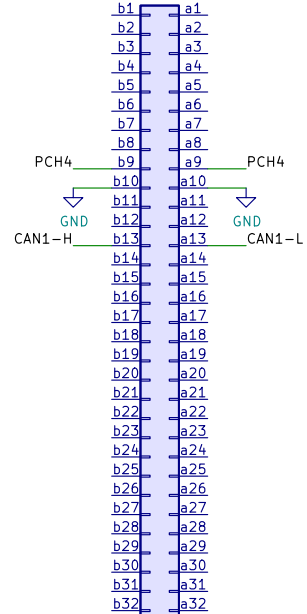
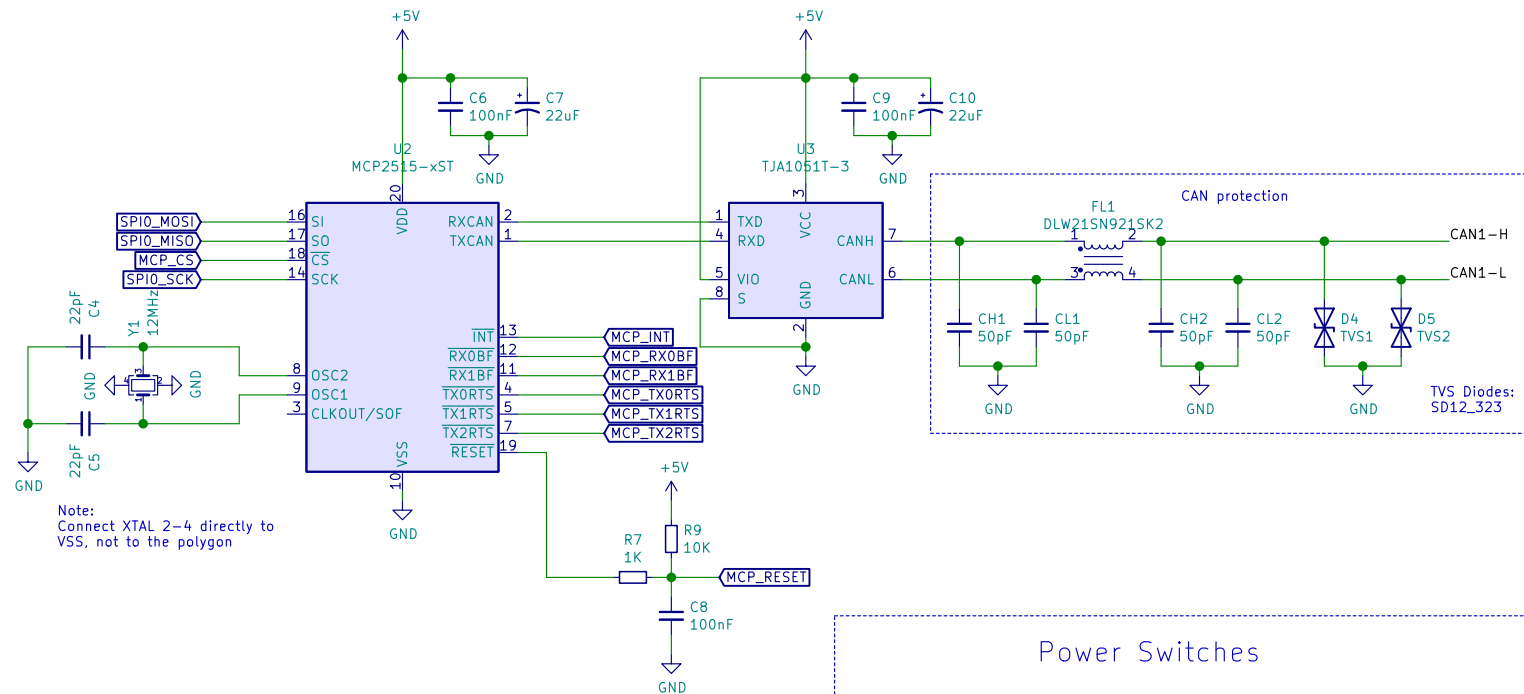


Platform Bus

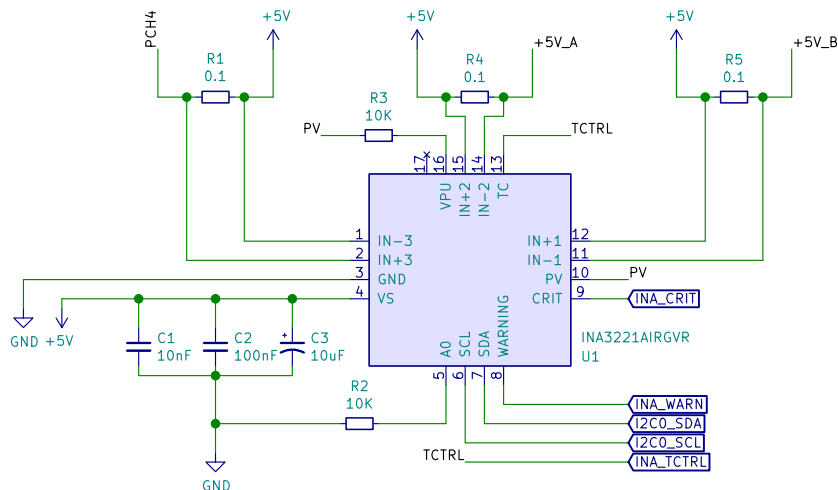
PC/104 Connector



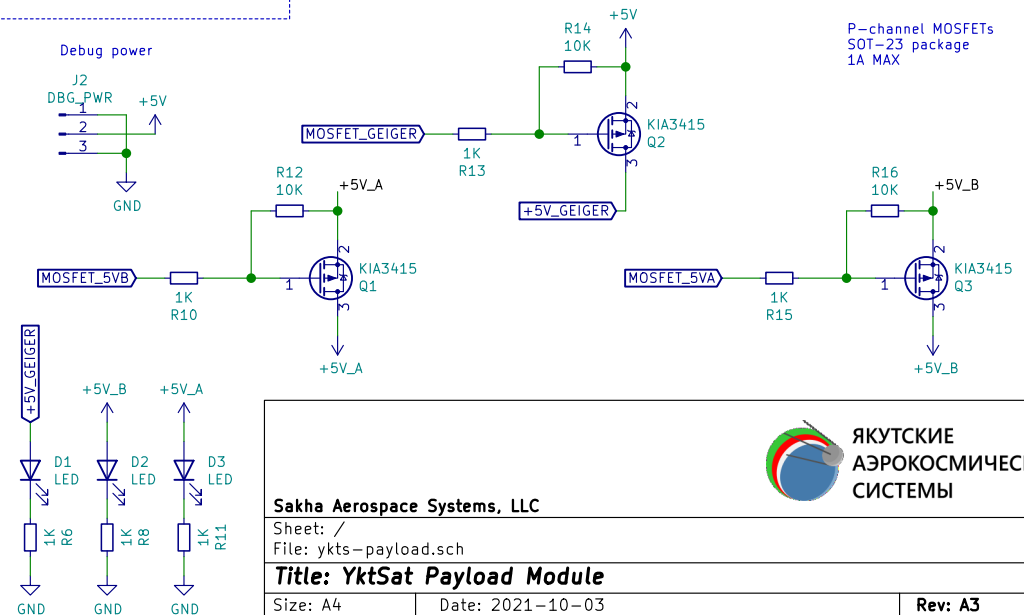
CANBUS Controller



Current Sensor



Power Switches



ЯКУТСКИЕ
АЭРОКОСМИЧЕСКИЕ
СИСТЕМЫ

Sakha Aerospace Systems, LLC

Sheet: /
File: ykts-payload.sch

Title: YktSat Payload Module

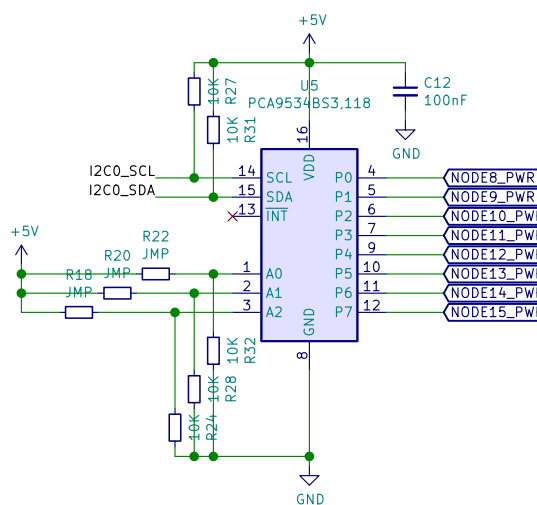
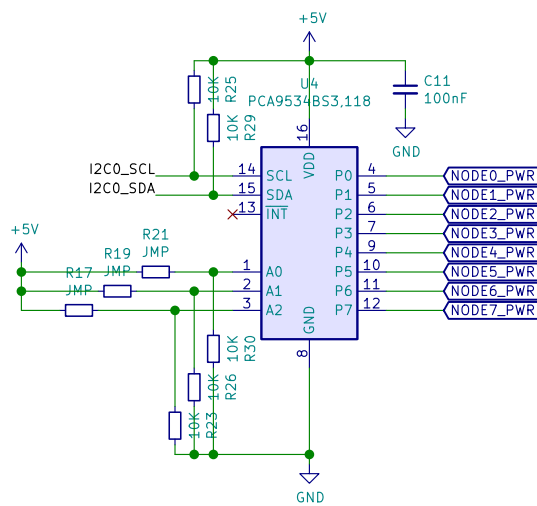
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

