

# PCB4108A; X-NUCLEO-53L5A1.PrjPcb

X-NUCLEO-53L5A1

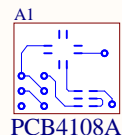
PCB4108

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	David WARDLE	Initial Draft
11/01/2021	001	David WARDLE	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	David WARDLE	Changed I2Cn_RIGHT_3V3 from Port PB6 to Port PA9 Reduced design complexity, affecting several components, nets and sheets.
16/01/2021	003	David WARDLE	Pullup resistor on LDO regulator connected to 3V3_NUCLEO
18/01/2021	004	David WARDLE	Signals on Satellite board connectors re-ordered
19/01/2021	005	David WARDLE	Solder bridges on satellite connectors removed
25/01/2021	006	David WARDLE	Satellite connectors changed to 9-pin
26/01/2021	007	David WARDLE	Satellite connectors' nets reordered to aid layout
31/03/2021	008	David WARDLE	Variant 00B Host connectors, CN5, CN6, CN8 and CN9 changed to shorter pin versions
29/04/2021	009	David WARDLE	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:  
David WARDLE

Dwg. No:  
PCB4108

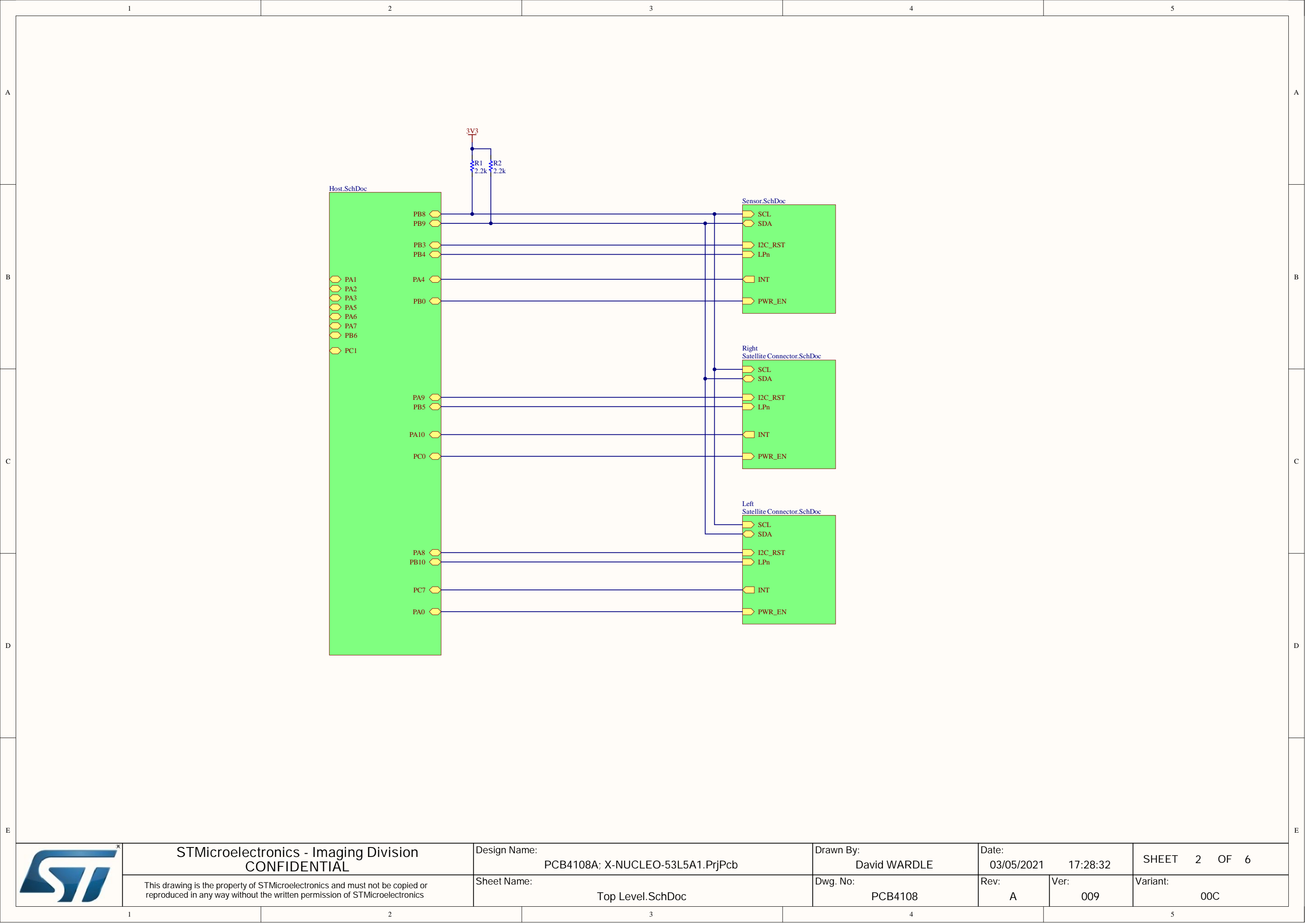
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Rev:  
A

