

EK-ST50 User Guide



AcSiP Technology Corp.

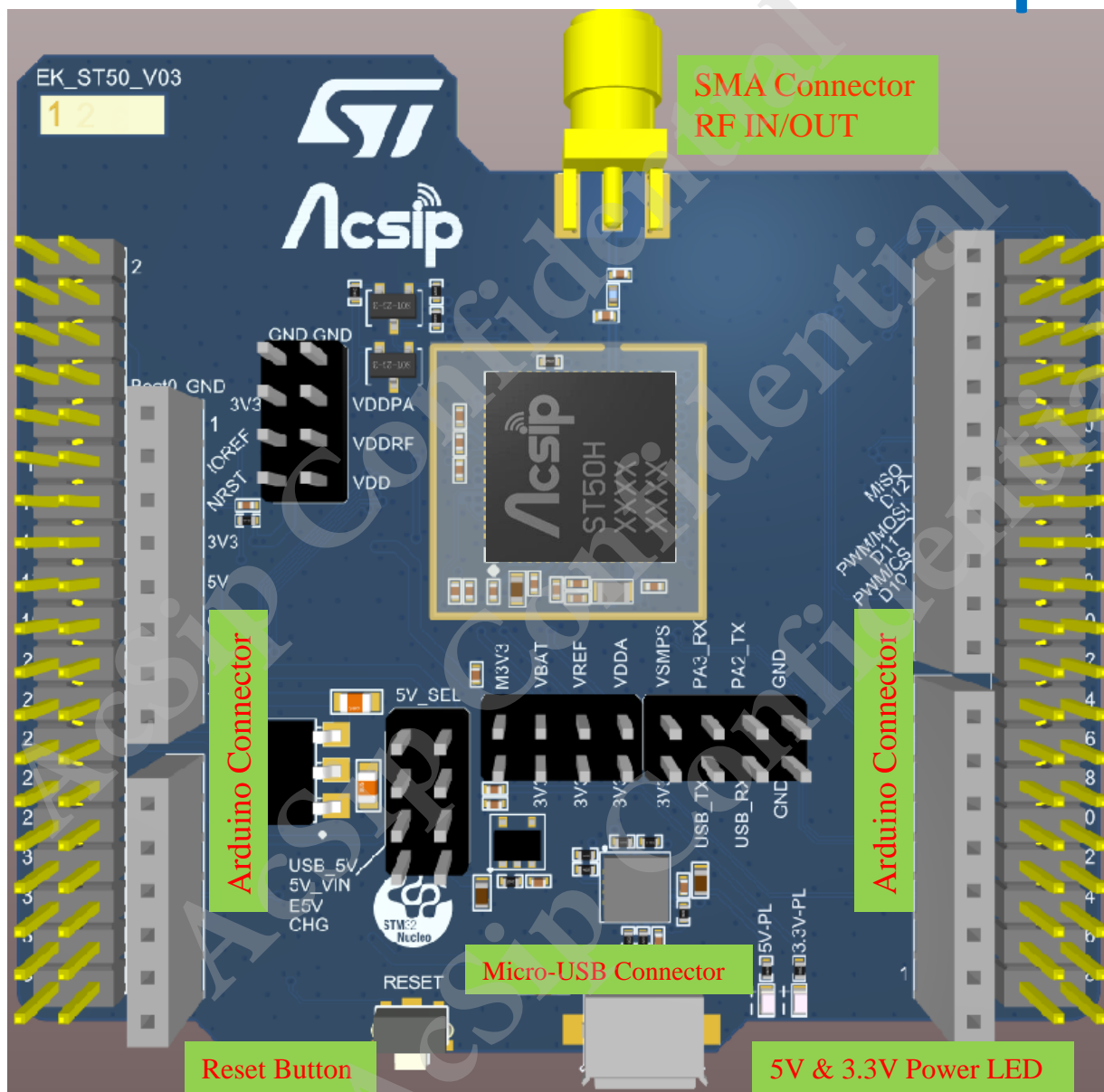
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Doc No : 912-12602