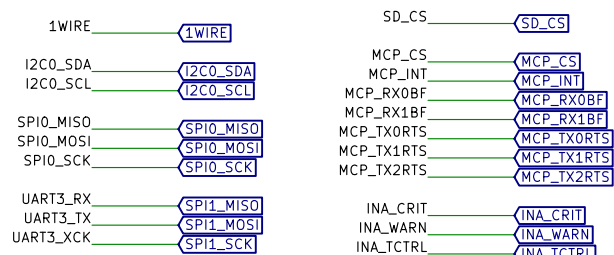
Rev: A3

Id: 1/18

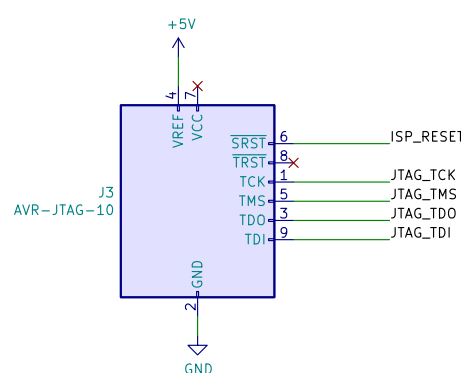
Node Power Control



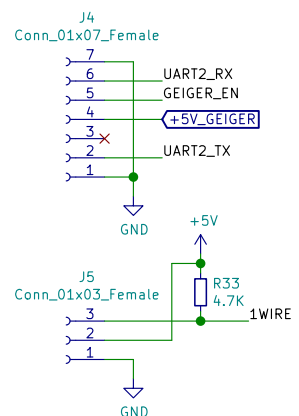
Bus Connections



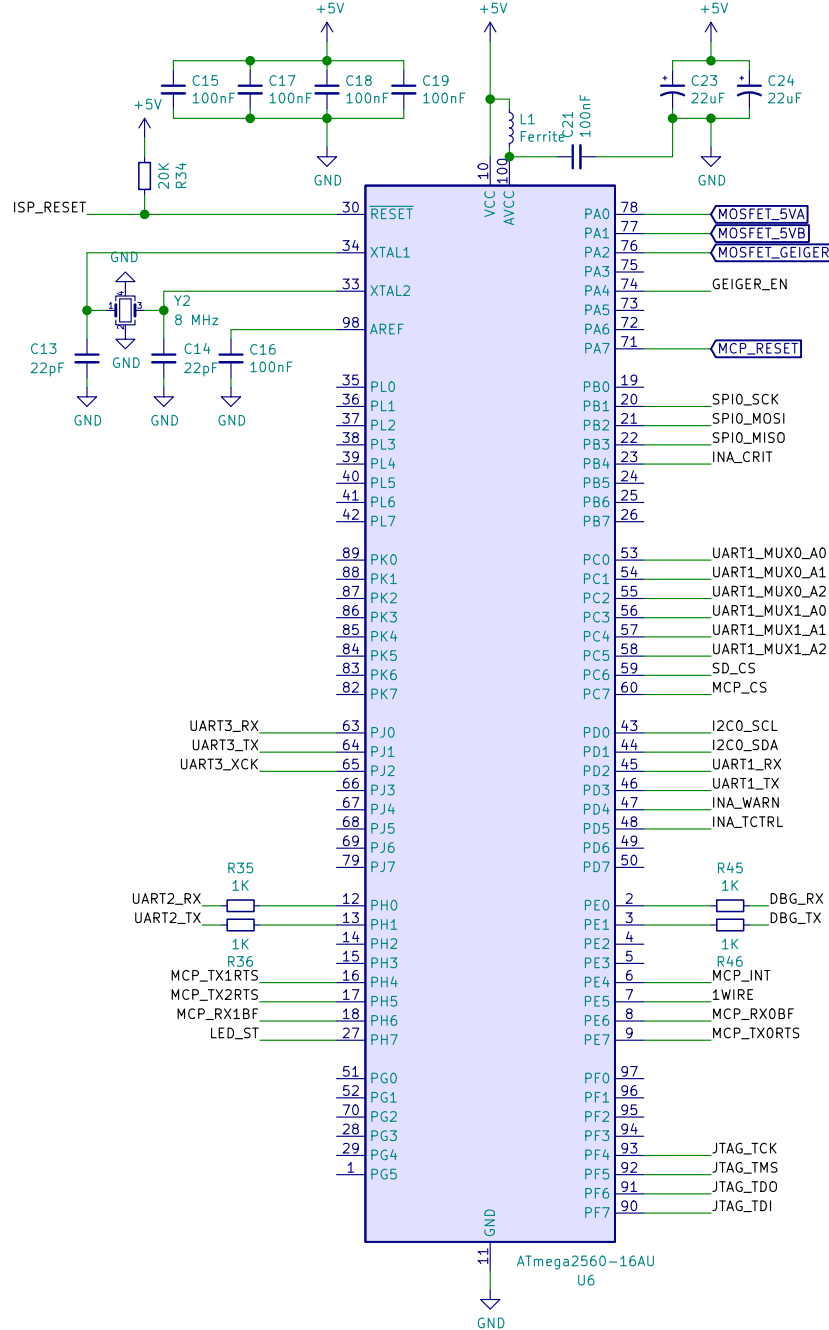
AVR JTAG



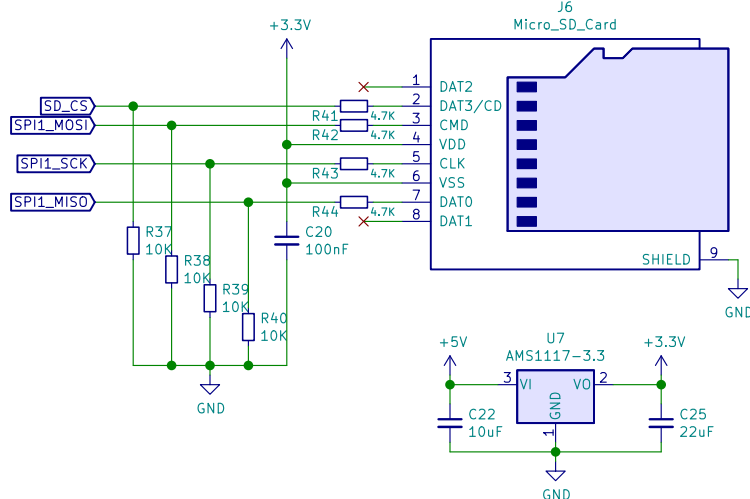
Auxiliary Devices



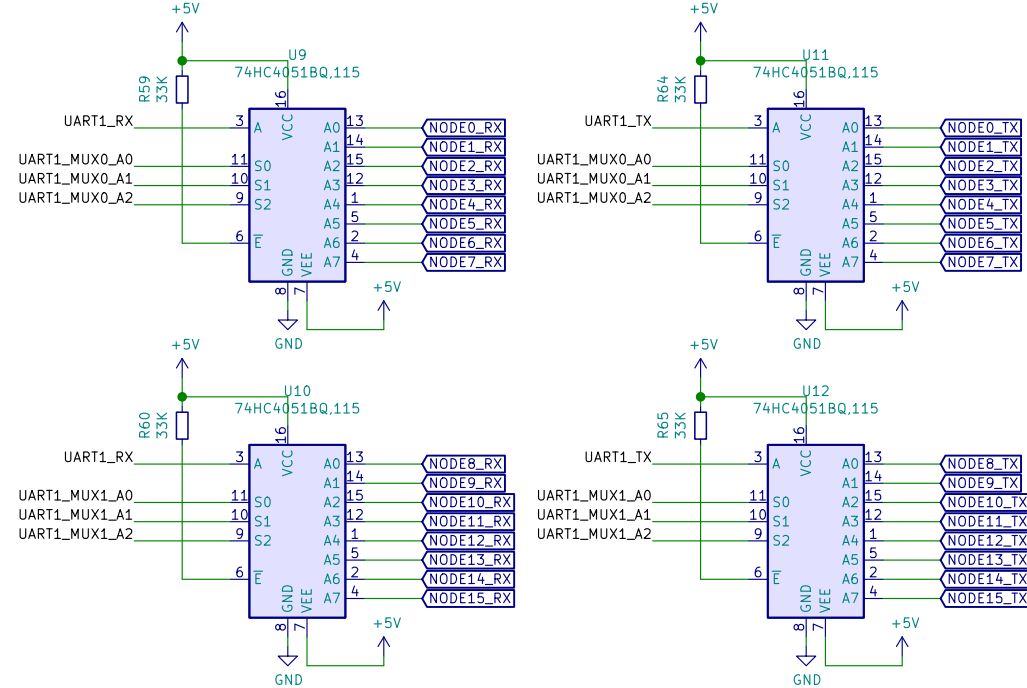
Main MCU



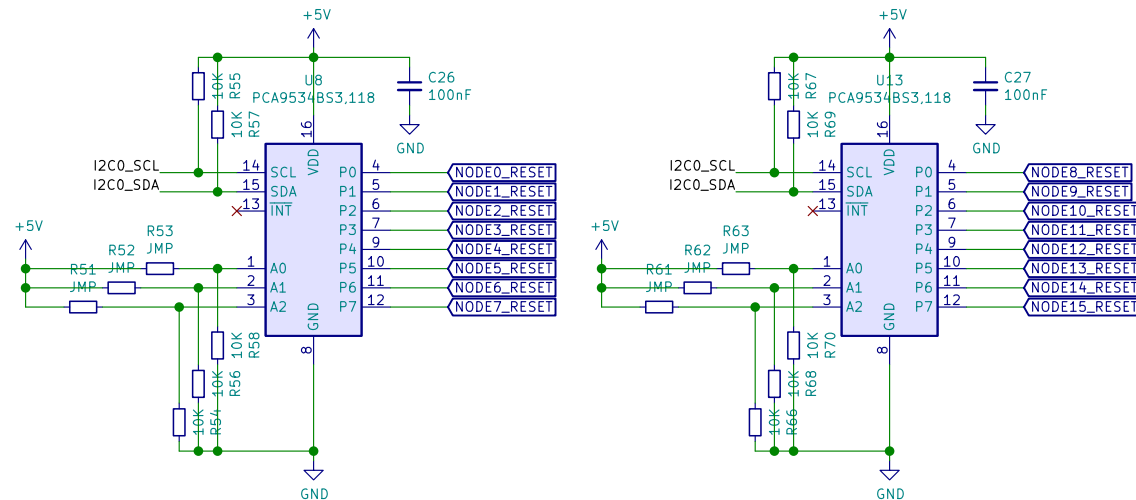
SD Card



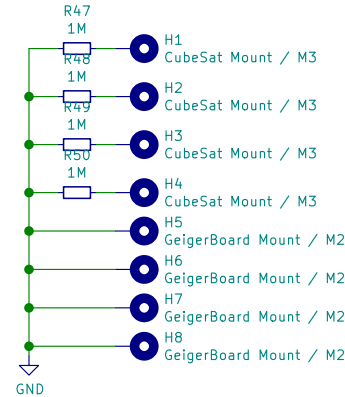
Node UART Multiplexing



Node Reset Control

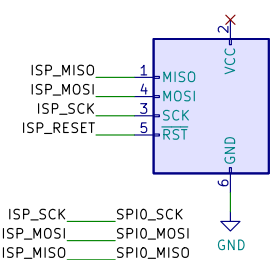


Mounting Holes

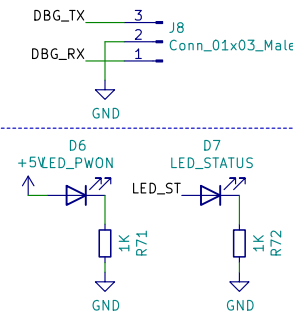


Notes:
1. Grounded through 1M resistor as required in SXC3-ICD
2. Must be PC104 compatible, check footprint