Ver:  
009

SHEET 1 OF 6

Variant:  
00C



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Sheet Name:  
Top Level.SchDoc

Drawn By:  
David WARDLE

Dwg. No:  
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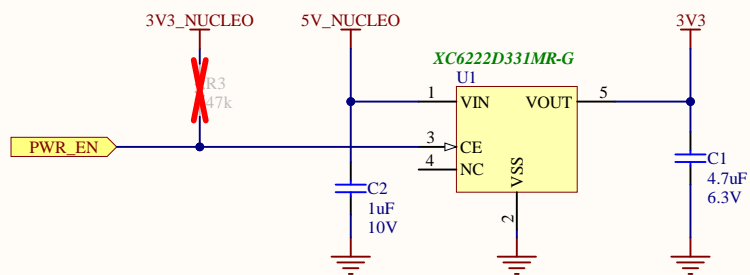
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Rev:  
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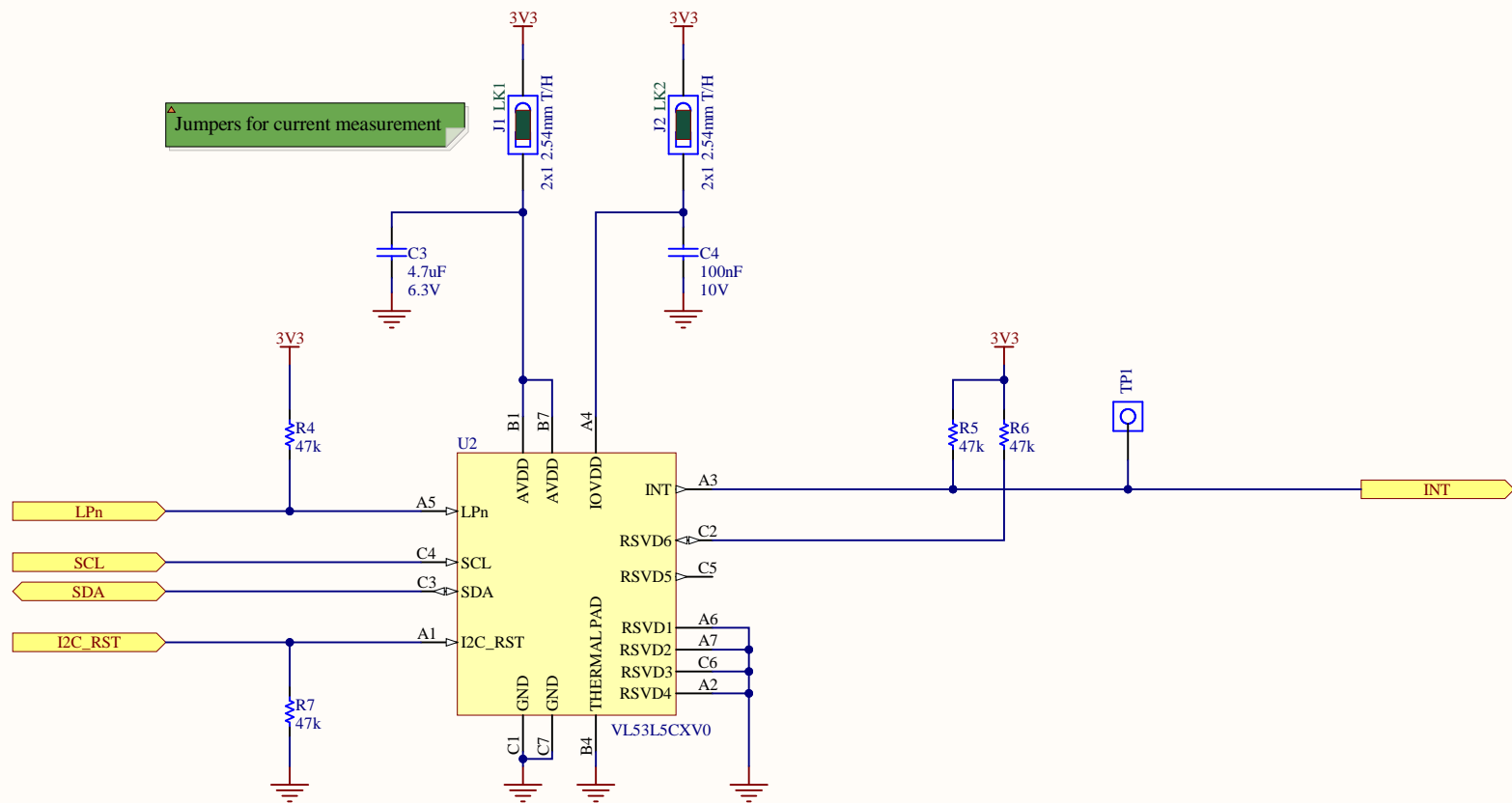
Ver:  
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SHEET 2 OF 6