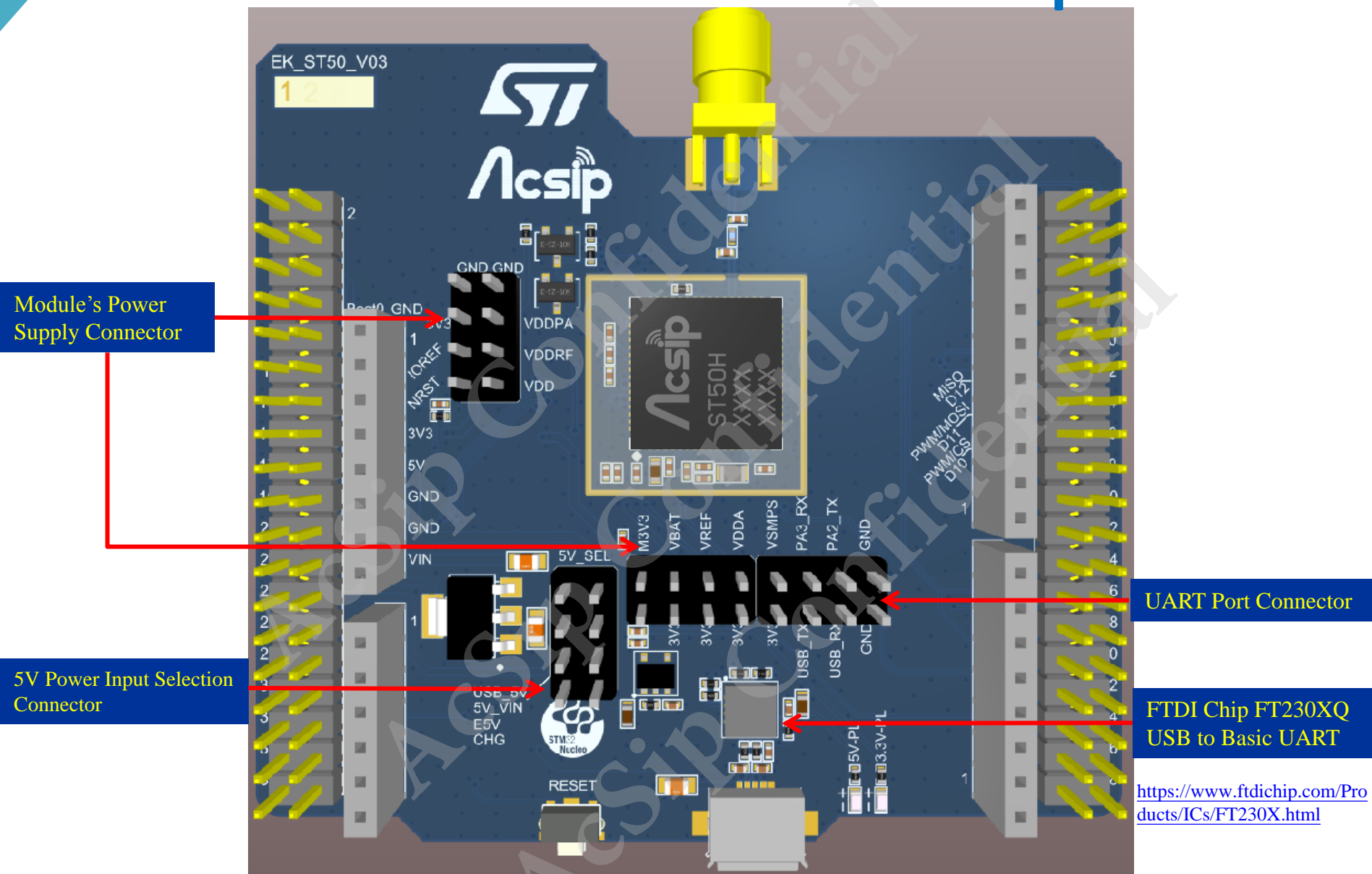
Ver. : G

Date: 2023/07/31

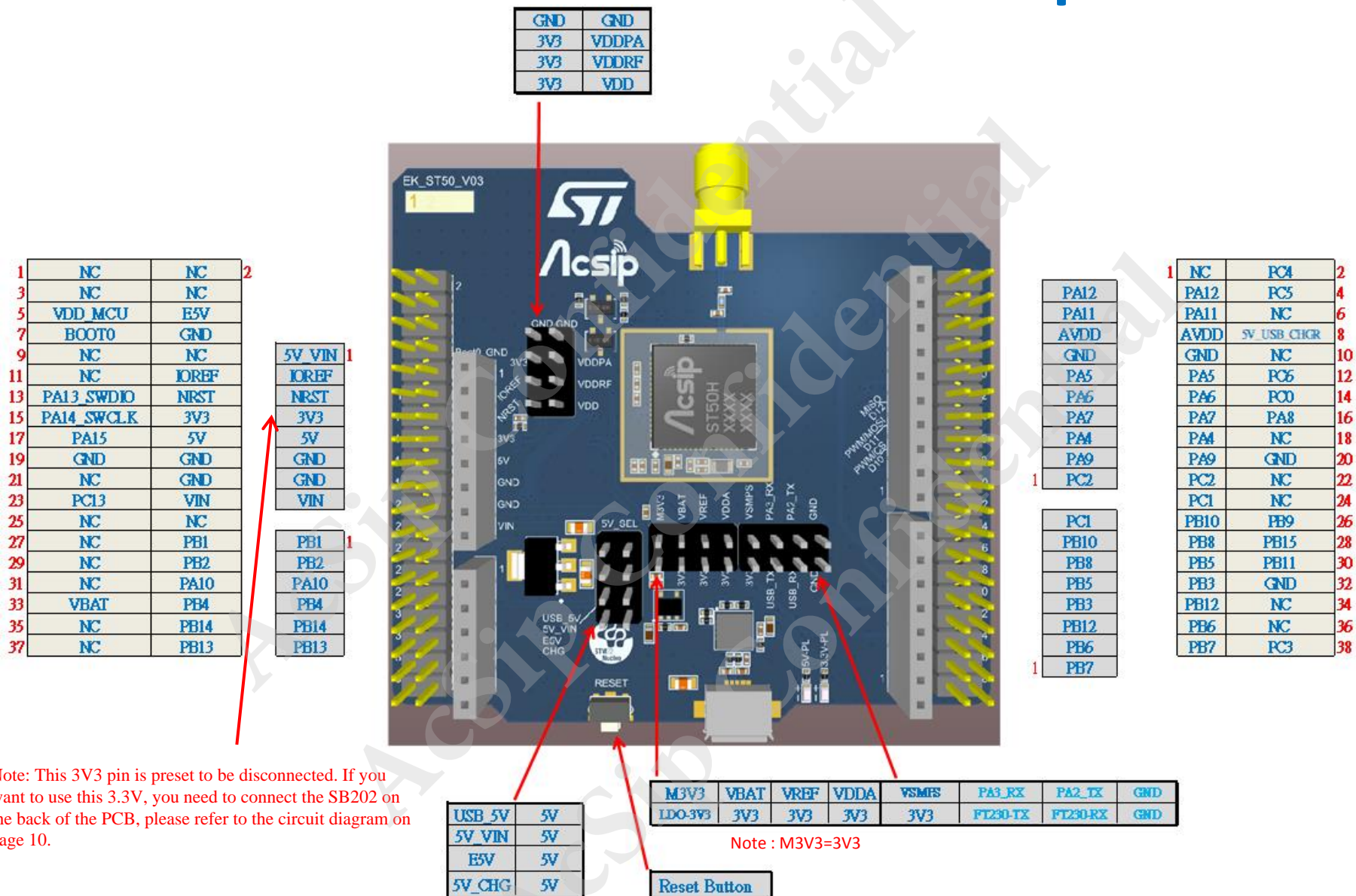