AVR ISP6

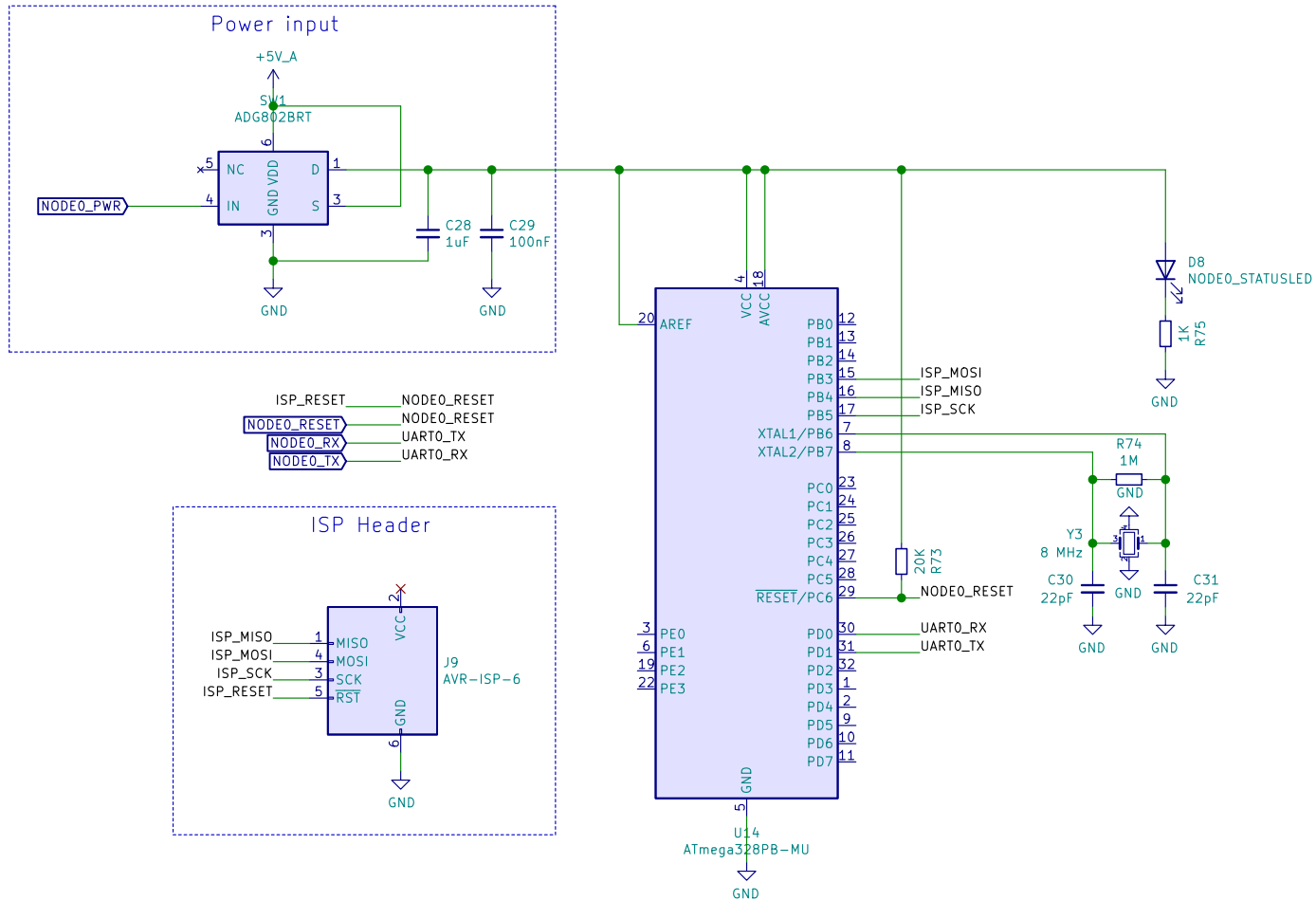


Debug Console



Verified by:	YAKUTSKIE АЭРОКОСМИЧЕСКИЕ СИСТЕМЫ
Approved by:	YAKUTSKIE АЭРОКОСМИЧЕСКИЕ СИСТЕМЫ
Sheet: /Payload MCU/	File: ykts-payload-mcu.sch
Title: YktSat Payload Module	
Size: A3	Date: 2021-10-03
KiCad E.D.A. kicad (5.1.8)-1	Rev: A3
Id: 2/18	

MCU Node 0



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node0/
File: ykts-mcu-node0.sch

Title: YktSat Payload Module

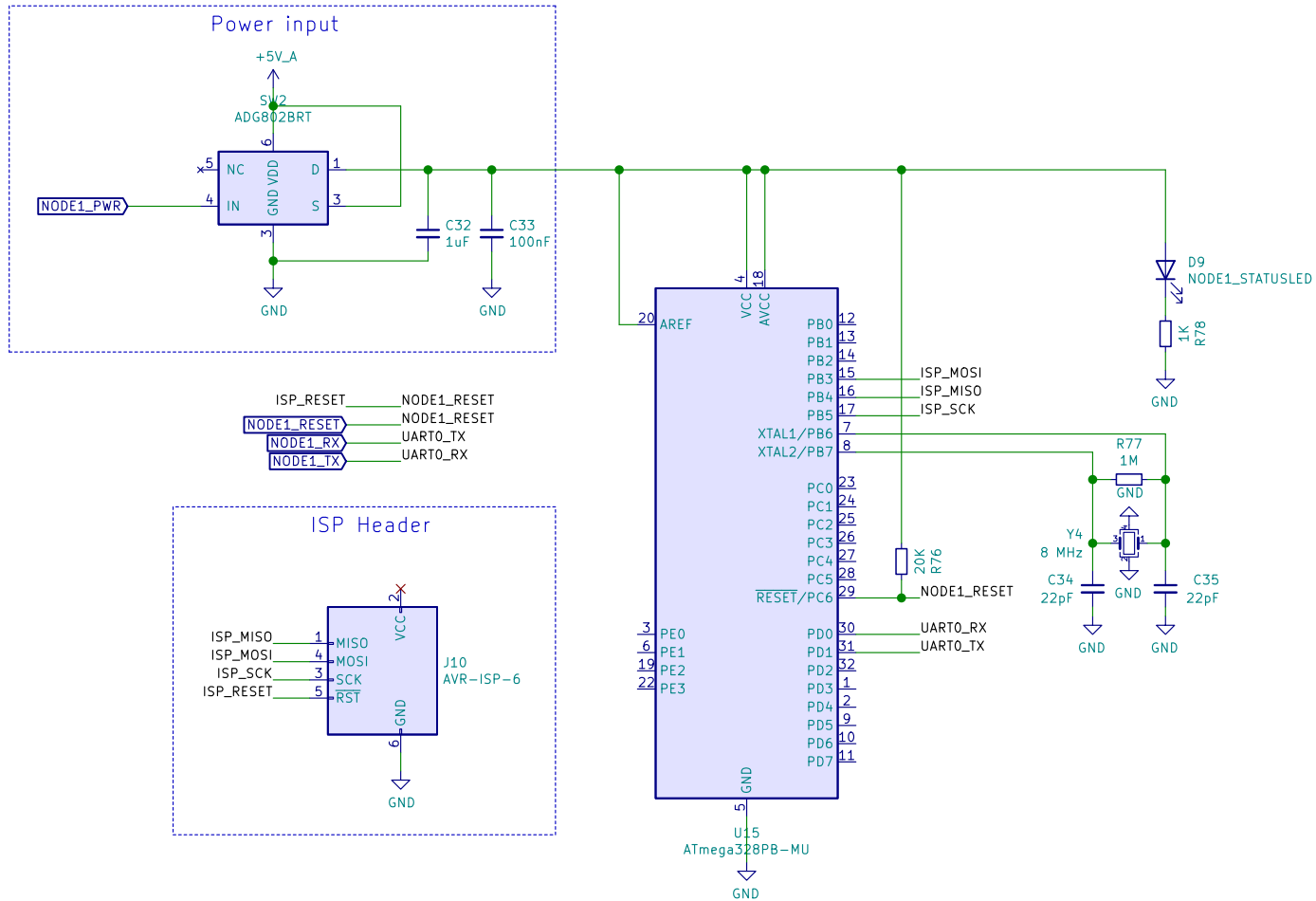
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 3/18

MCU Node 1



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node1/
File: ykts-mcu-node1.sch

Title: YktSat Payload Module

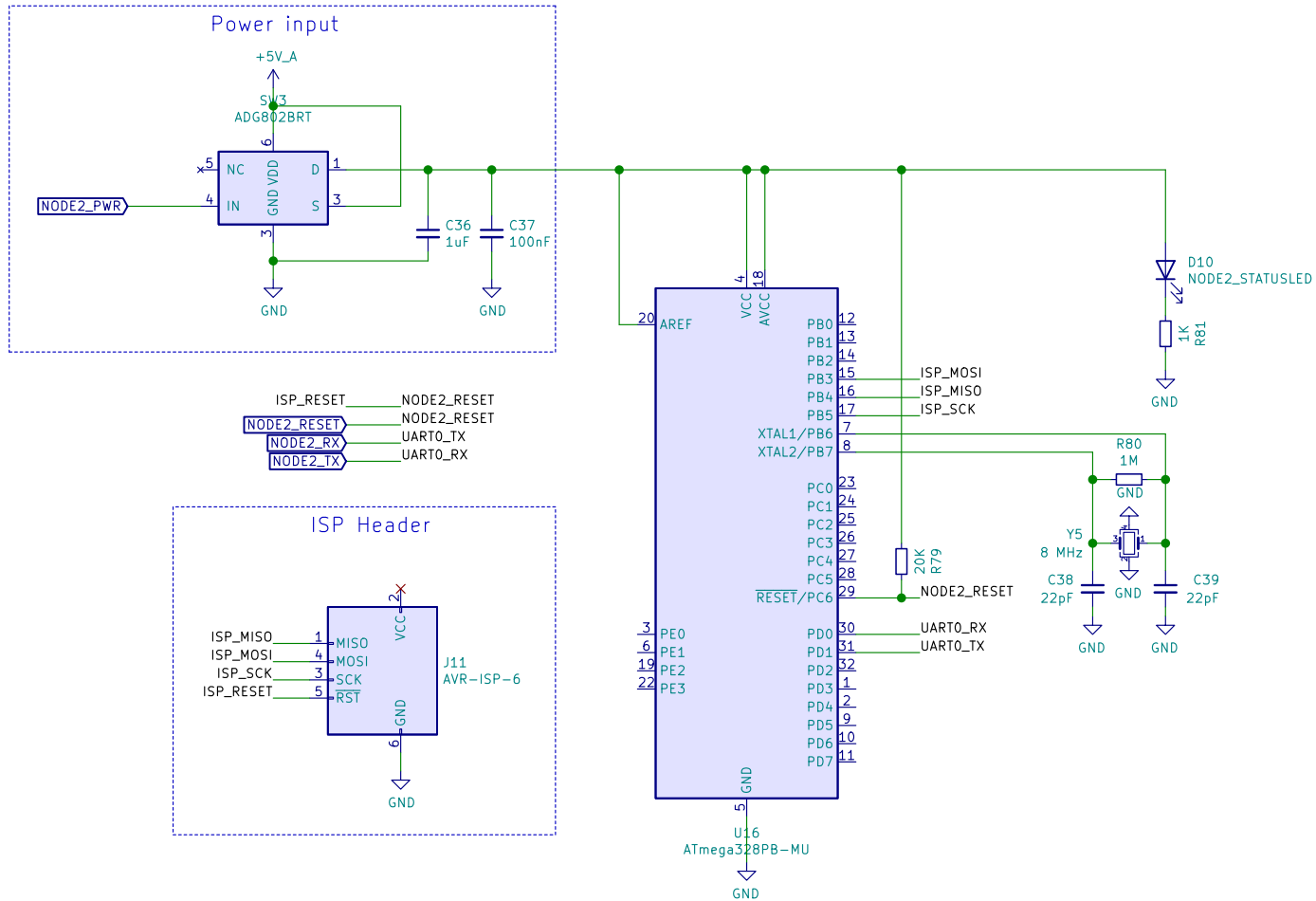
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 4/18