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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Sheet Name:  
 Sensor.SchDoc

Drawn By:  
 David WARDLE

Dwg. No:  
 PCB4108

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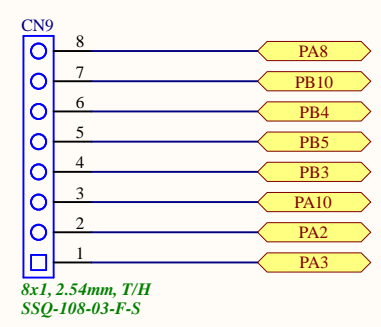
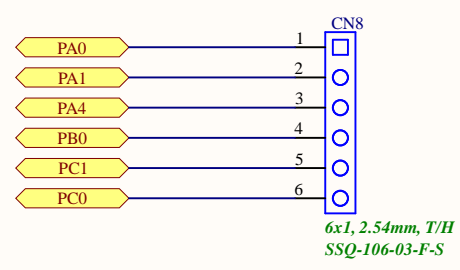
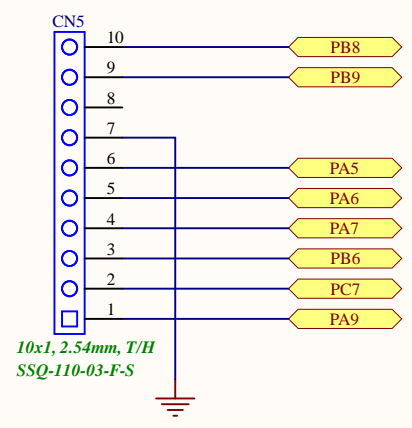
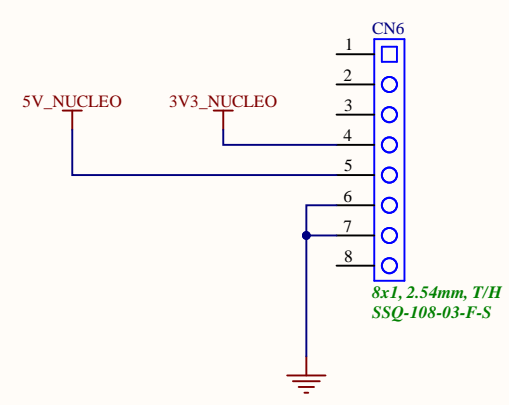
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 009

SHEET 3 OF 6

Variant:  
 00C

### Nucleo Arduino Connectors



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

Sheet Name:  
Host.SchDoc

Drawn By:  
David WARDLE

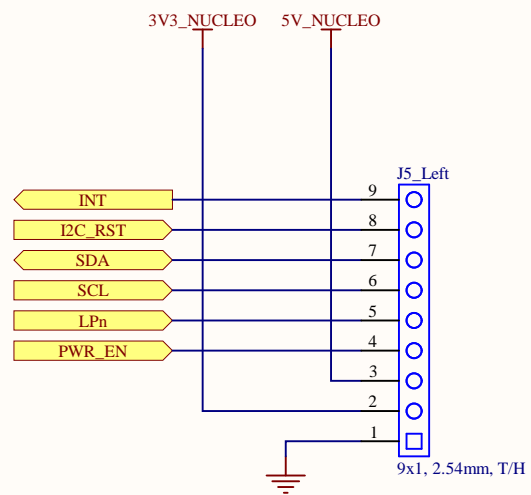
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SHEET 4 OF 6

Variant:  
00C



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Design Name:  
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Sheet Name:  
Satellite Connector.SchDoc

Drawn By:  
David WARDLE

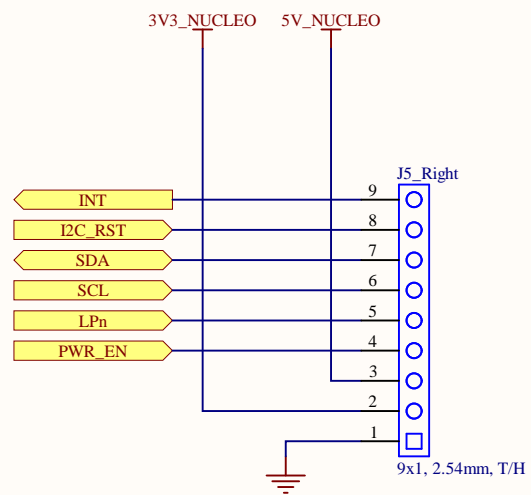
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Rev: A Ver: 009

SHEET 5.1 OF 6

Variant: 00C



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Satellite Connector.SchDoc

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009

SHEET 5.2 OF 6

Variant:  
00C