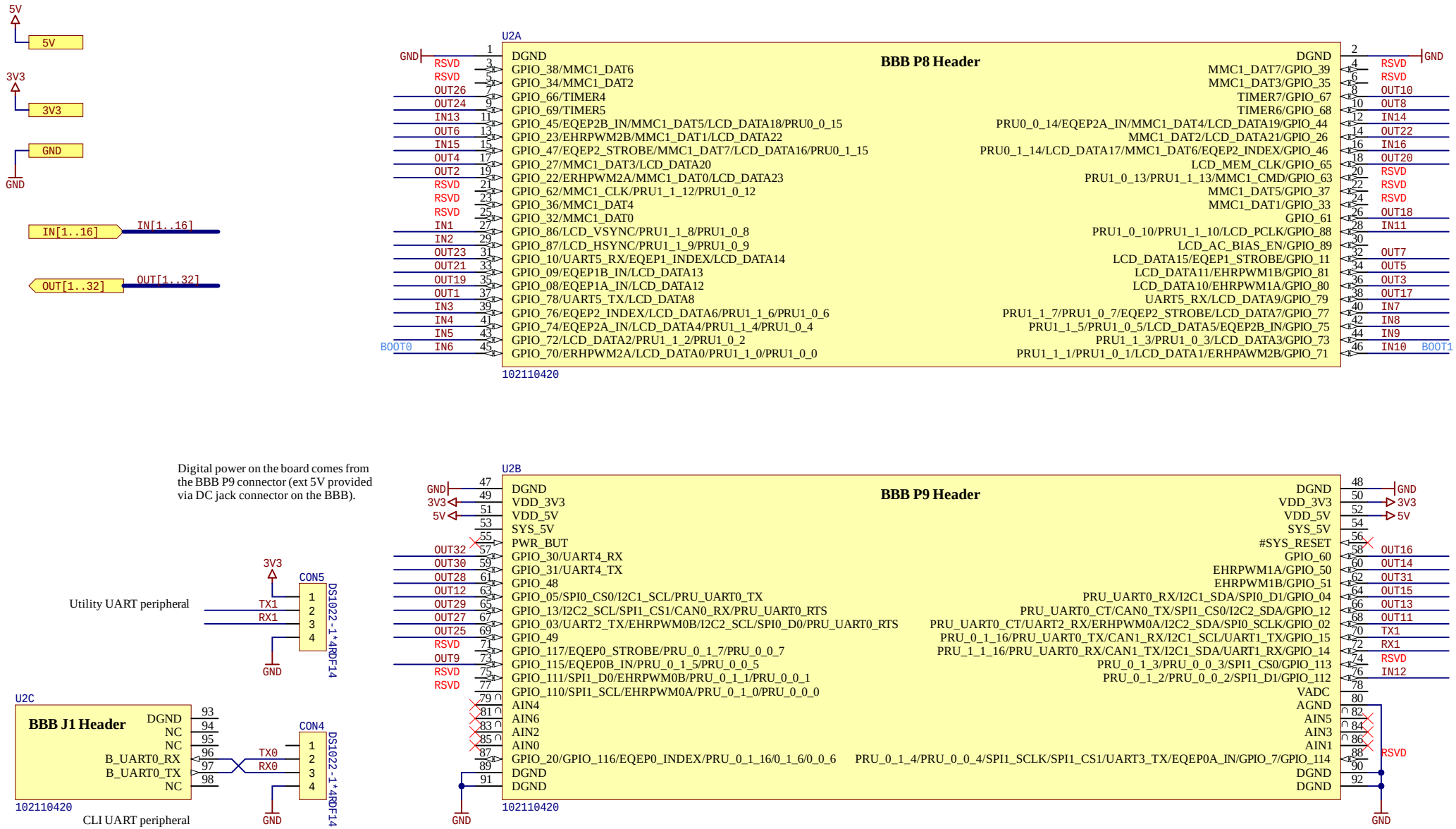




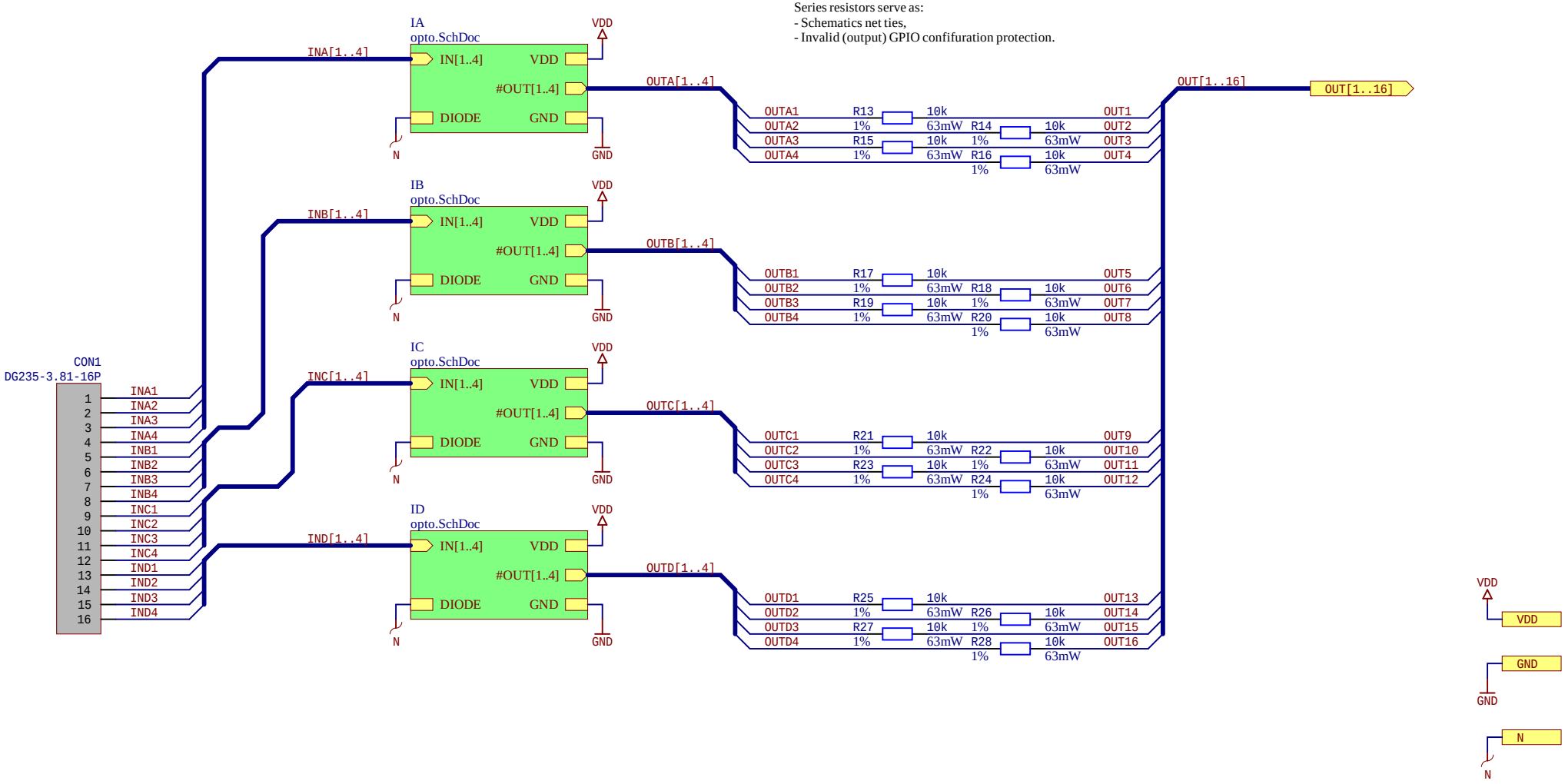


N terminal with a series diode to allow only for half sine to pass through the opto couplers diodes.

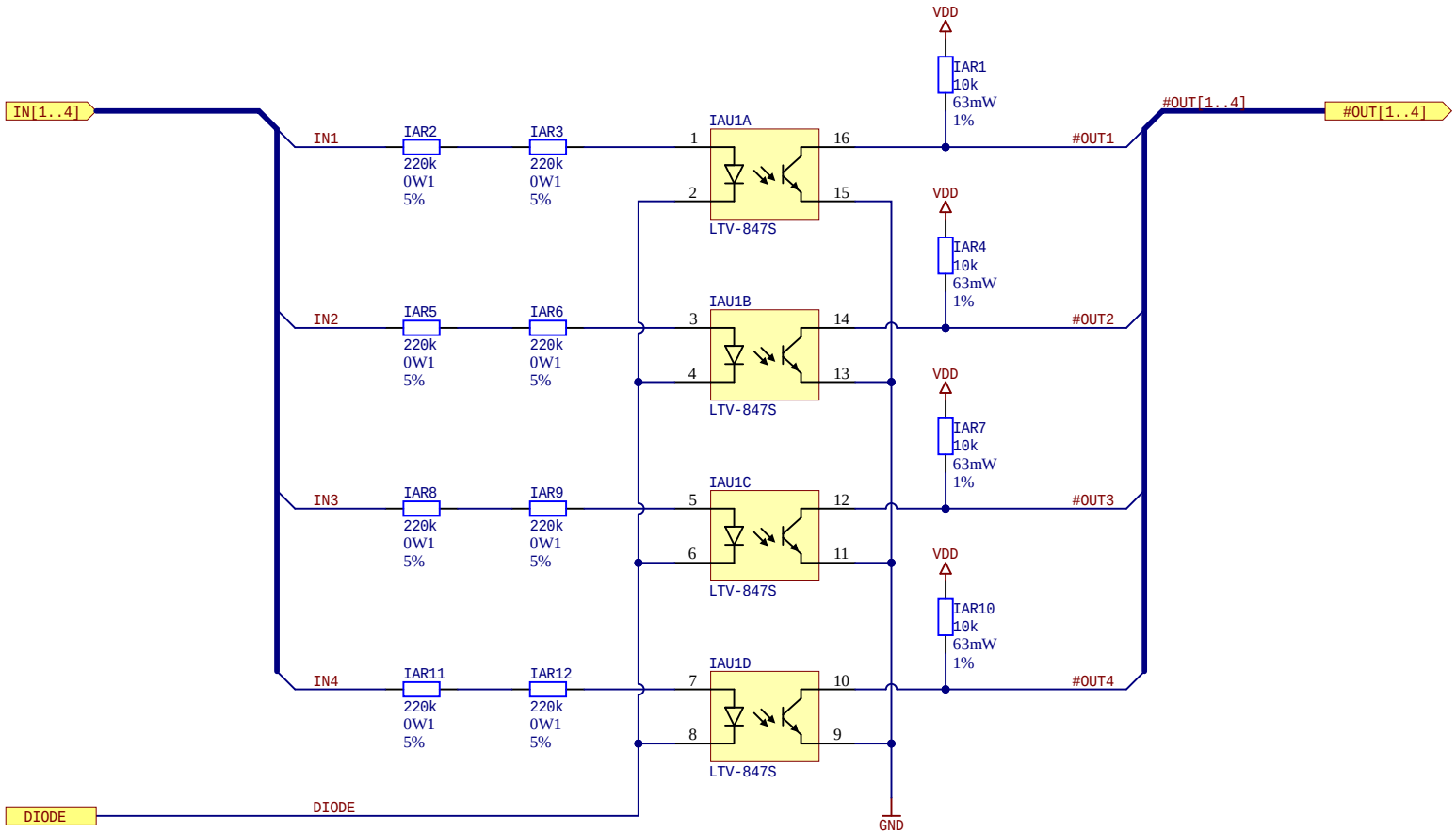
Title: top.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address: Ofiar Katynia 21 72-100 Goleniów Poland
Description: Top level sheet	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	
	Company: Przenioslo Electronics & Software	Sheet 1 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\top.SchDoc		