MCU Node 2



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node2/
File: ykts-mcu-node2.sch

Title: YktSat Payload Module

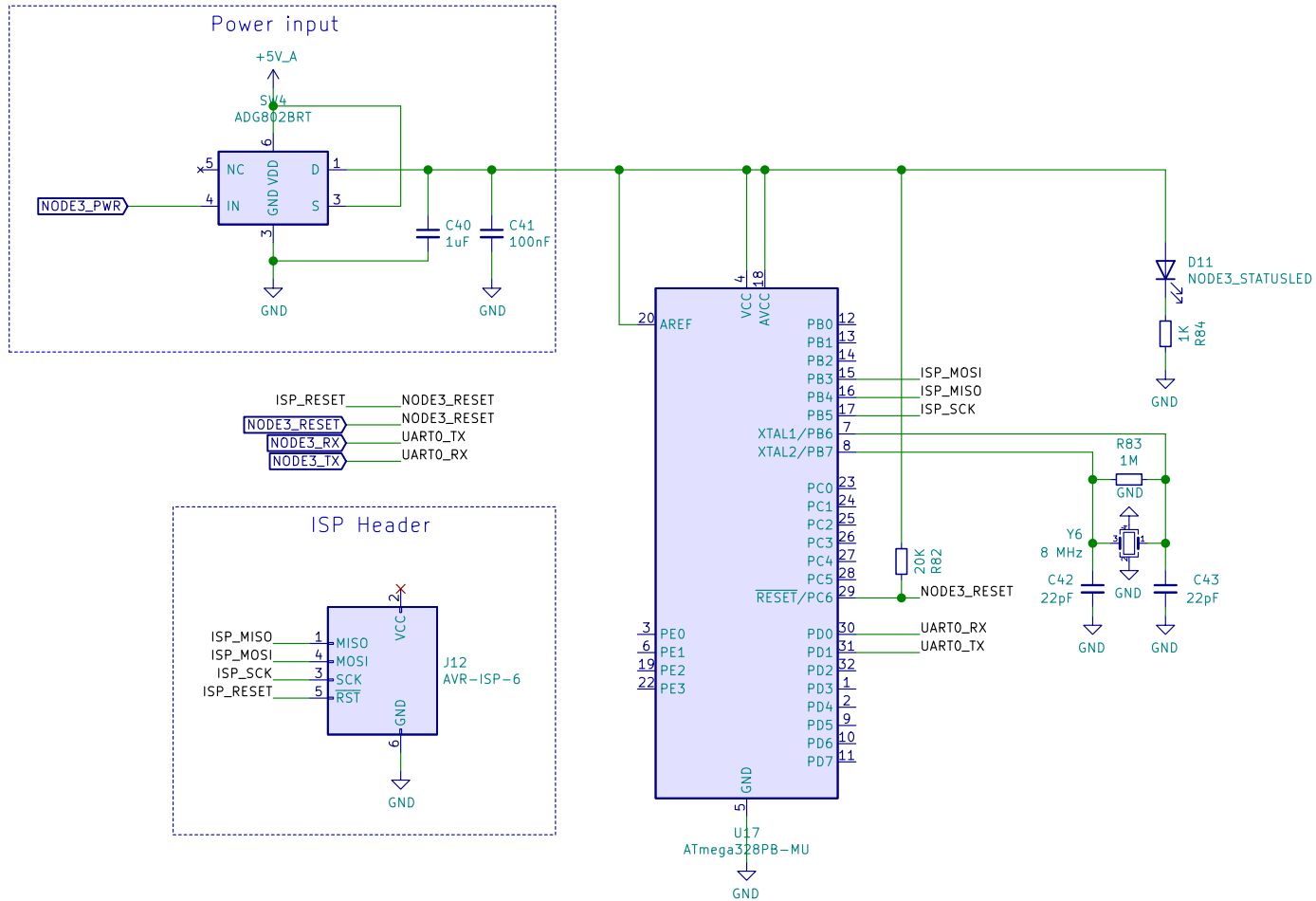
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 5/18

MCU Node 3



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node3/
File: ykts-mcu-node3.sch

Title: YktSat Payload Module

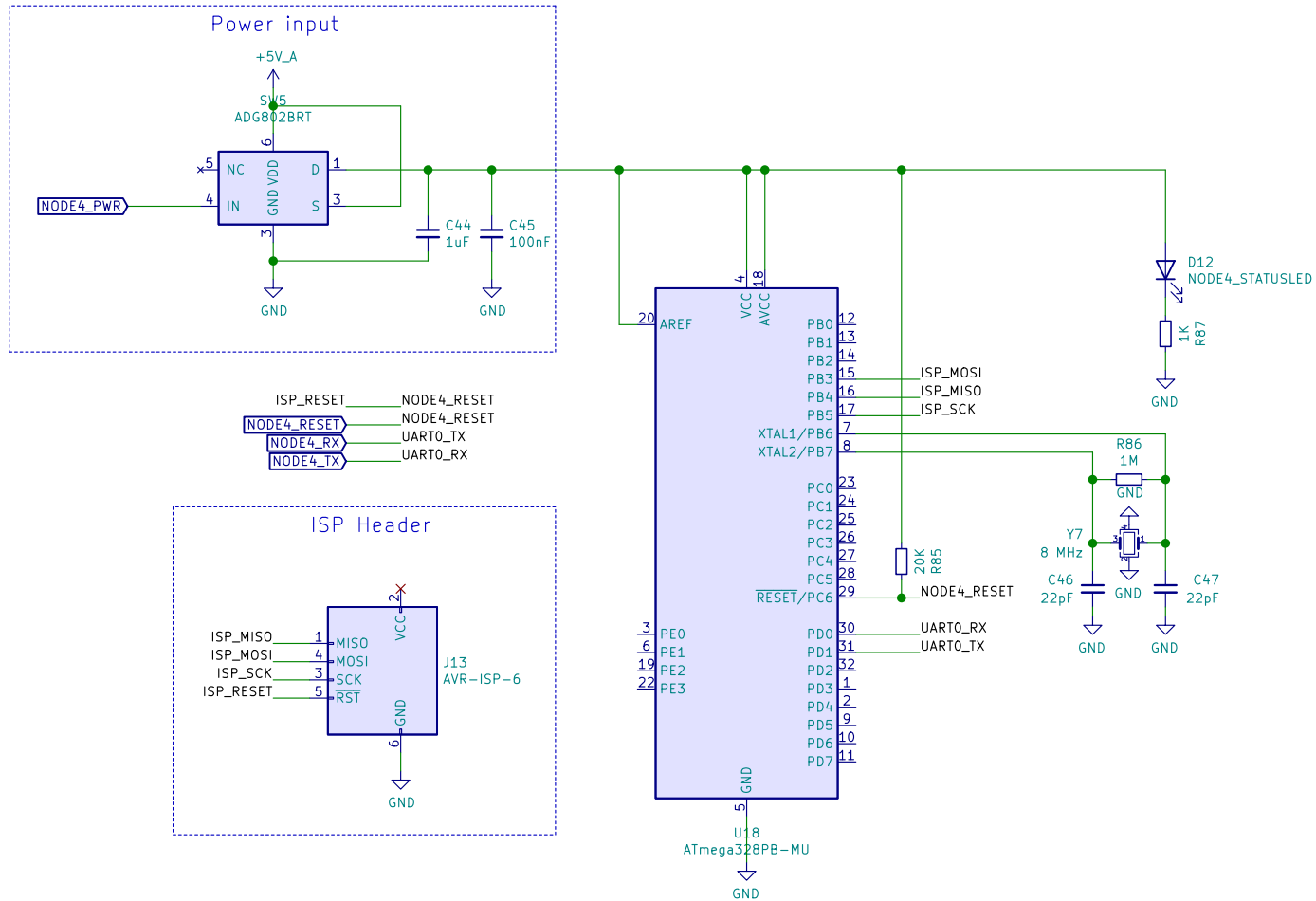
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 6/18

MCU Node 4



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node4/
File: ykts-mcu-node4.sch