EK-ST50 PCB Connector Description



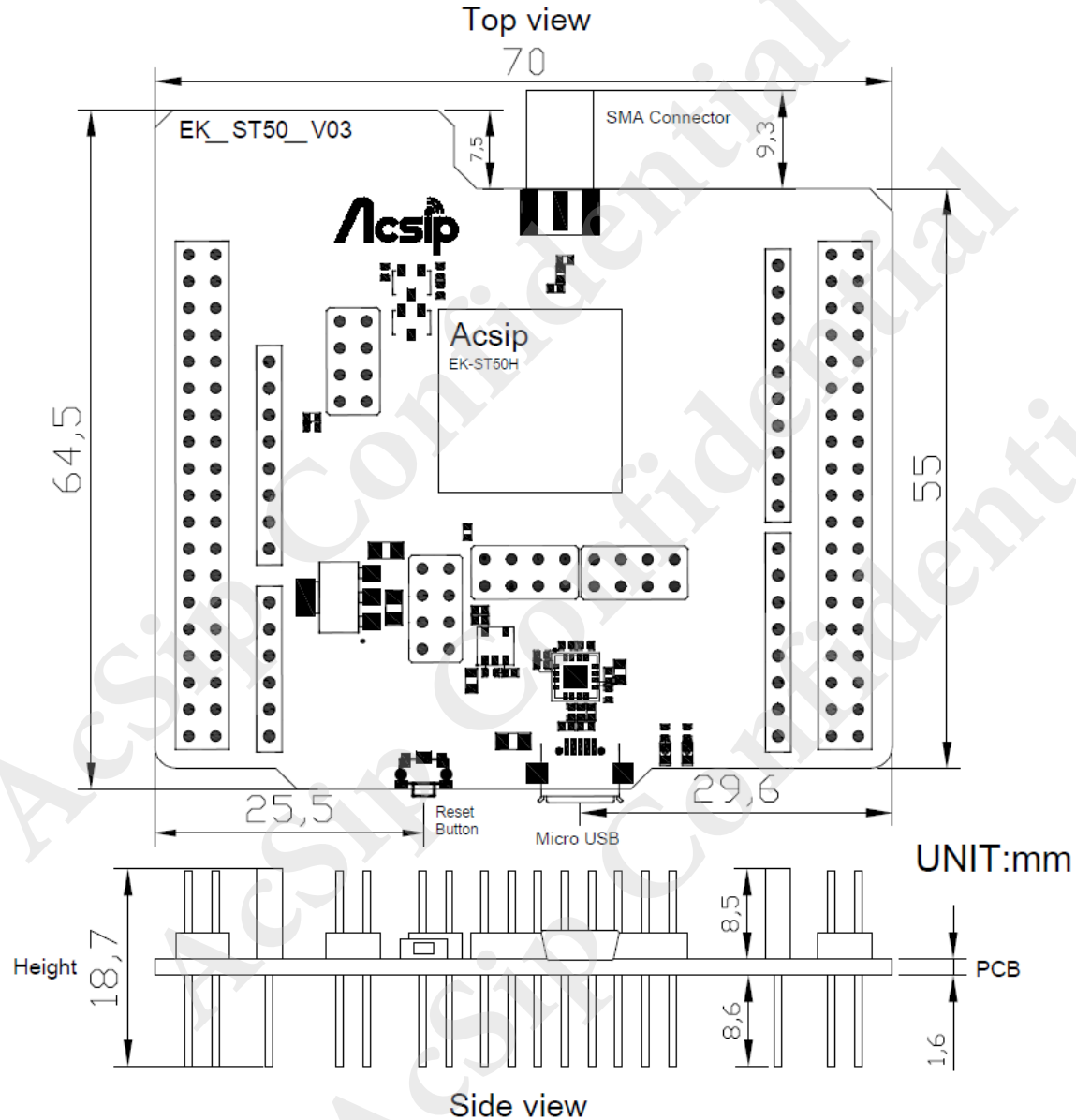
EK-ST50 PCB Connector Description



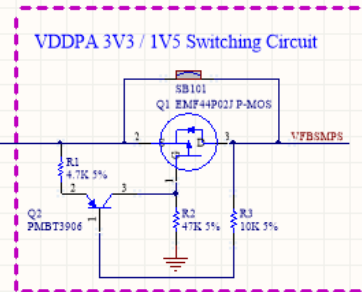
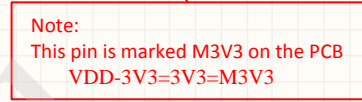
EK-ST50 PCB Connector Description