Title: sbc.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
BeagleBone Black connectors	Company: Przenioslo Electronics & Software	Sheet 2 of 6	
	Created: 2023-02-11 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\sbc.SchDoc		



Title: input.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC switches inputs connectors circuit	Company: Przenioslo Electronics & Software	Sheet 3 of 6	
	Created: 2023-02-07 Edited: 2023-02-15		
	File: D:\storage\repo\git\github\BeagleNodeHW\input.SchDoc		



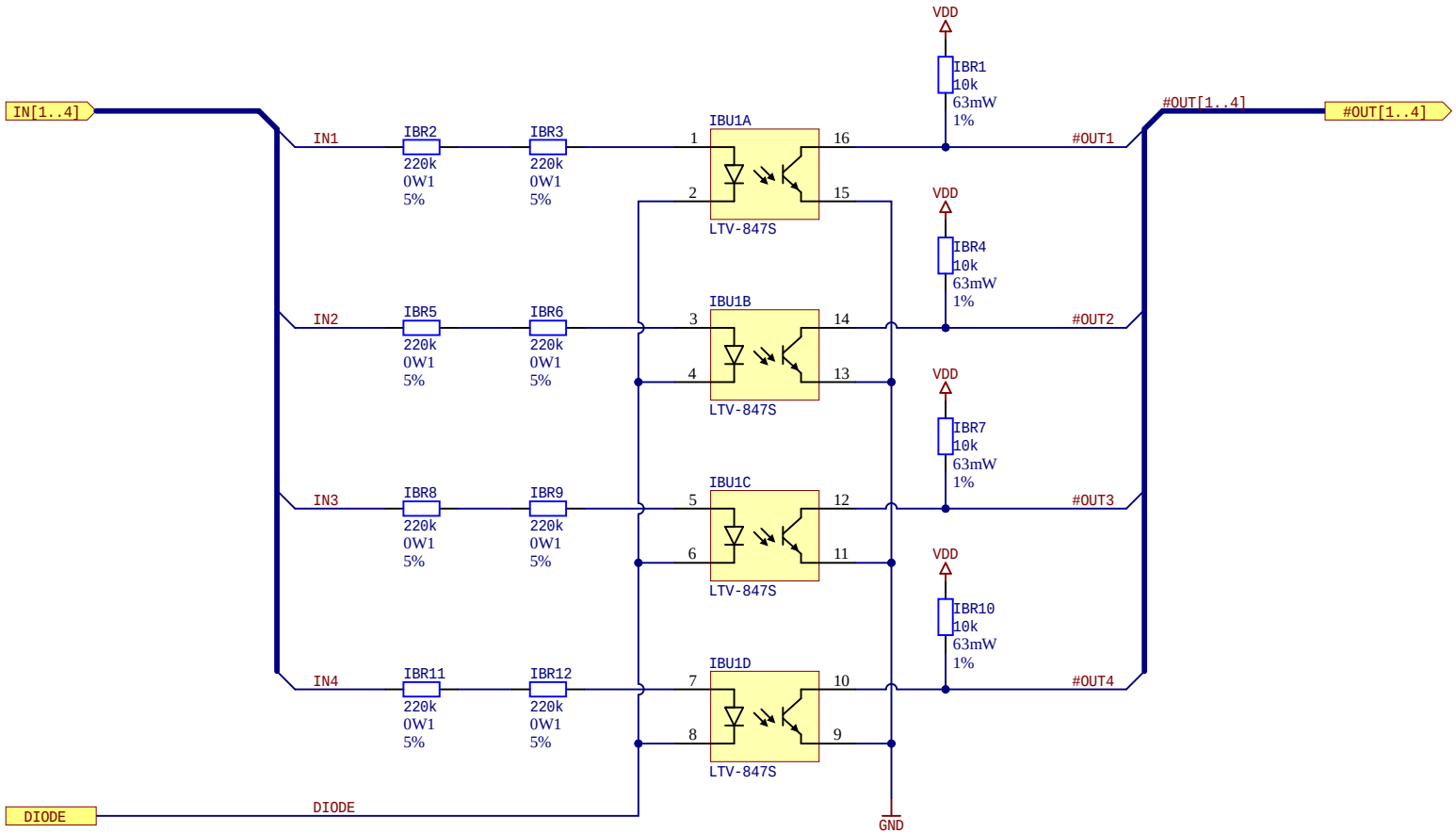
VDD

VDD

GND

GND

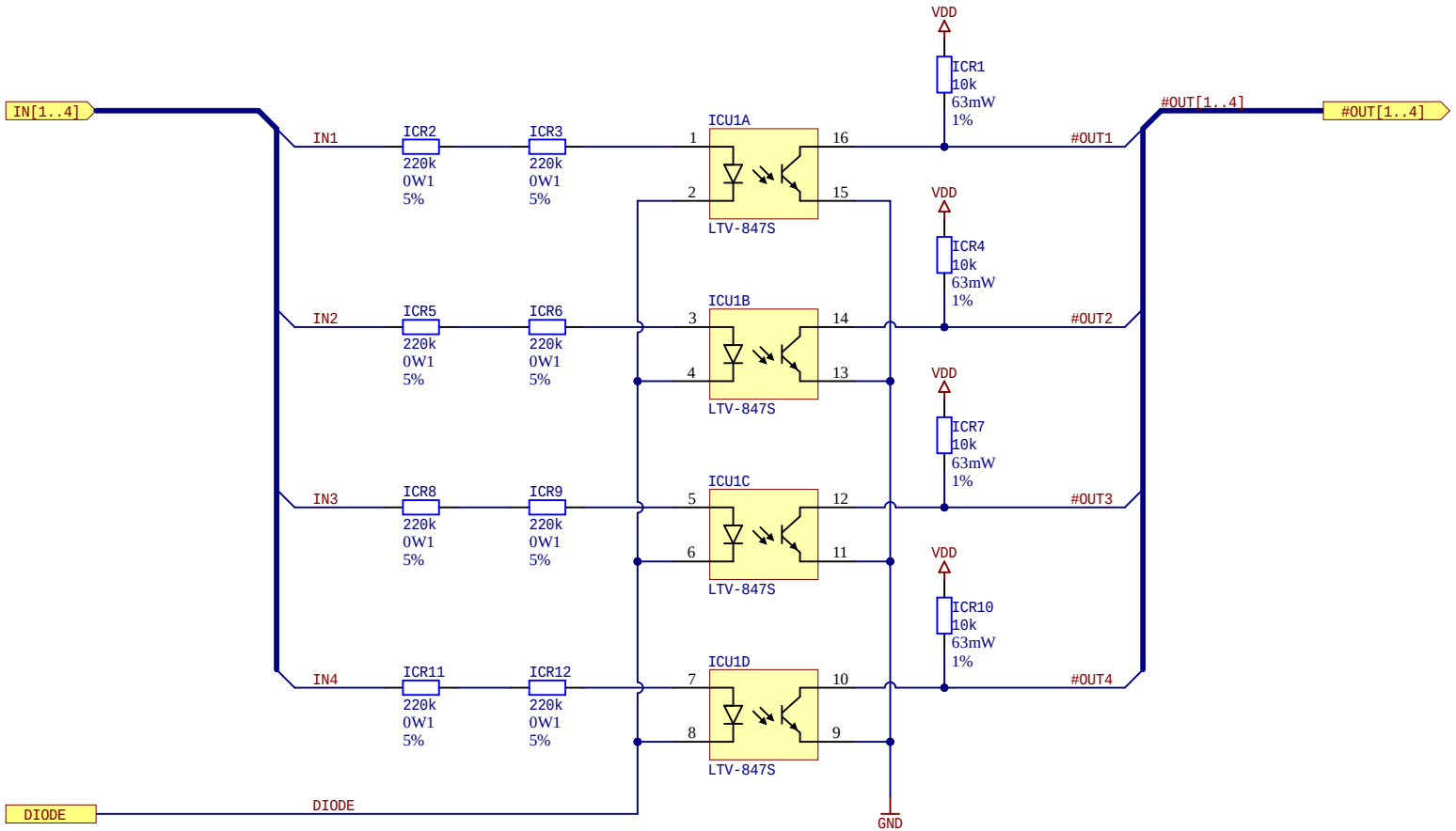
Title: opto.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
High voltage quad opto isolation circuit	Company: Przenioslo Electronics & Software	Sheet 4 of 6	
	Created: 20xx-xx-xx Edited: 2023-02-15		
	File: D:\storage\repo\git\github\BeagleNodeHW\opto.SchDoc		