Title: YktSat Payload Module

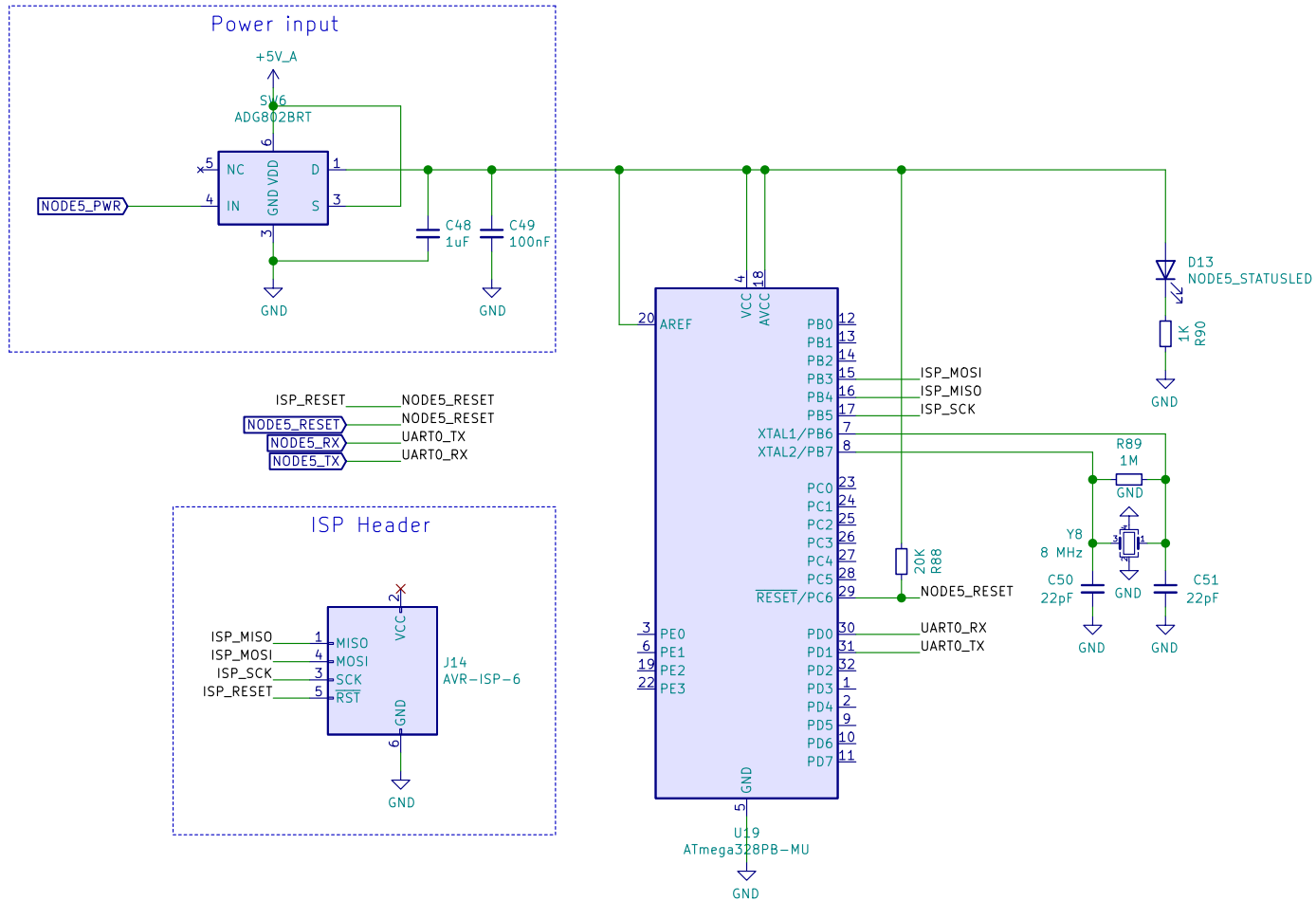
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 7/18

MCU Node 5



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node5/
File: ykts-mcu-node5.sch

Title: YktSat Payload Module

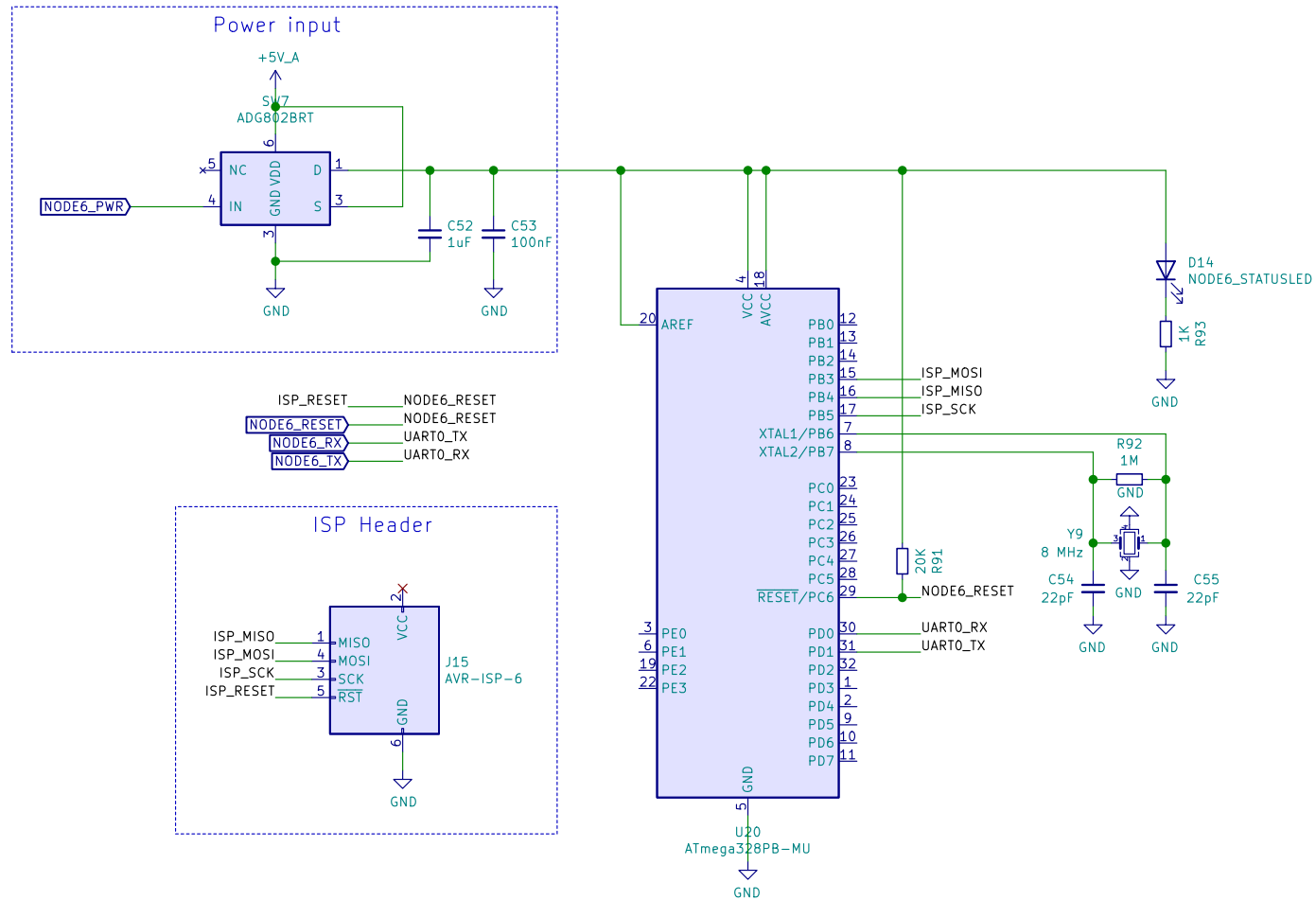
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 8/18

MCU Node 6



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node6/
File: ykts-mcu-node6.sch

Title: YktSat Payload Module

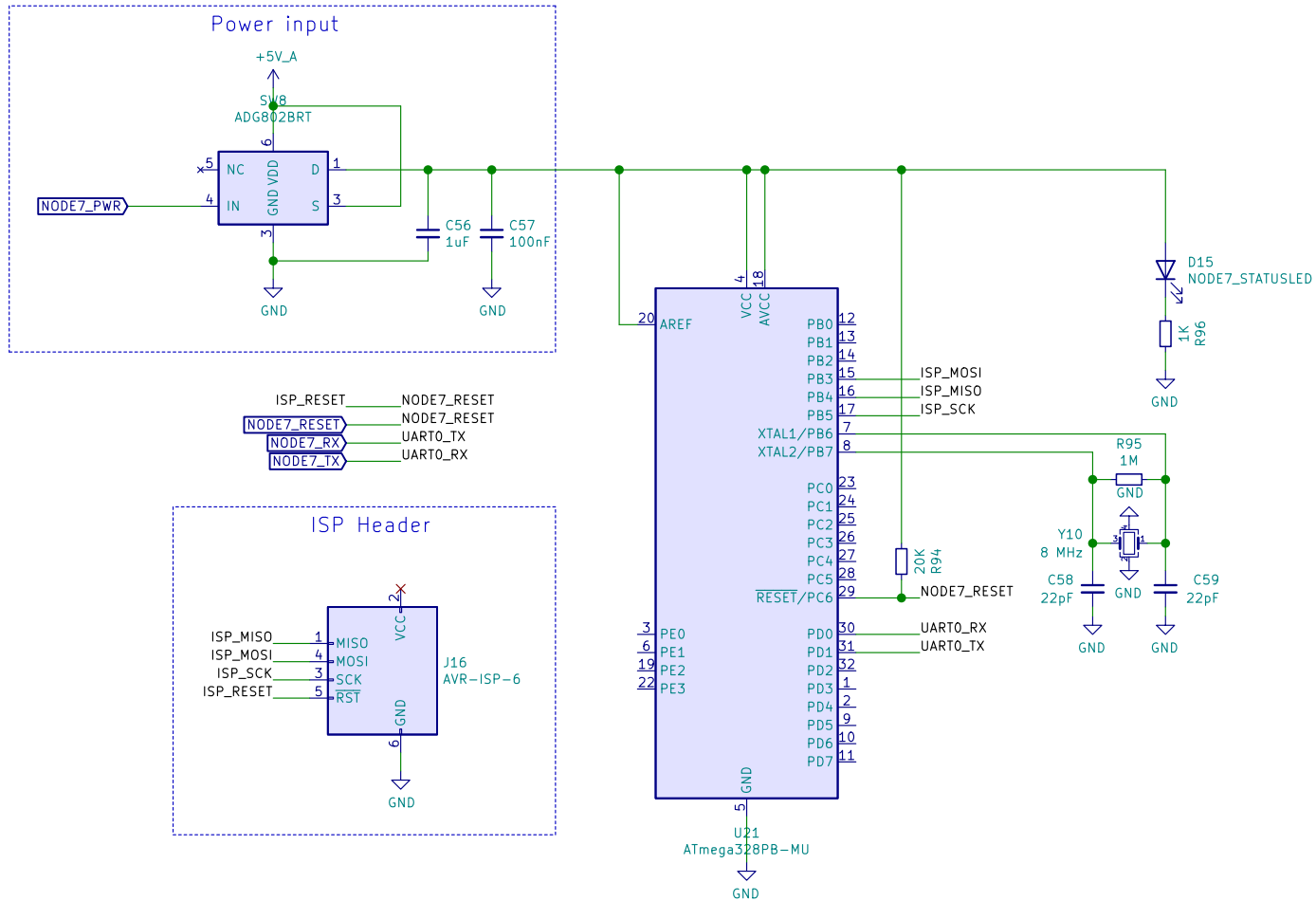
Size: A4	Date: 2021-10-03
----------	------------------

