

PCB4108A; X-NUCLEO-53L5A1.PrjPcb

X-NUCLEO-53L5A1

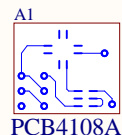
PCB4108

03/05/2021

SHEET 01: Title
SHEET 02: Top Level
SHEET 03: Sensor
SHEET 04: Host
SHEET 05: Satellite Connector

REVISION HISTORY

DATE	VERSION	NAME	DESCRIPTION
20/12/2020	000		Initial Draft
11/01/2021	001		Updated VL53L5CXV0 symbol Corrected Nucleo Arduino designators Placed single pull-up resistor on PWR_EN net Removed power enable signals from level shift
15/01/2021	002		Changed I2Cn_RIGHT_3V3 from Port PB6 to Port PA9 Reduced design complexity, affecting several components, nets and sheets.
16/01/2021	003		Pullup resistor on LDO regulator connected to 3V3_NUCLEO
18/01/2021	004		Signals on Satellite board connectors re-ordered
19/01/2021	005		Solder bridges on satellite connectors removed
25/01/2021	006		Satellite connectors changed to 9-pin
26/01/2021	007		Satellite connectors' nets reordered to aid layout
31/03/2021	008		Variant 00B Host connectors, CN5, CN6, CN8 and CN9 changed to shorter pin versions
29/04/2021	009		Variant 00C. Changed LDO to "D" version. R3 made DNF



Top Level
Top Level.SchDoc



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Design Name:
PCB4108A; X-NUCLEO-53L5A1.PrjPcb

Sheet Name:
Title.SchDoc

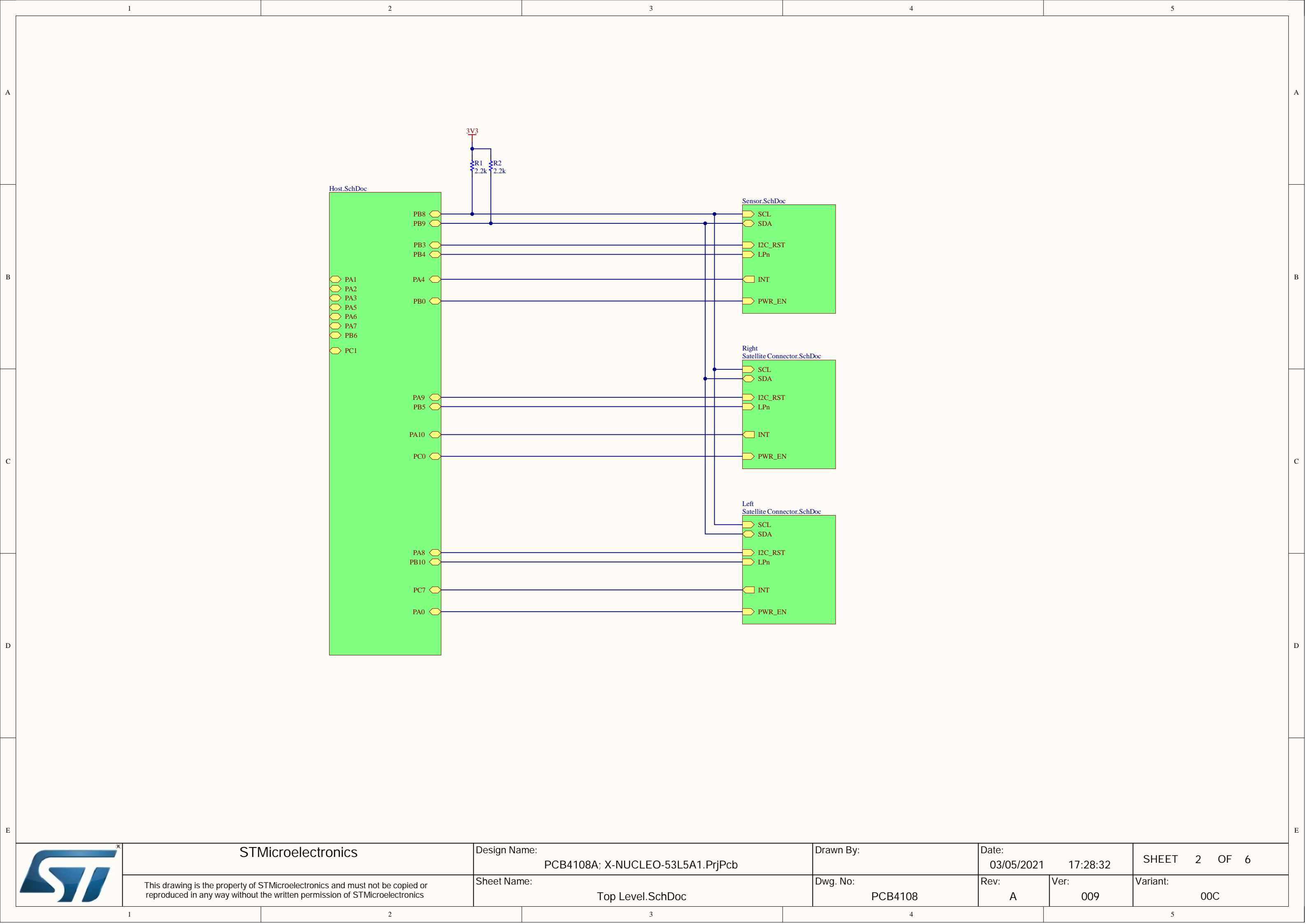
Drawn By:
Date:
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Dwg. No:
PCB4108