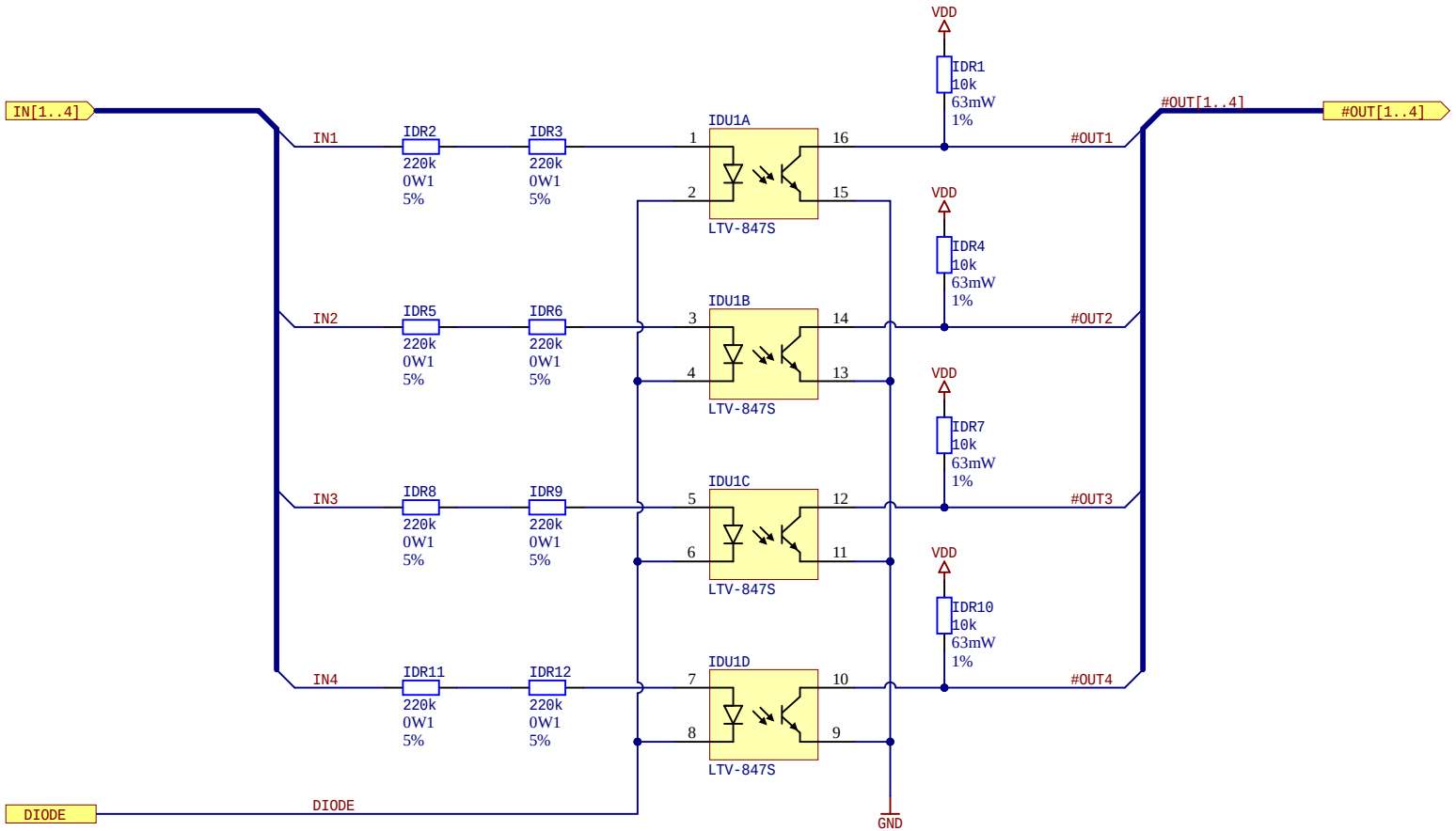
VDD

GND

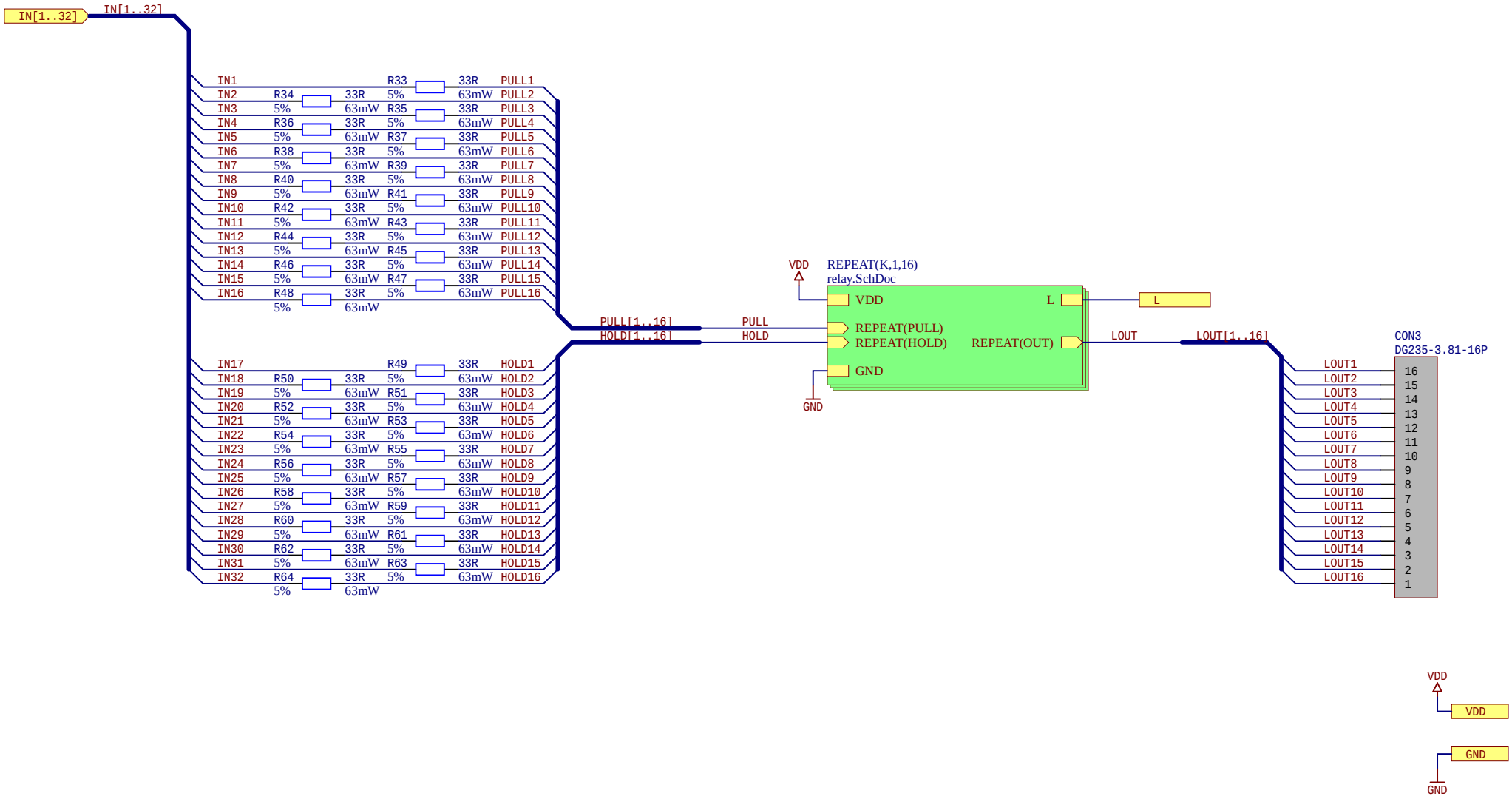
Title: opto.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
High voltage quad opto isolation circuit	Company: Przenioslo Electronics & Software	Sheet 4 of 6	
	Created: 20xx-xx-xx Edited: 2023-02-15		
	File: D:\storage\repo\git\github\BeagleNodeHW\opto.SchDoc		