KiCad E.D.A.	kiCad (5.1.8)-1
--------------	-----------------

Rev: A3

Id: 9/18

MCU Node 7



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node7/

File: ykts-mcu-node7.sch

Title: YktSat Payload Module

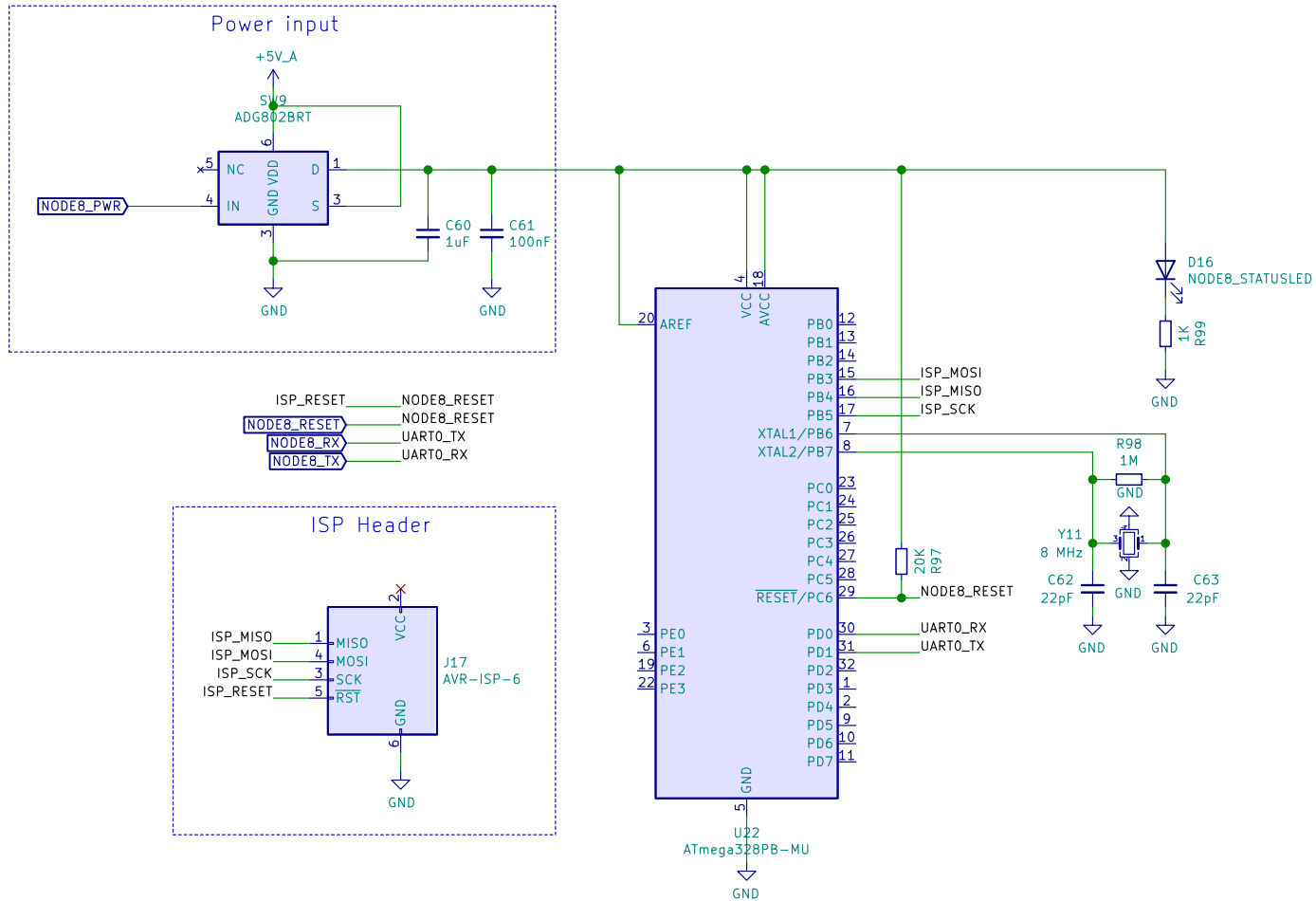
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 10/18

MCU Node 8



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node8/
File: ykts-mcu-node8.sch

Title: YktSat Payload Module

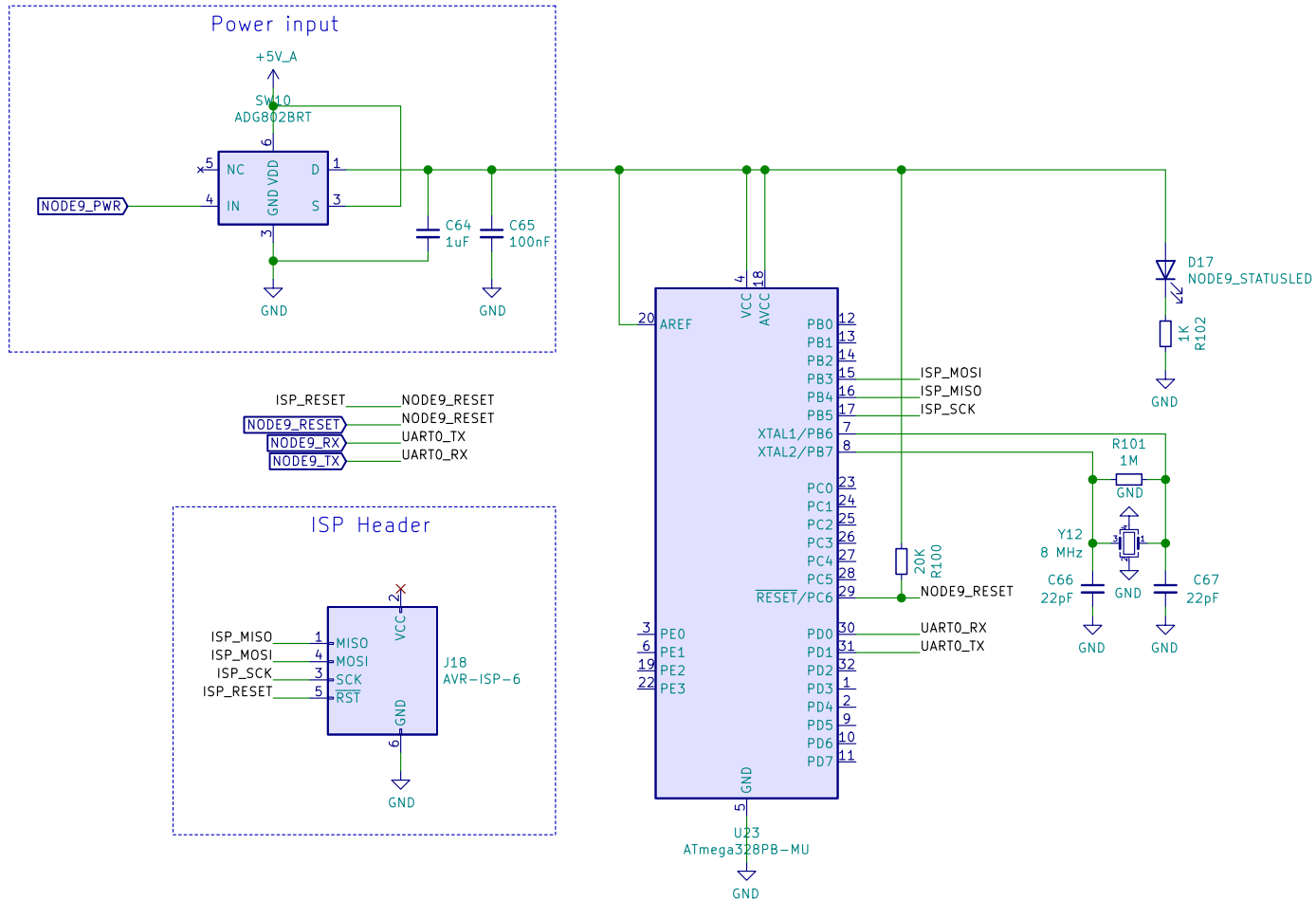
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 11/18

MCU Node 9



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node9/
File: ykts-mcu-node9.sch

Title: YktSat Payload Module

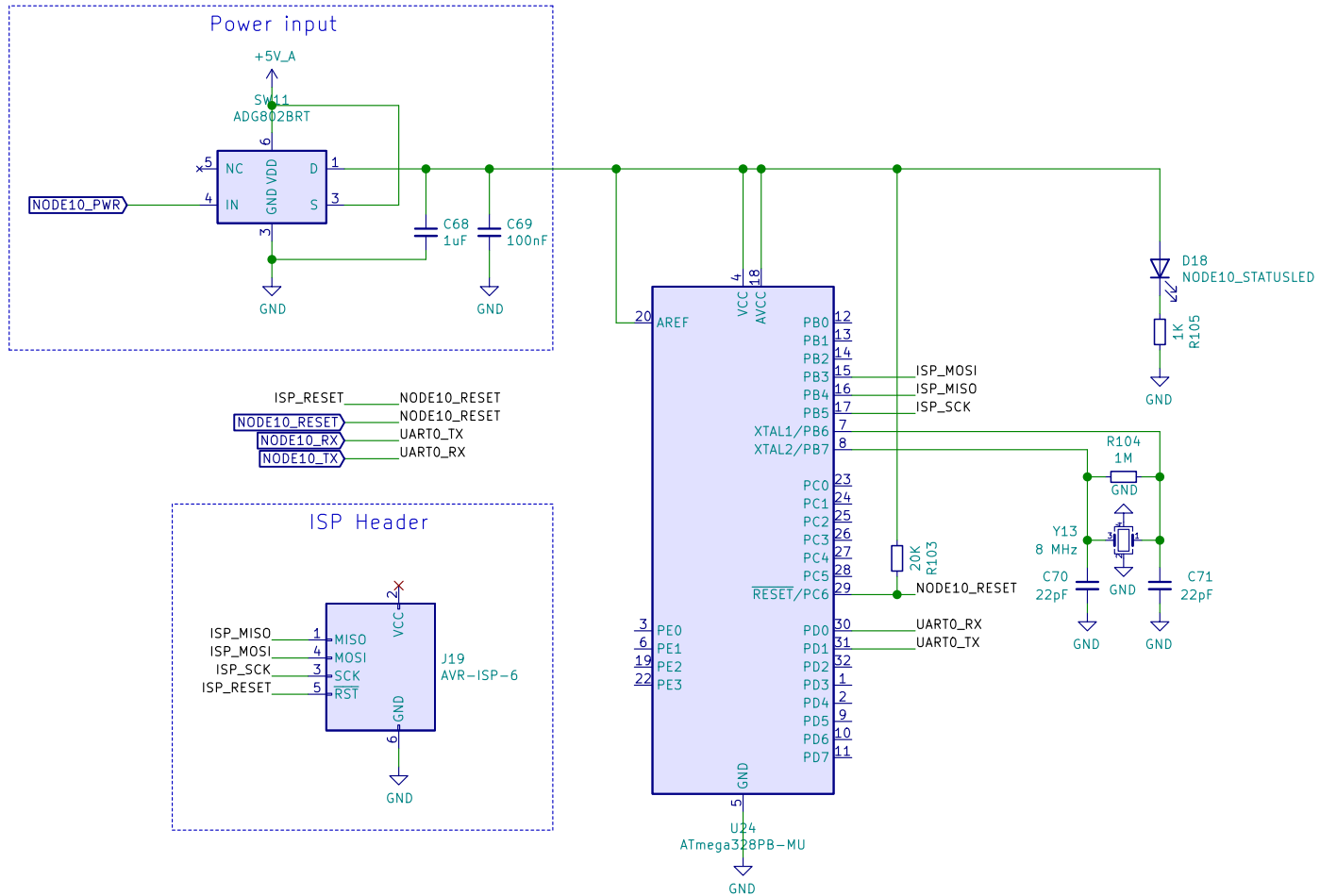
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 12/18