Rev:
A
Ver:
009

SHEET 1 OF 6

Variant:
00C



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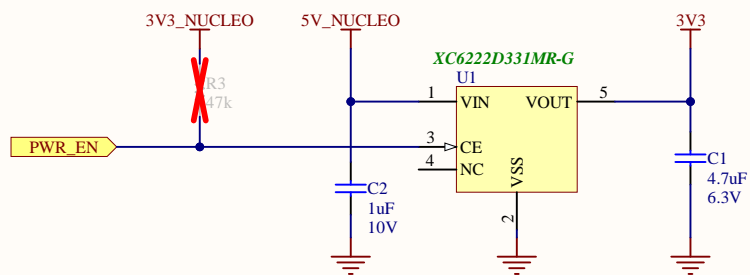
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PCB4108A; X-NUCLEO-53L5A1.PrjPcb

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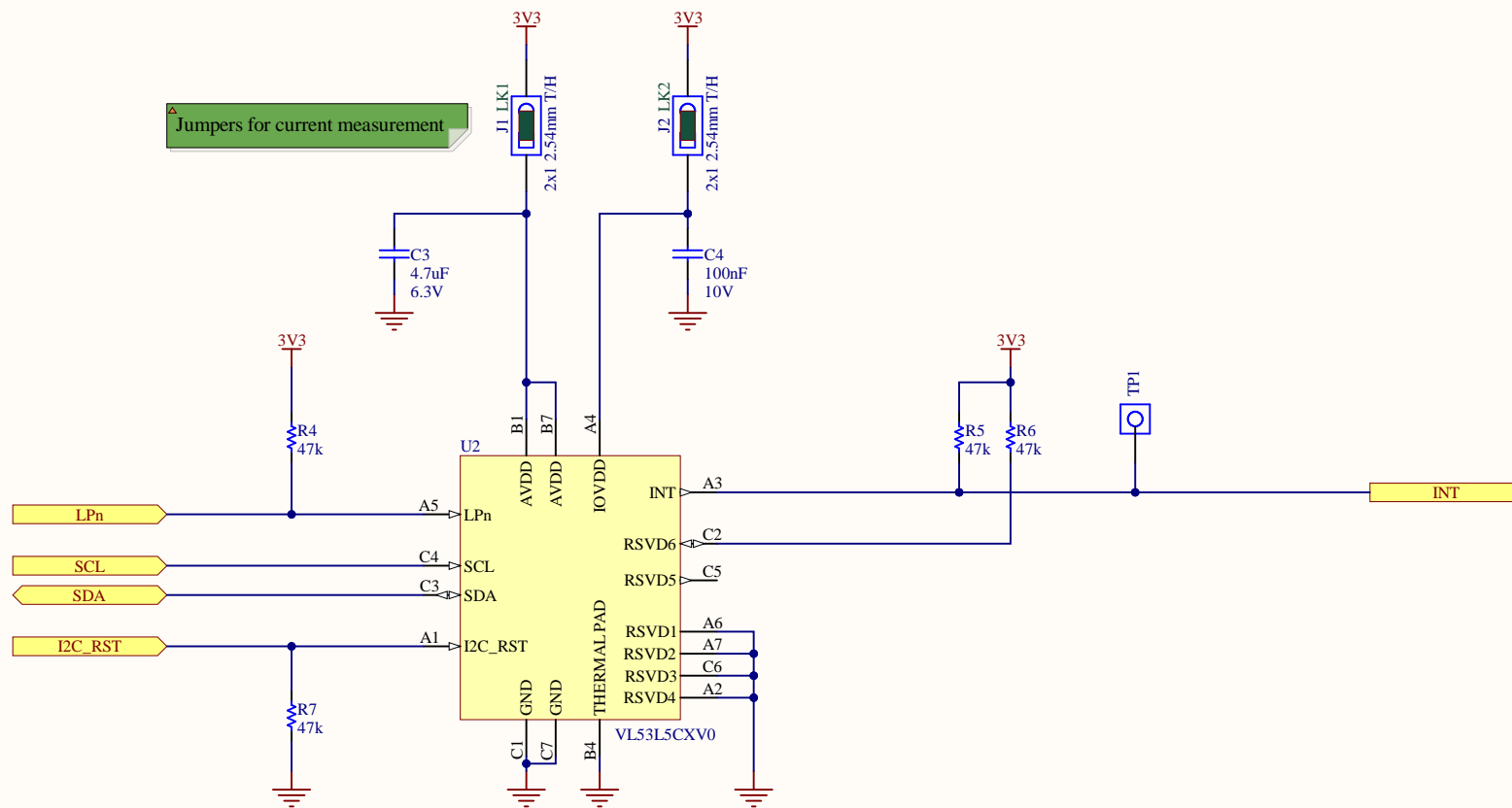
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Dwg. No:
PCB4108

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Ver:
009

SHEET 2 OF 6
Variant:
00C



AVDD and IOVDD power supply for main sensor
 Max Current = 60 mA + 90 mA = 150 mA
 Power = 1.7 V x 150 mA = 255mW
 Satellite boards supplied directly from host power supplies