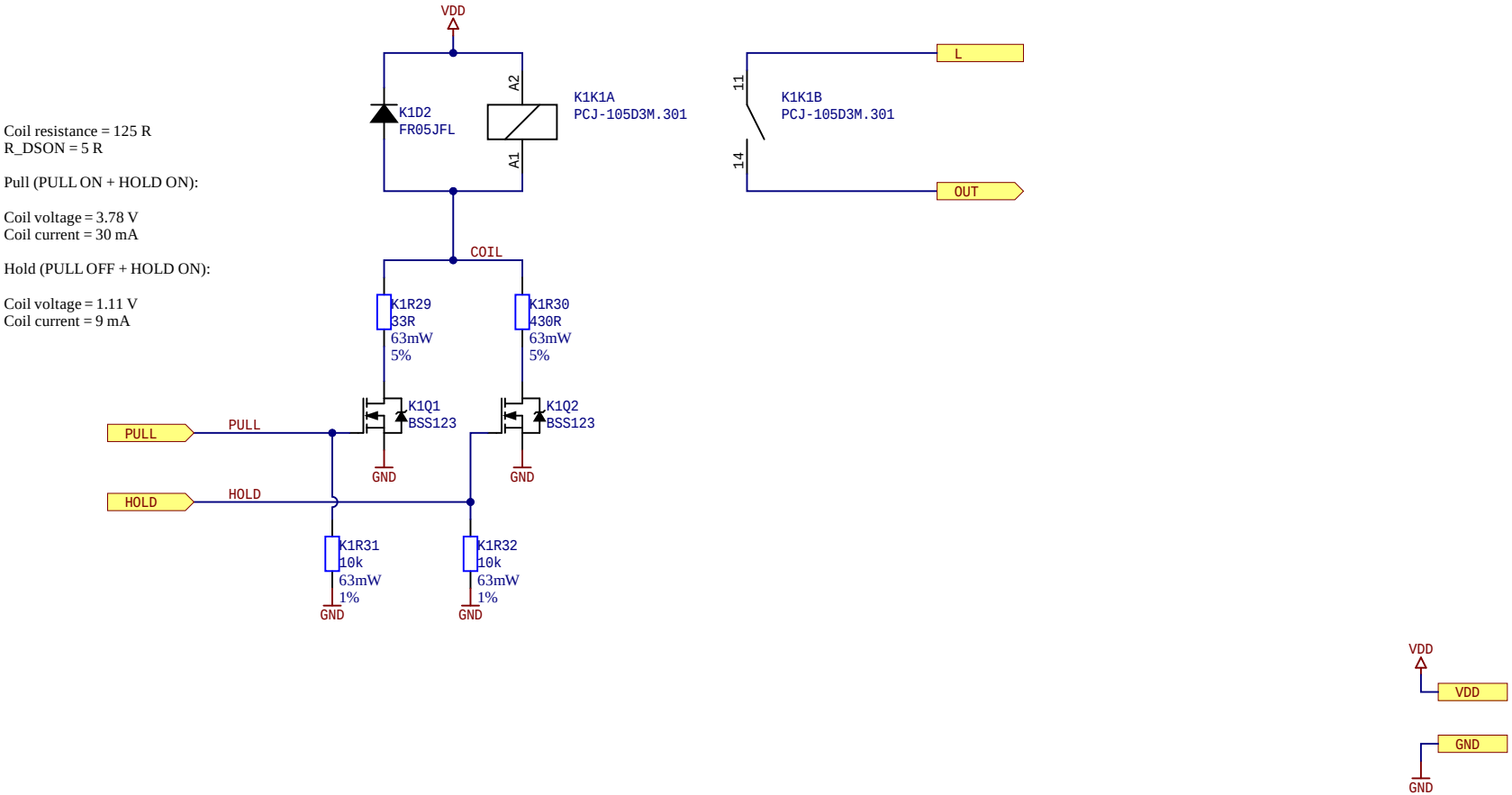
Title: opto.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address: Ofiar Katynia 21 72-100 Goleniów Poland
Description: High voltage quad opto isolation circuit	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	
	Company: Przenioslo Electronics & Software	Sheet 4 of 6	
	Created: 20xx-xx-xx Edited: 2023-02-15		
	File: D:\storage\repo\git\github\BeagleNodeHW\opto.SchDoc		



Title: opto.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address: Ofiar Katynia 21 72-100 Goleniów Poland
Description: High voltage quad opto isolation circuit	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	
	Company: Przenioslo Electronics & Software	Sheet 4 of 6	
	Created: 20xx-xx-xx Edited: 2023-02-15		
	File: D:\storage\repo\git\github\BeagleNodeHW\opto.SchDoc		



Title: output.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC outputs connector circuit	Company: Przenioslo Electronics & Software	Sheet 5 of 6	
	Created: 2023-02-11 Edited: 2023-02-15		
	File: D:\storage\repo\git\github\BeagleNodeHW\output.SchDoc		



Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address: Ofiar Katynia 21 72-100 Goleniów Poland
Description: 230 VAC output relay control circuit	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	
	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

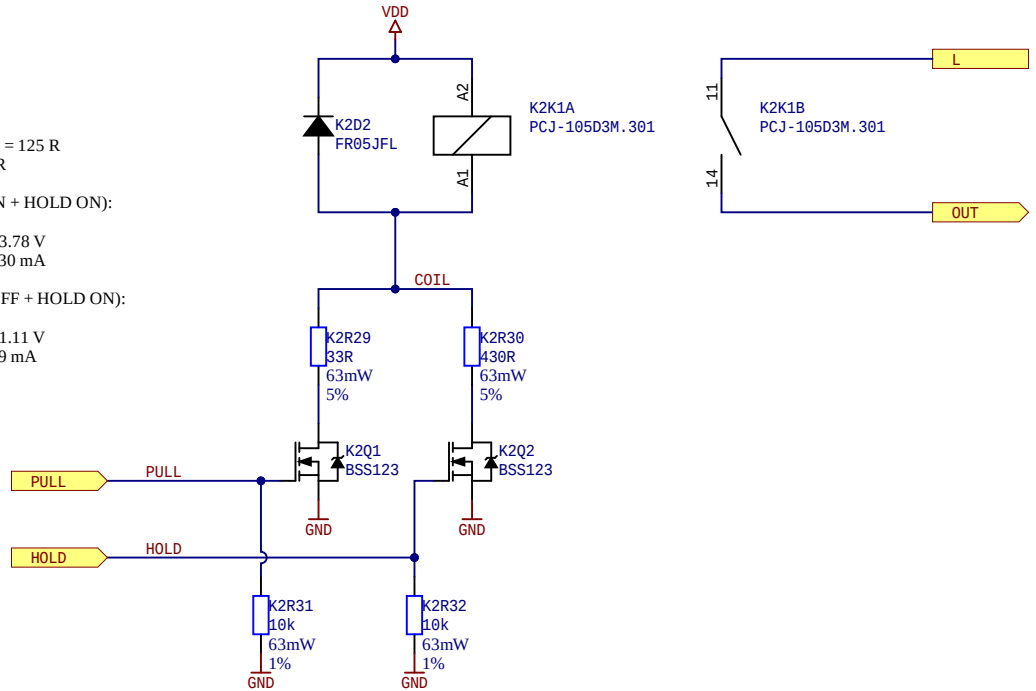
Coil resistance = 125 R
R_DSON = 5 R

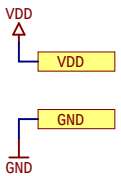
Pull (PULL ON + HOLD ON):

Coil voltage = 3.78 V
Coil current = 30 mA

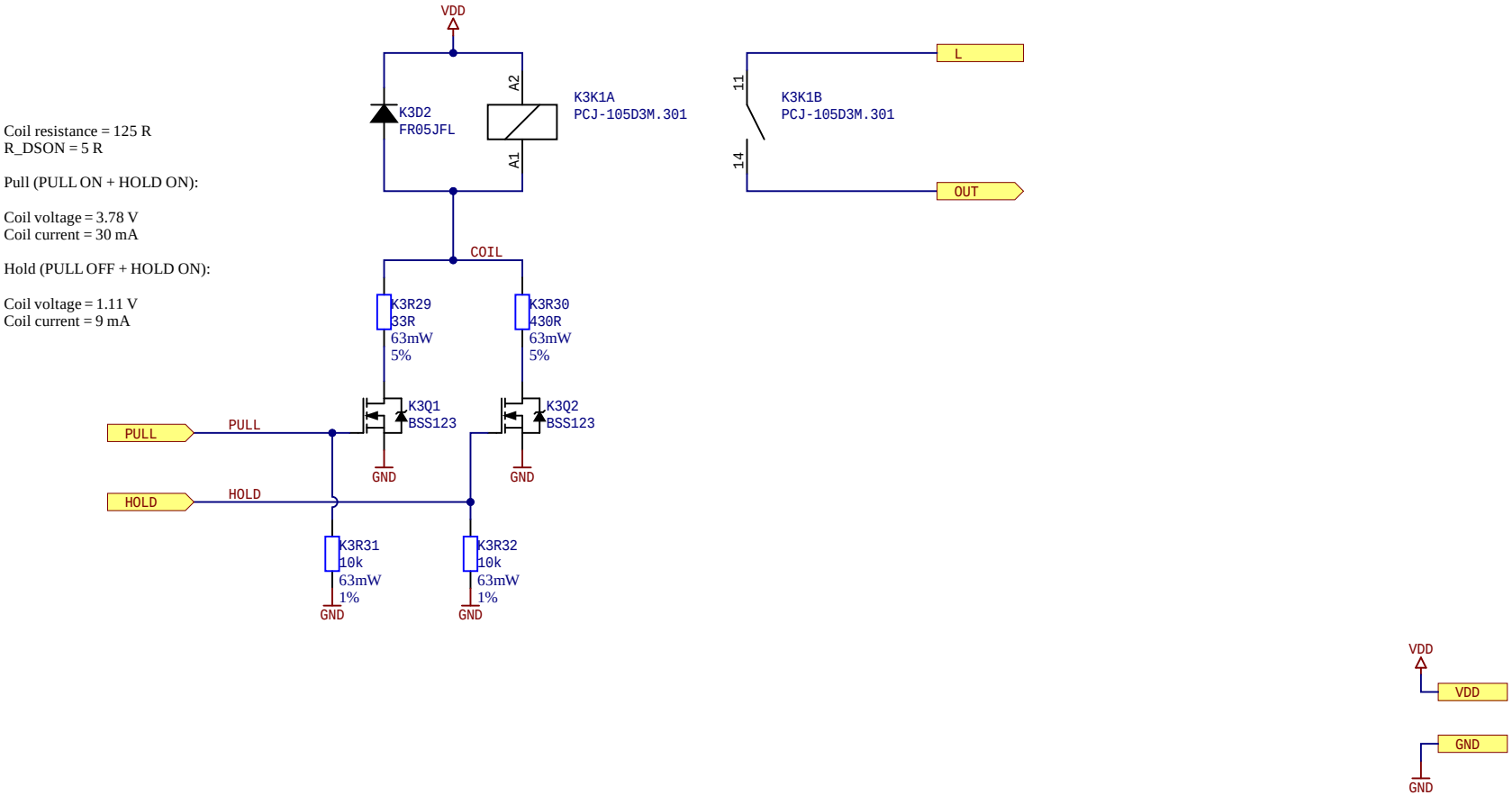
Hold (PULL OFF + HOLD ON):