MCU Node 10



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node10/
File: ykts-mcu-node10.sch

Title: YktSat Payload Module

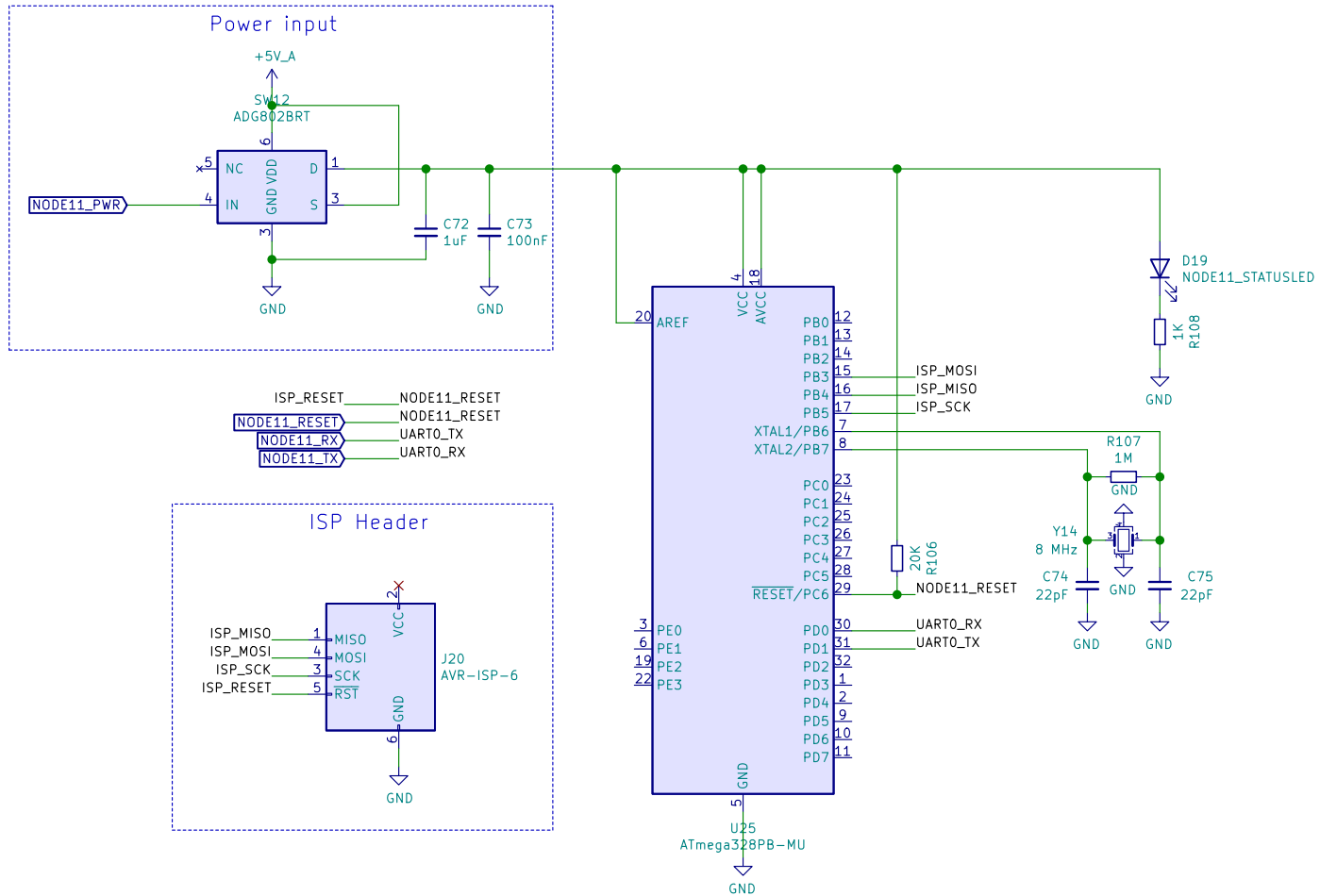
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 13/18

MCU Node 11



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node11/
File: ykts-mcu-node11.sch

Title: YktSat Payload Module

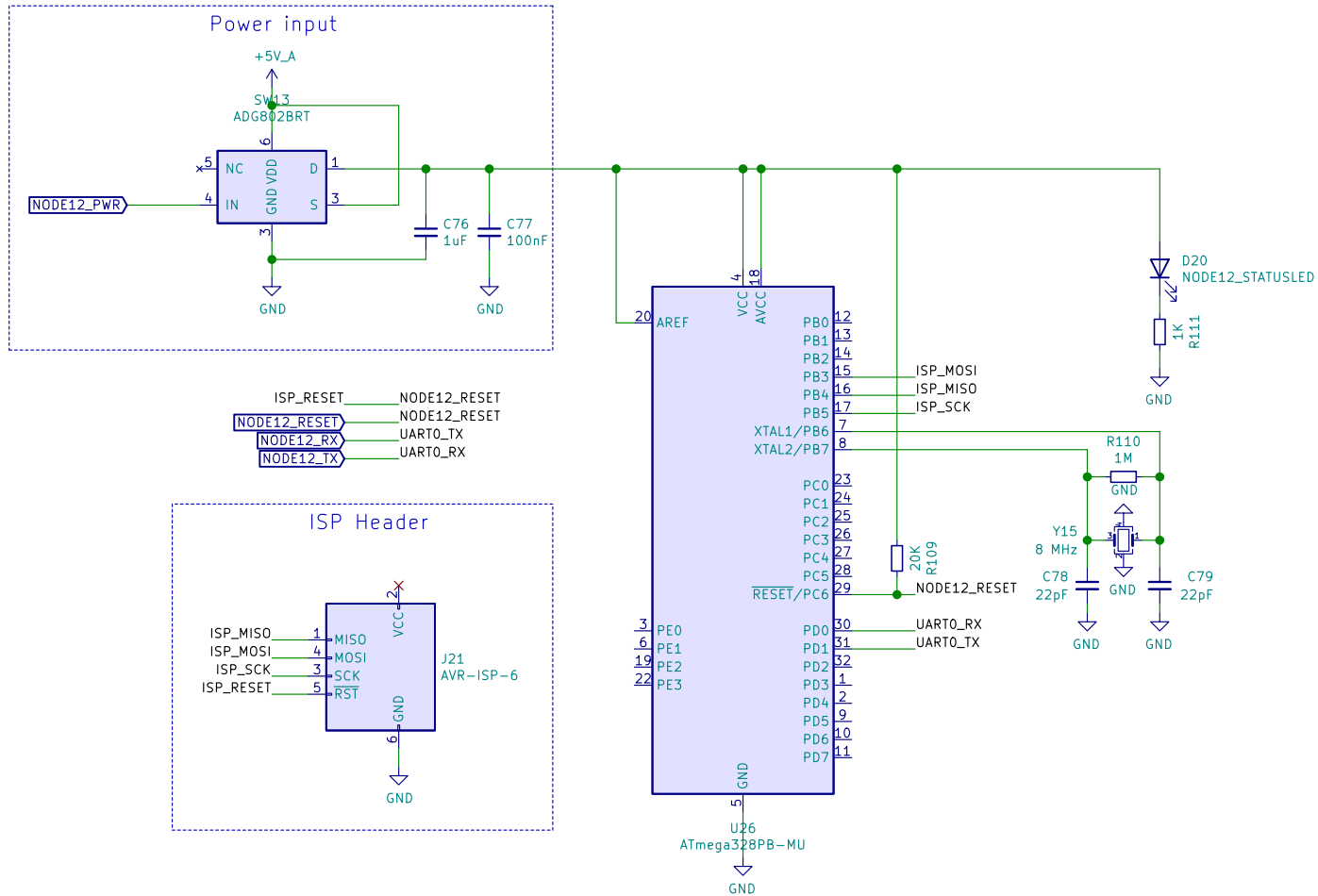
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 14/18

MCU Node 12



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node12/
File: ykts-mcu-node12.sch