Jumpers for current measurement



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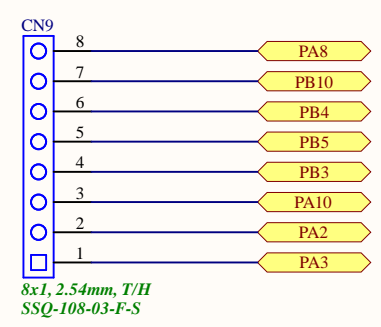
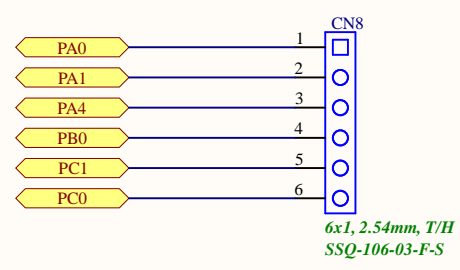
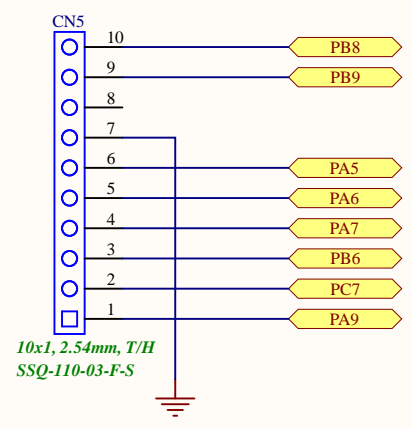
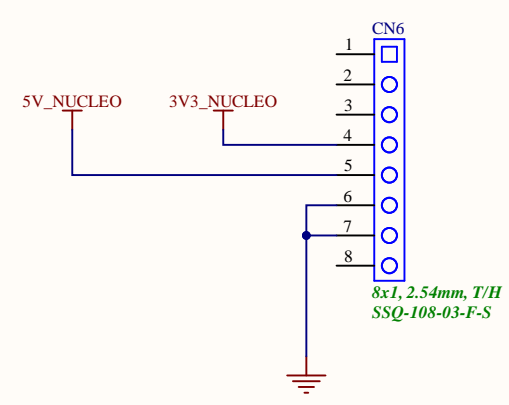
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Drawn By:
Dwg. No:
PCB4108

Date:
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Rev:
A
Ver:
009

SHEET 3 OF 6
Variant:
00C

Nucleo Arduino Connectors



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Design Name: PCB4108A; X-NUCLEO-53L5A1.PrjPcb

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SHEET 4 OF 6

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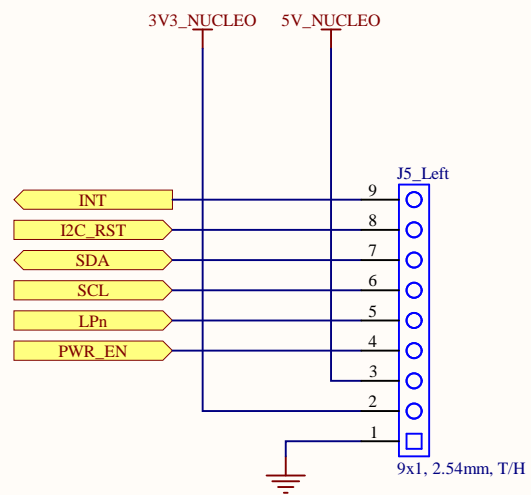
Sheet Name: Host.SchDoc

Dwg. No: PCB4108

Rev: A

Ver: 009

Variant: 00C



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Design Name:
PCB4108A; X-NUCLEO-53L5A1.PrjPcb

Sheet Name:
Satellite Connector.SchDoc

Drawn By:

Dwg. No:
PCB4108

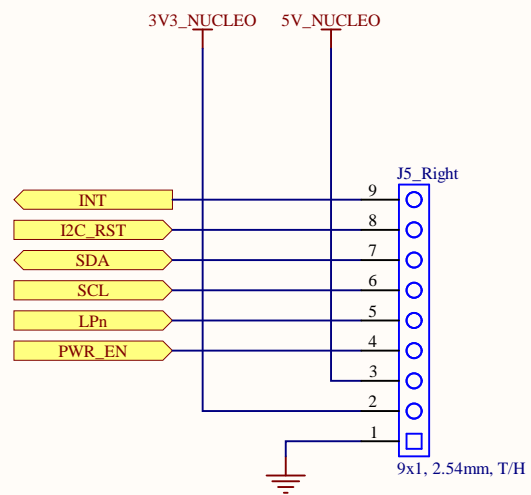
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Ver:
009

SHEET 5.1 OF 6

Variant:
00C



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Sheet Name:
Satellite Connector.SchDoc

Drawn By:
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Date:
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009

SHEET 5.2 OF 6
Variant:
00C