Coil voltage = 1.11 V
Coil current = 9 mA

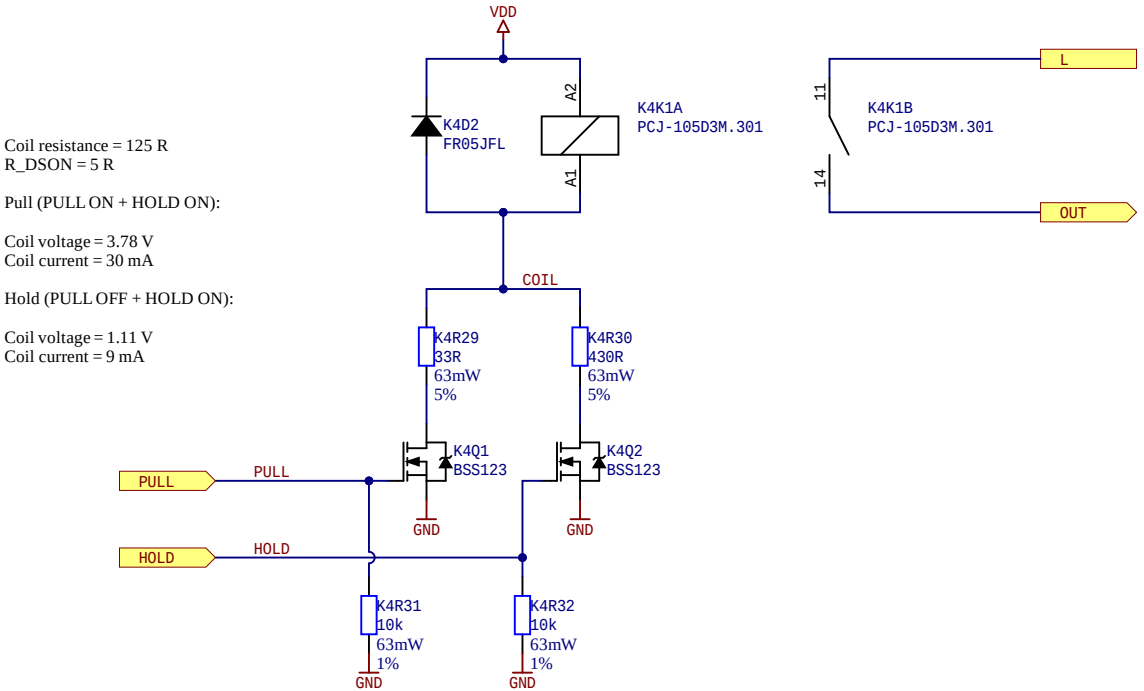


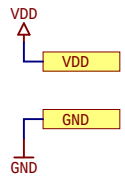


Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		



Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address: Ofiar Katynia 21 72-100 Goleniów Poland
Description: 230 VAC output relay control circuit	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	
	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		





Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

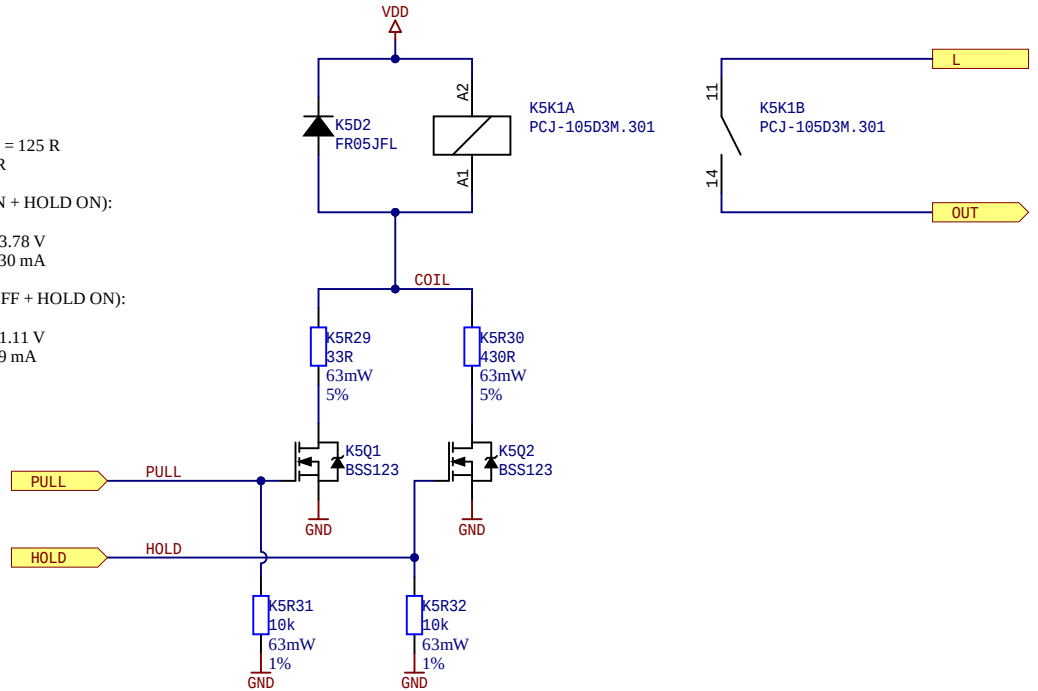
Coil resistance = 125 R
R_DSON = 5 R

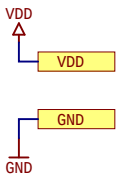
Pull (PULL ON + HOLD ON):

Coil voltage = 3.78 V
Coil current = 30 mA

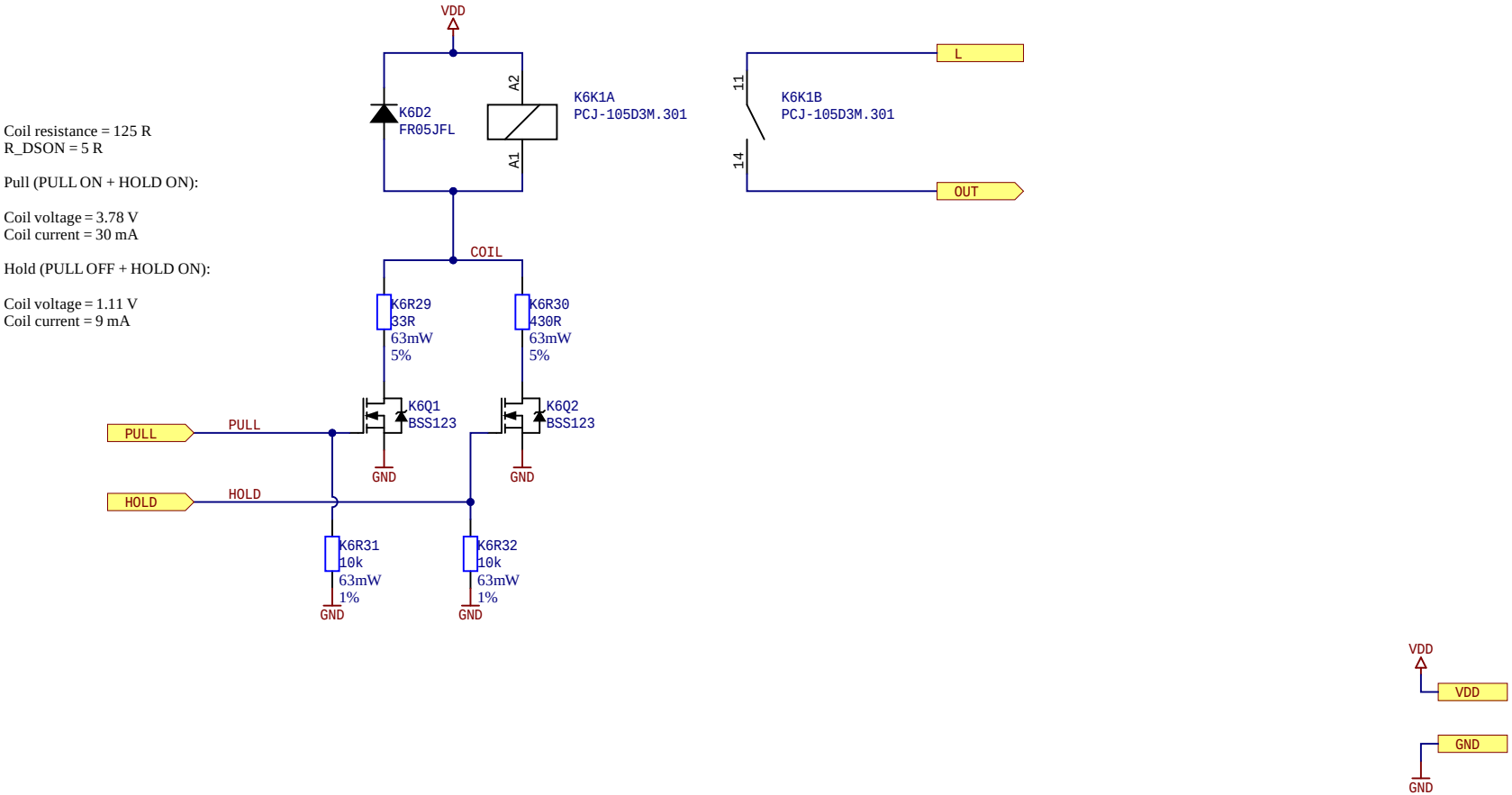
Hold (PULL OFF + HOLD ON):