Title: YktSat Payload Module

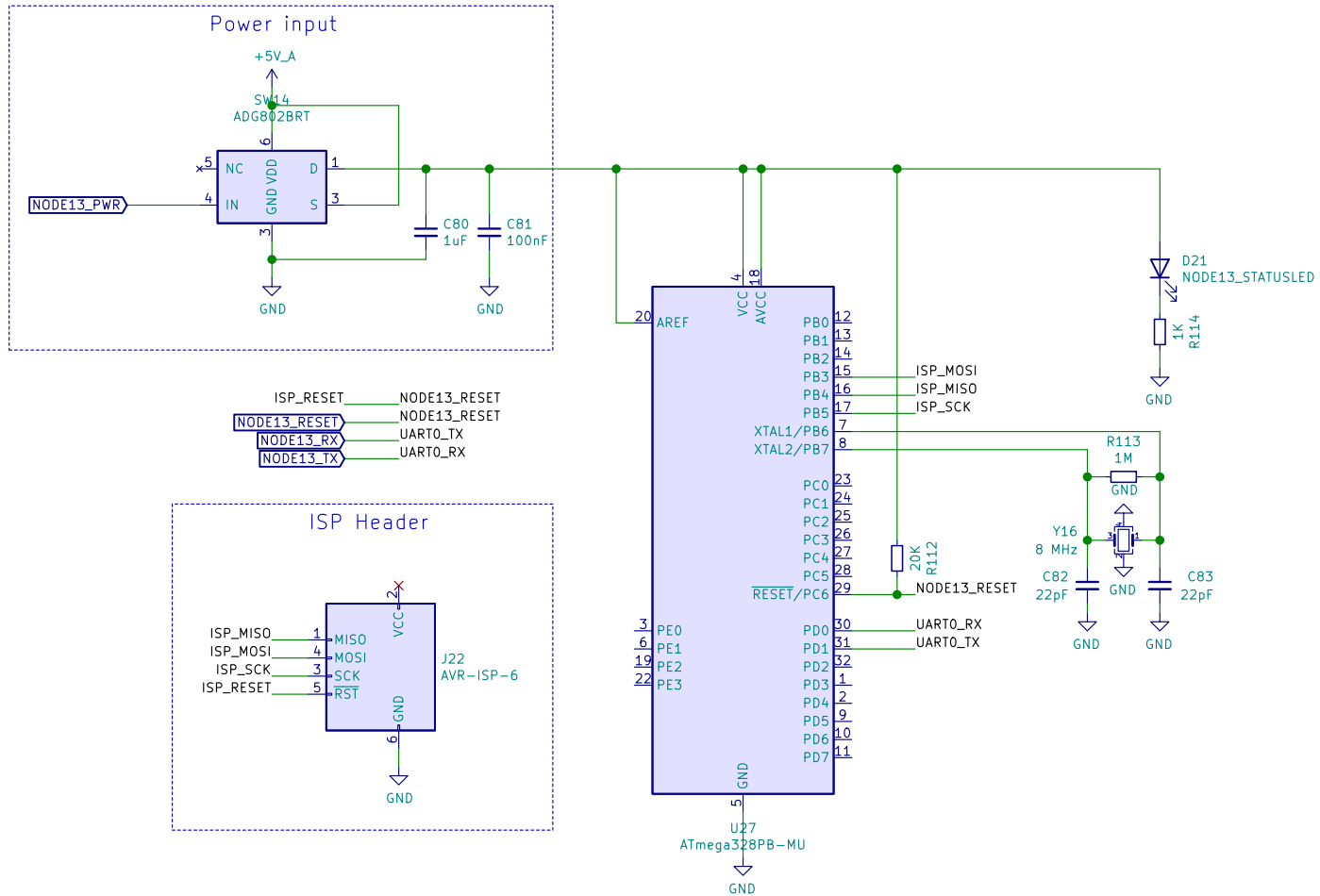
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 15/18

MCU Node 13



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node13/
File: ykts-mcu-node13.sch

Title: YktSat Payload Module

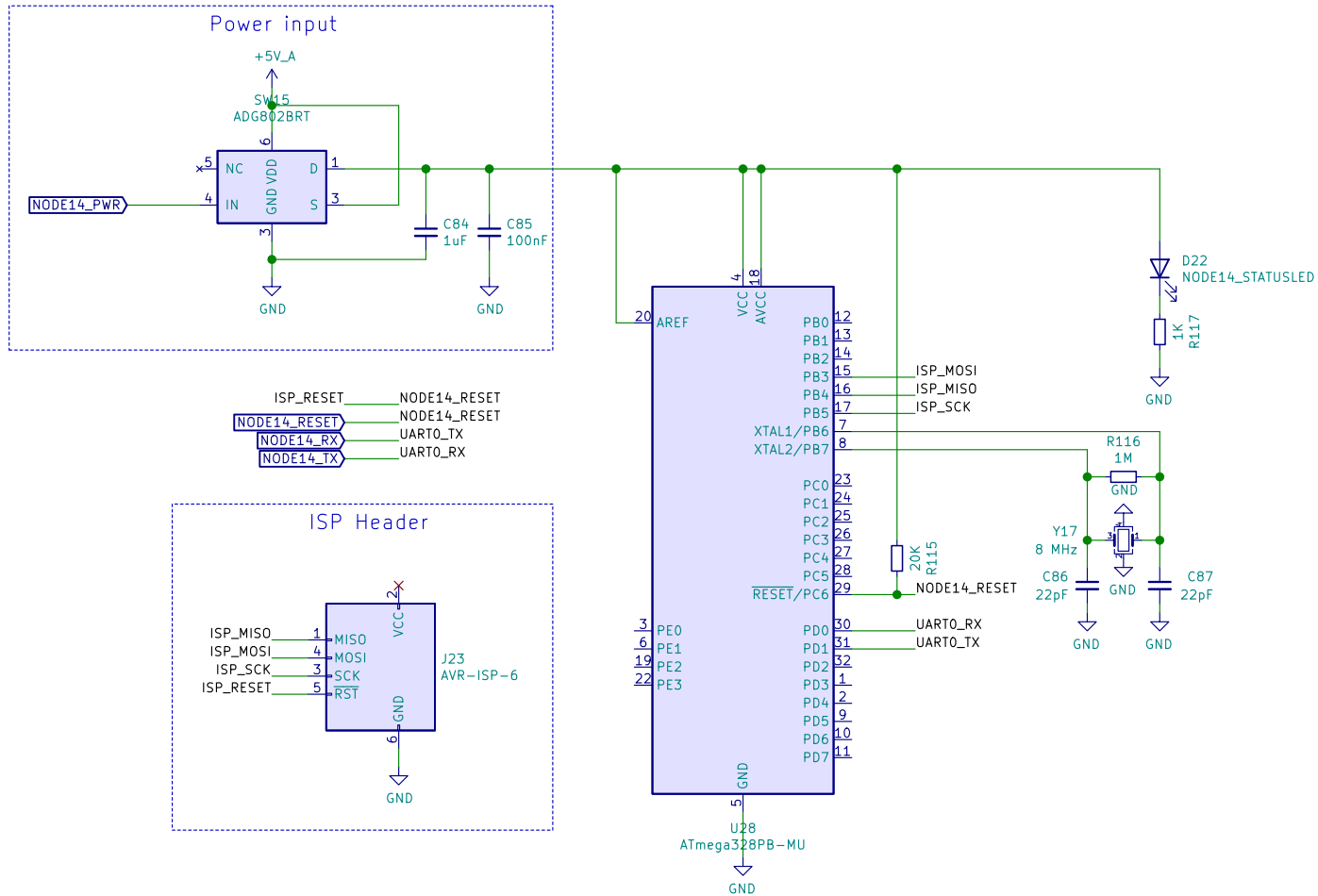
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 16/18

MCU Node 14



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node14/
File: ykts-mcu-node14.sch

Title: YktSat Payload Module

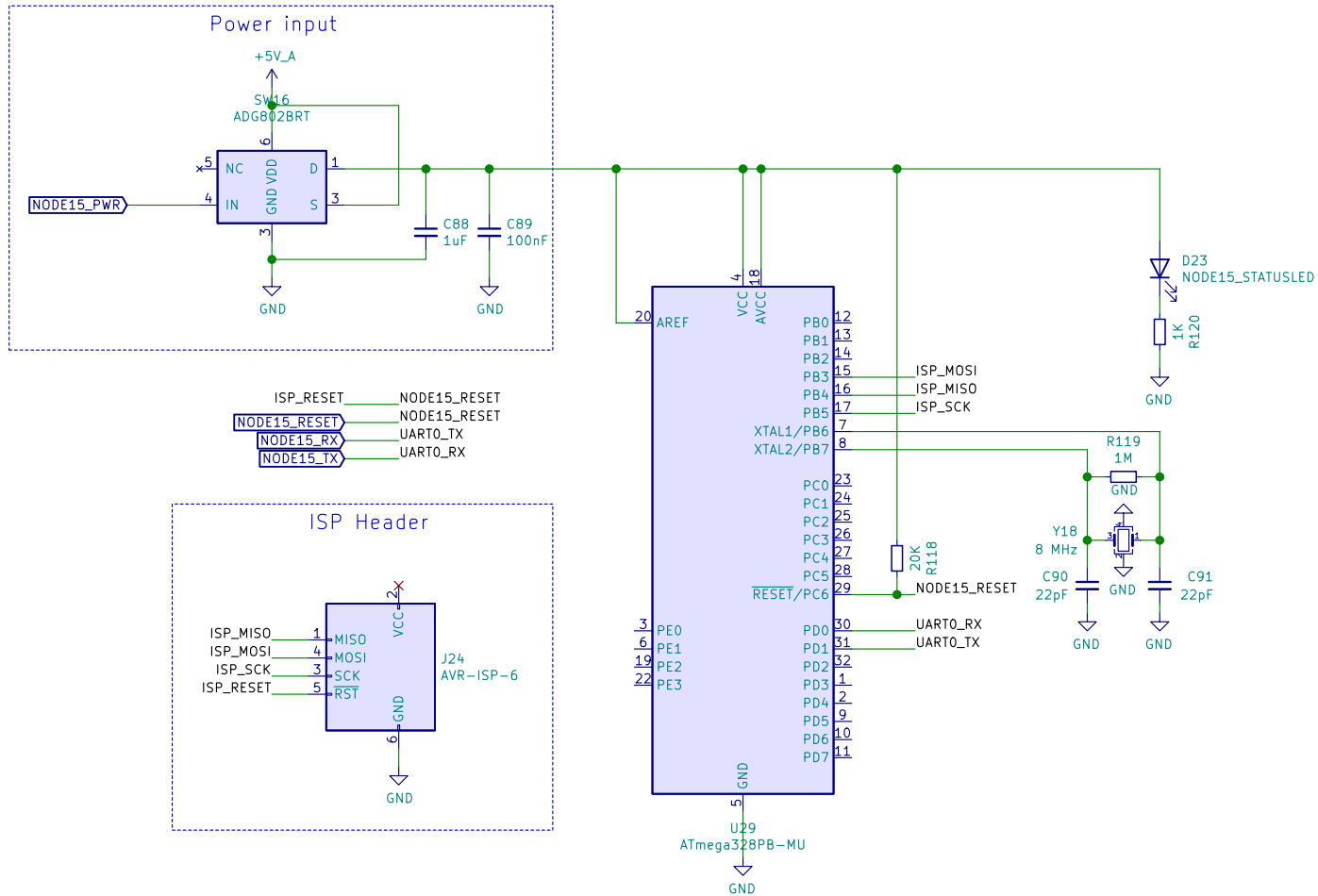
Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 17/18

MCU Node 15



Sakha Aerospace Systems, LLC

Sheet: /Payload MCU/MCU Node15/
File: ykts-mcu-node15.sch

Title: YktSat Payload Module

Size: A4 Date: 2021-10-03

KiCad E.D.A. kicad (5.1.8)-1

Rev: A3

Id: 18/18