Coil voltage = 1.11 V
Coil current = 9 mA

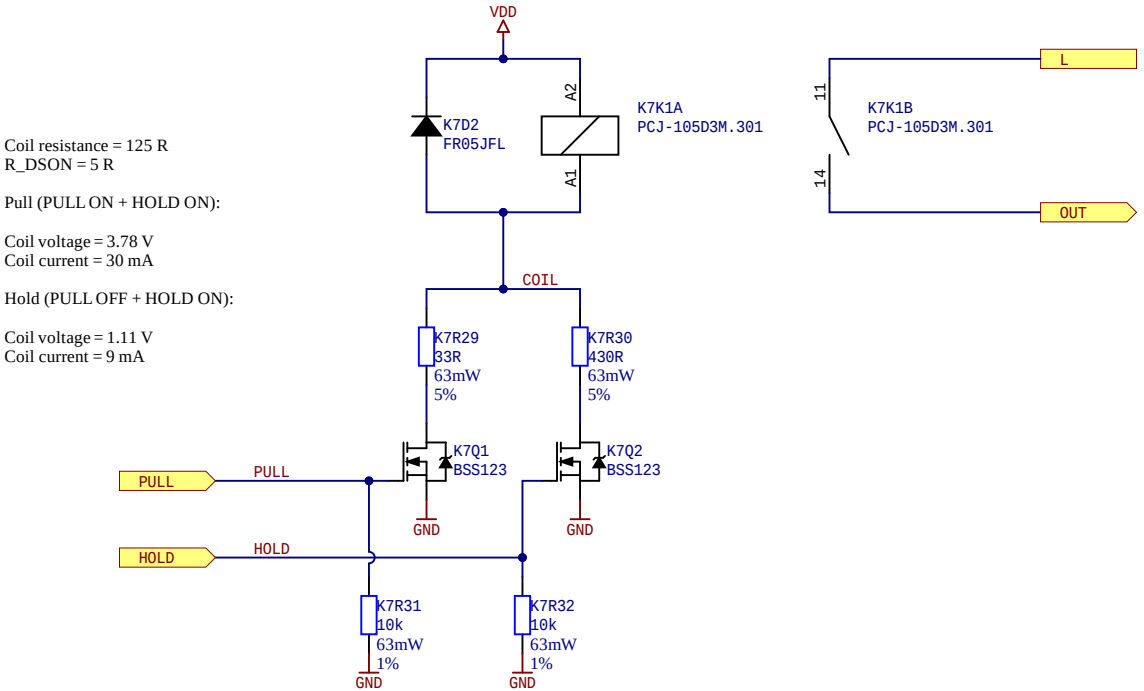


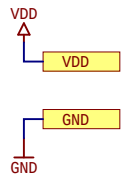


Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

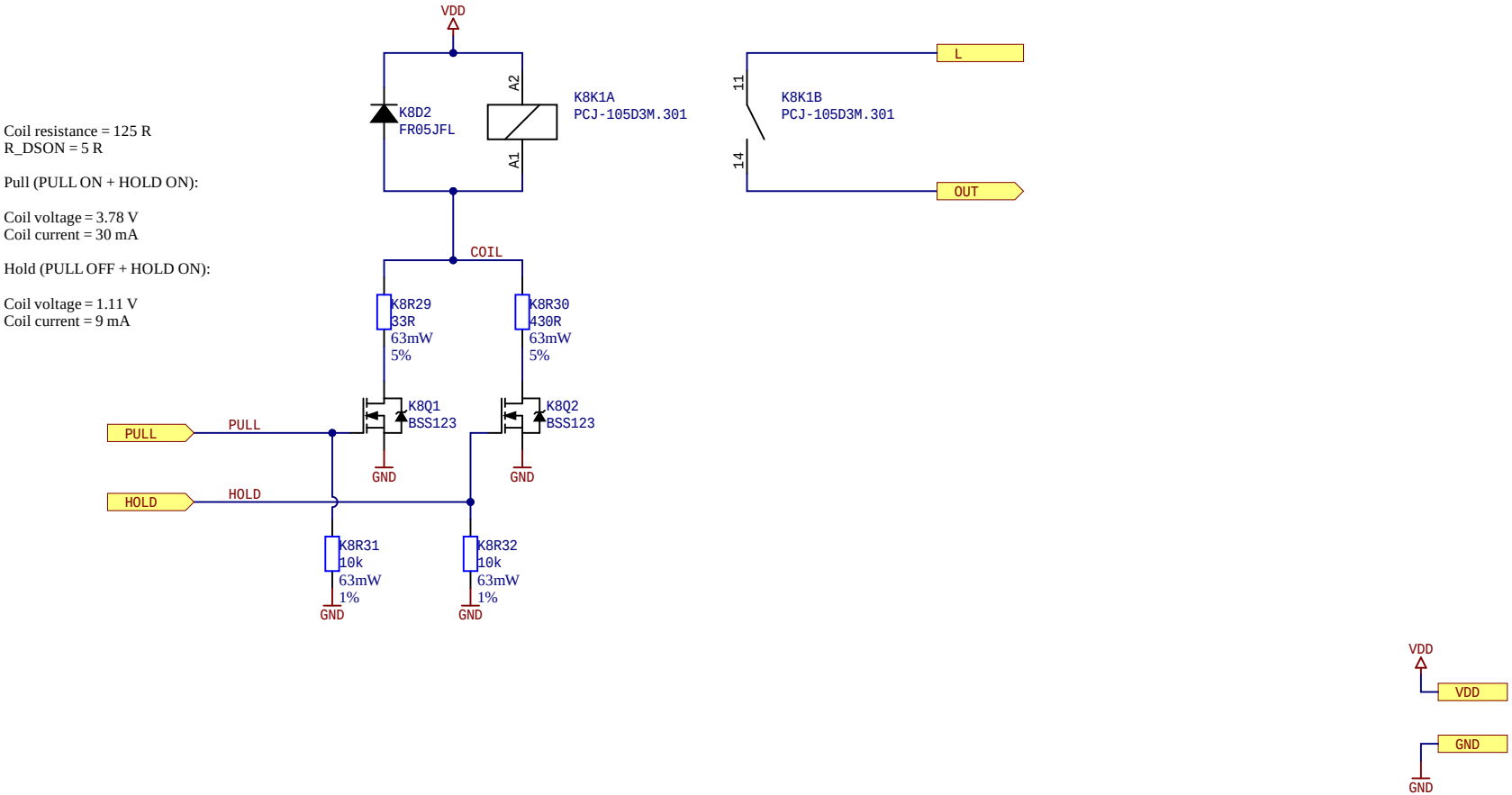


Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

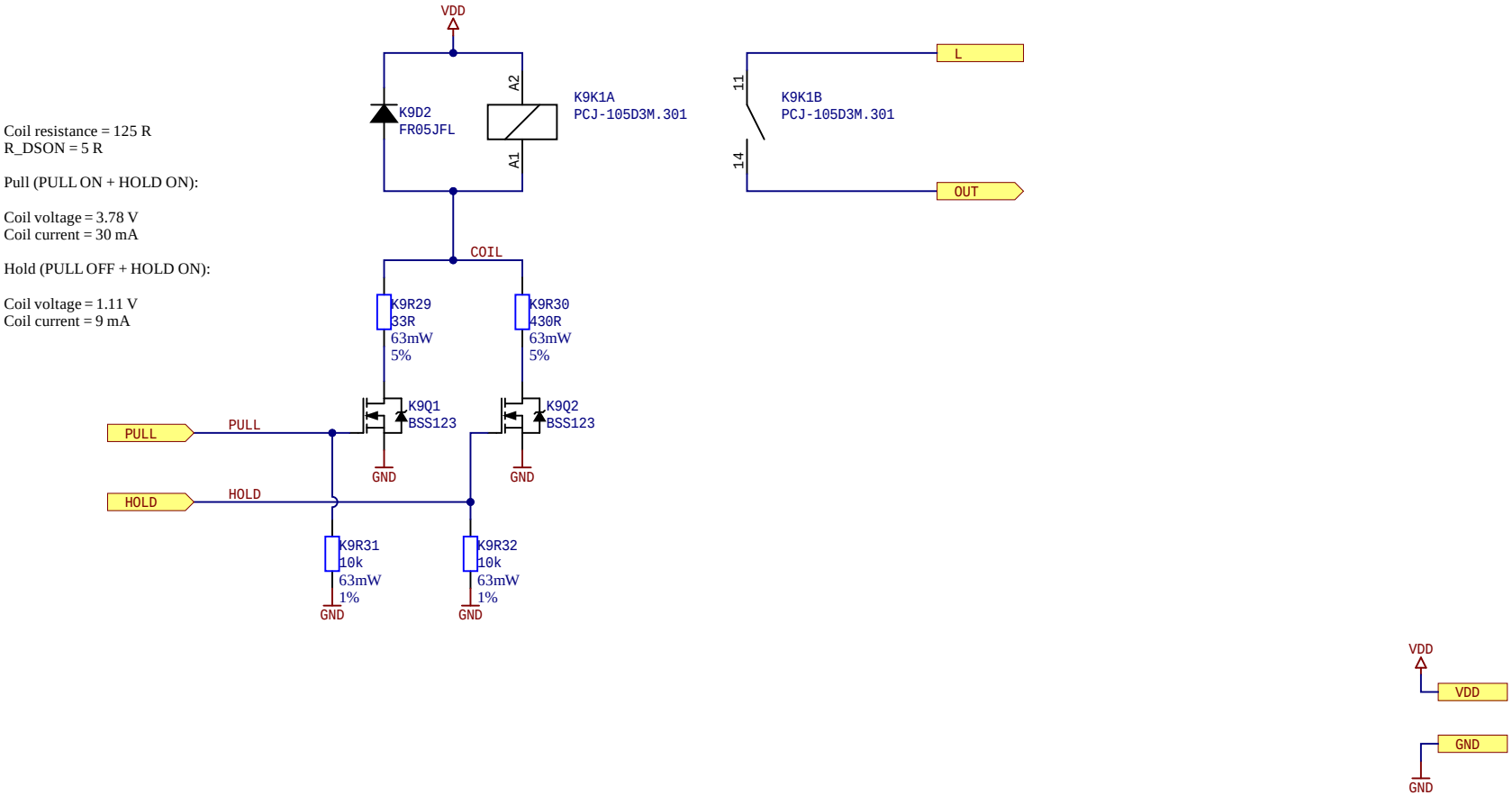




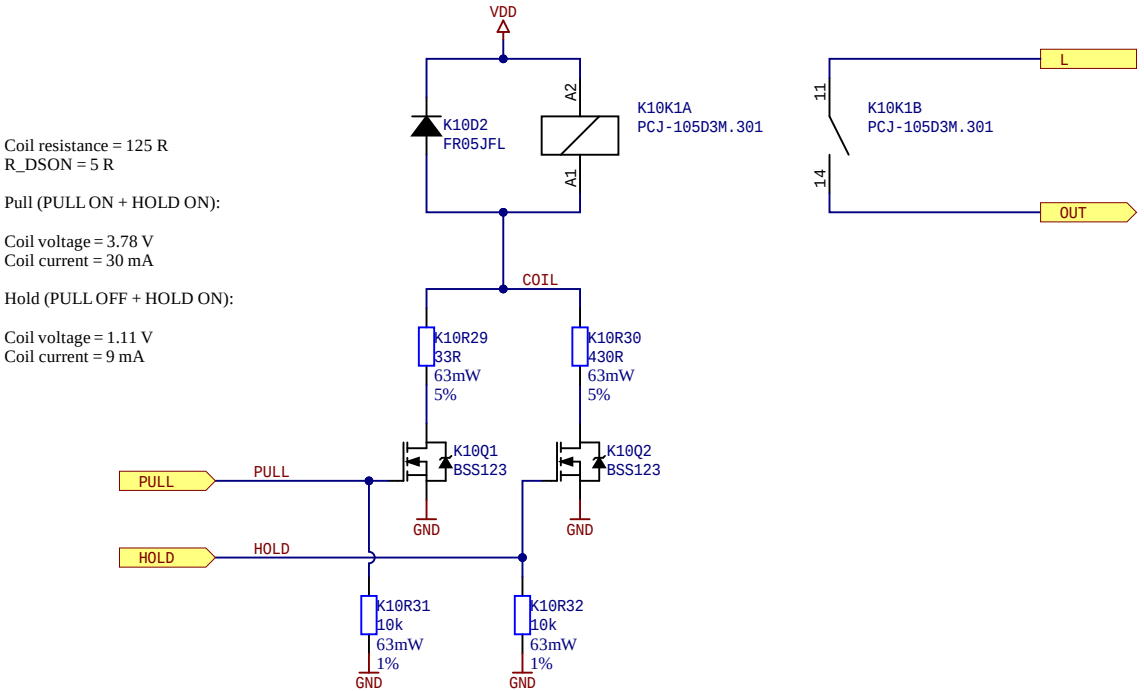
Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

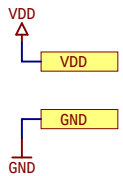


Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

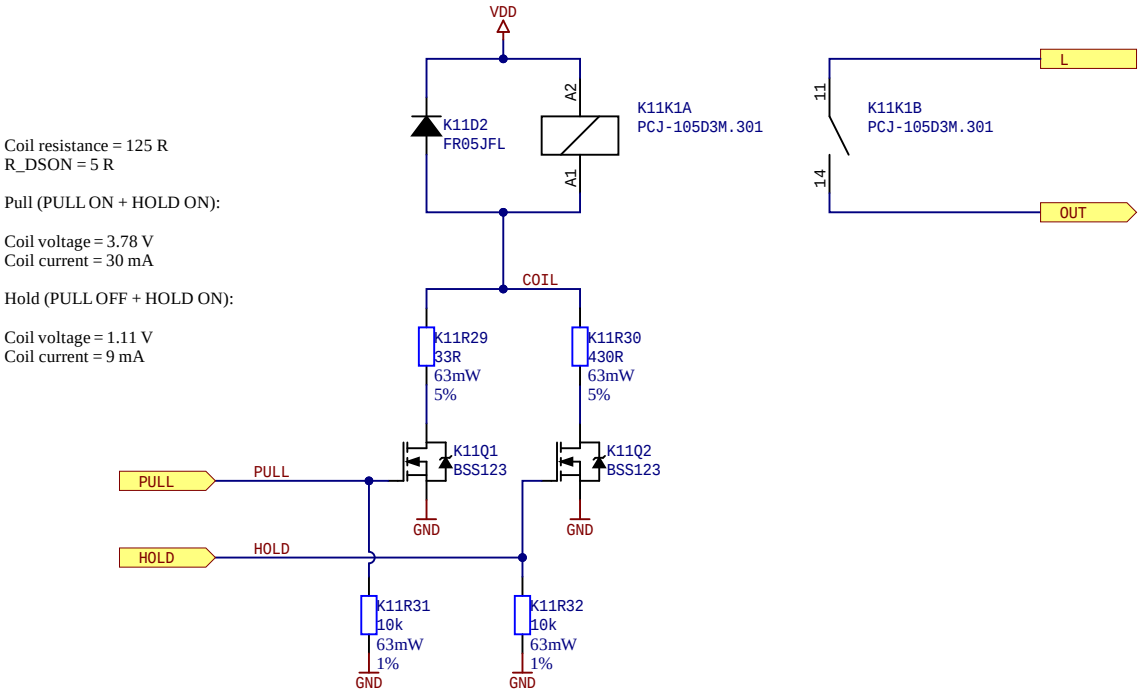


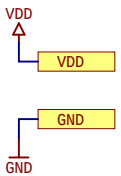
Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		



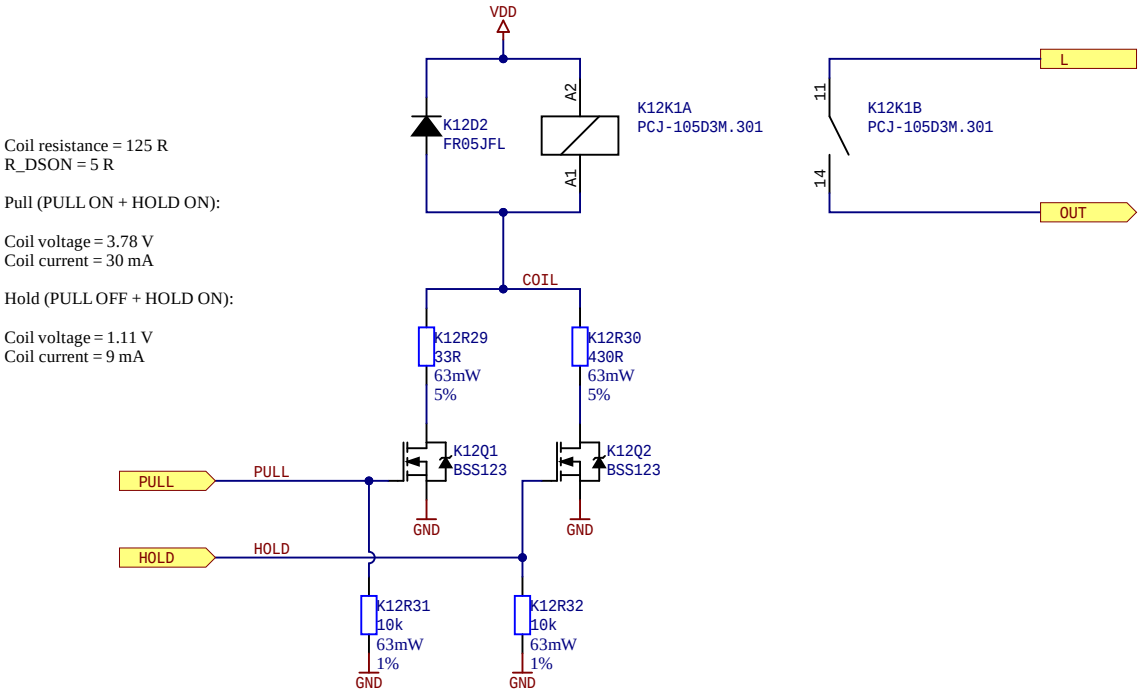


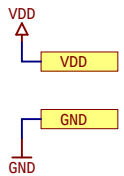
Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		



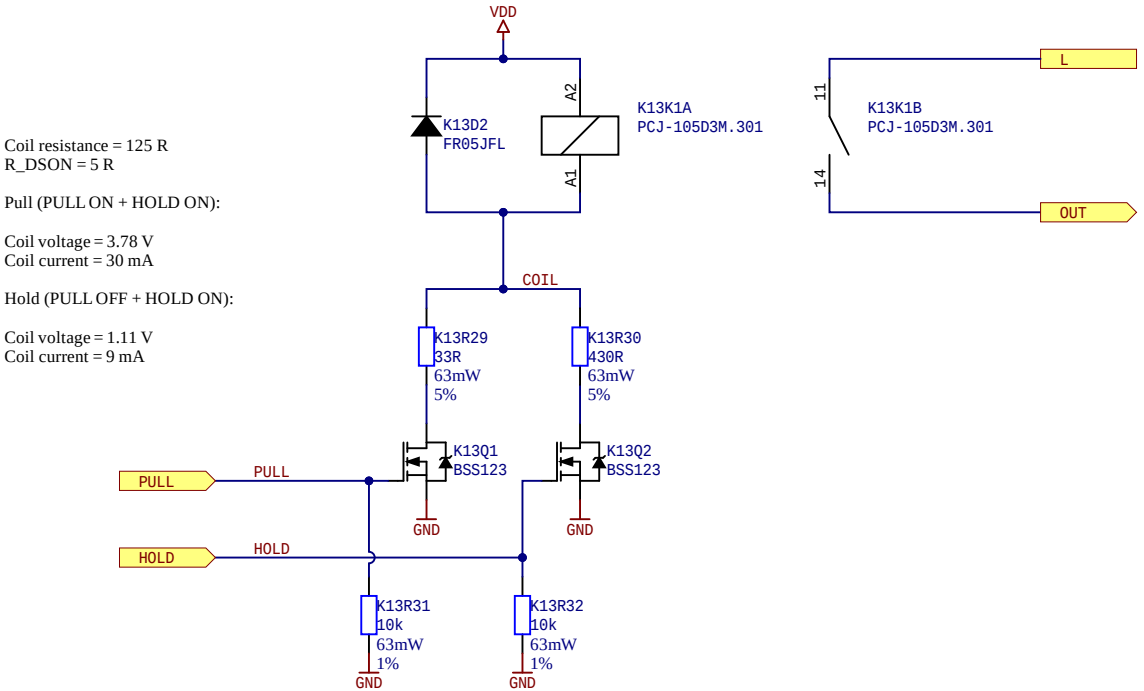


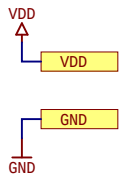
Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		



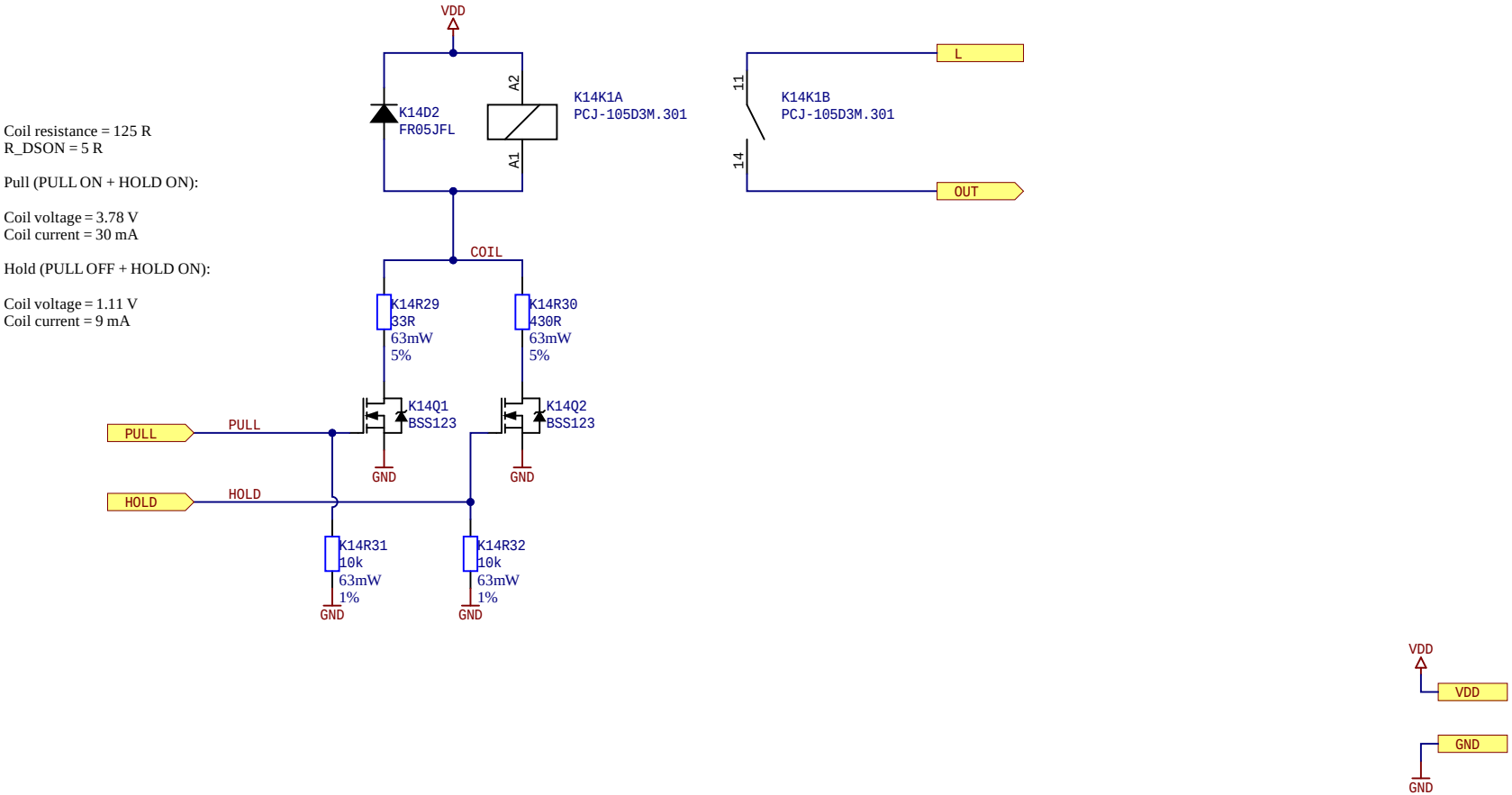


Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

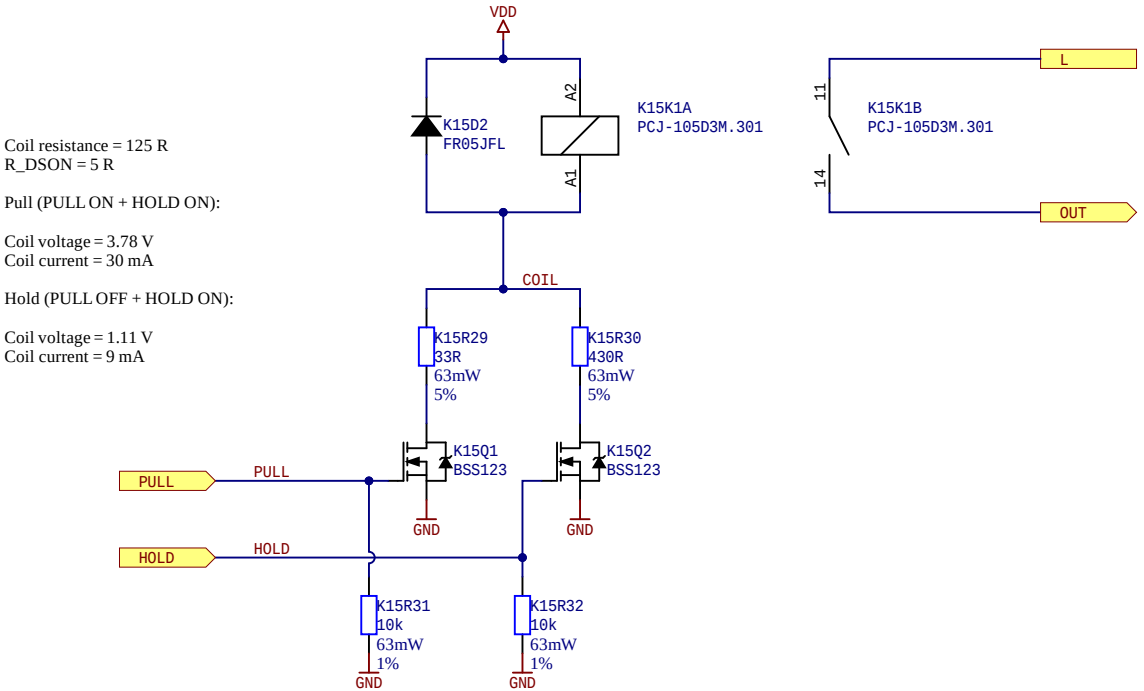


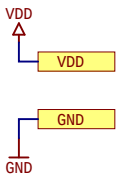


Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przenioło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		

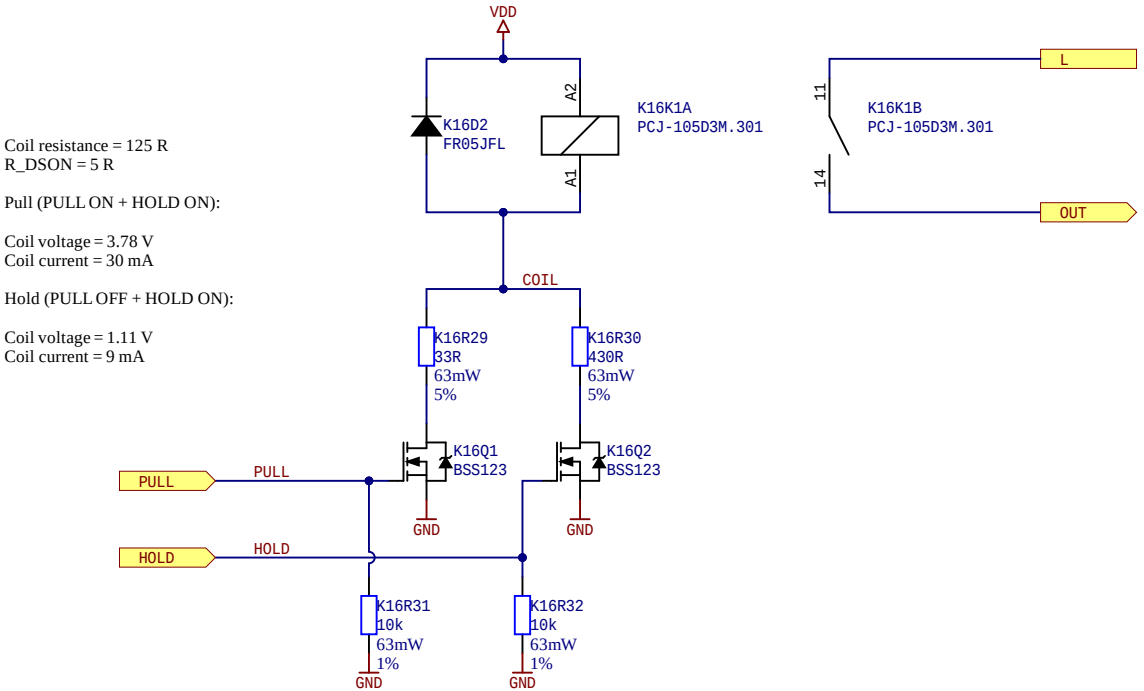


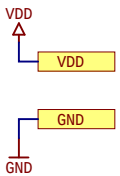
Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		





Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		





Title: relay.SchDoc	Project: BeagleNode.PrjPcb	Rev: A	Address:
Description:	Author: Łukasz Przeniosło	Contact: lukasz@przenioslo.com	Ofiar Katynia 21 72-100 Goleniów Poland
230 VAC output relay control circuit	Company: Przenioslo Electronics & Software	Sheet 6 of 6	
	Created: 2023-02-10 Edited: 2023-10-28		
	File: D:\storage\repo\git\github\BeagleNodeHW\relay.SchDoc		