EK-ST50 PCB Dimension



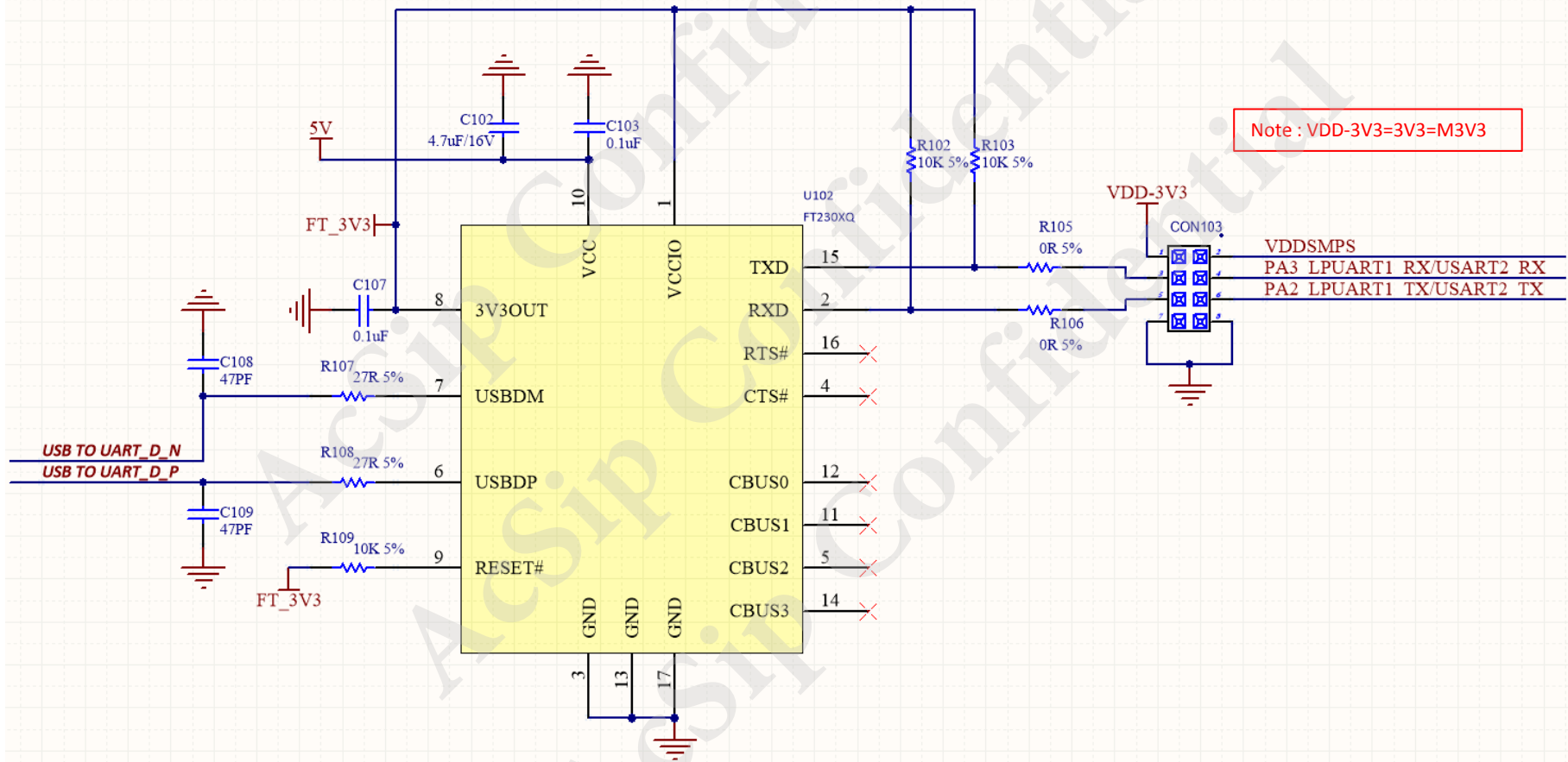
Module peripheral circuit Diagram



EK-ST50 Schematic Diagram

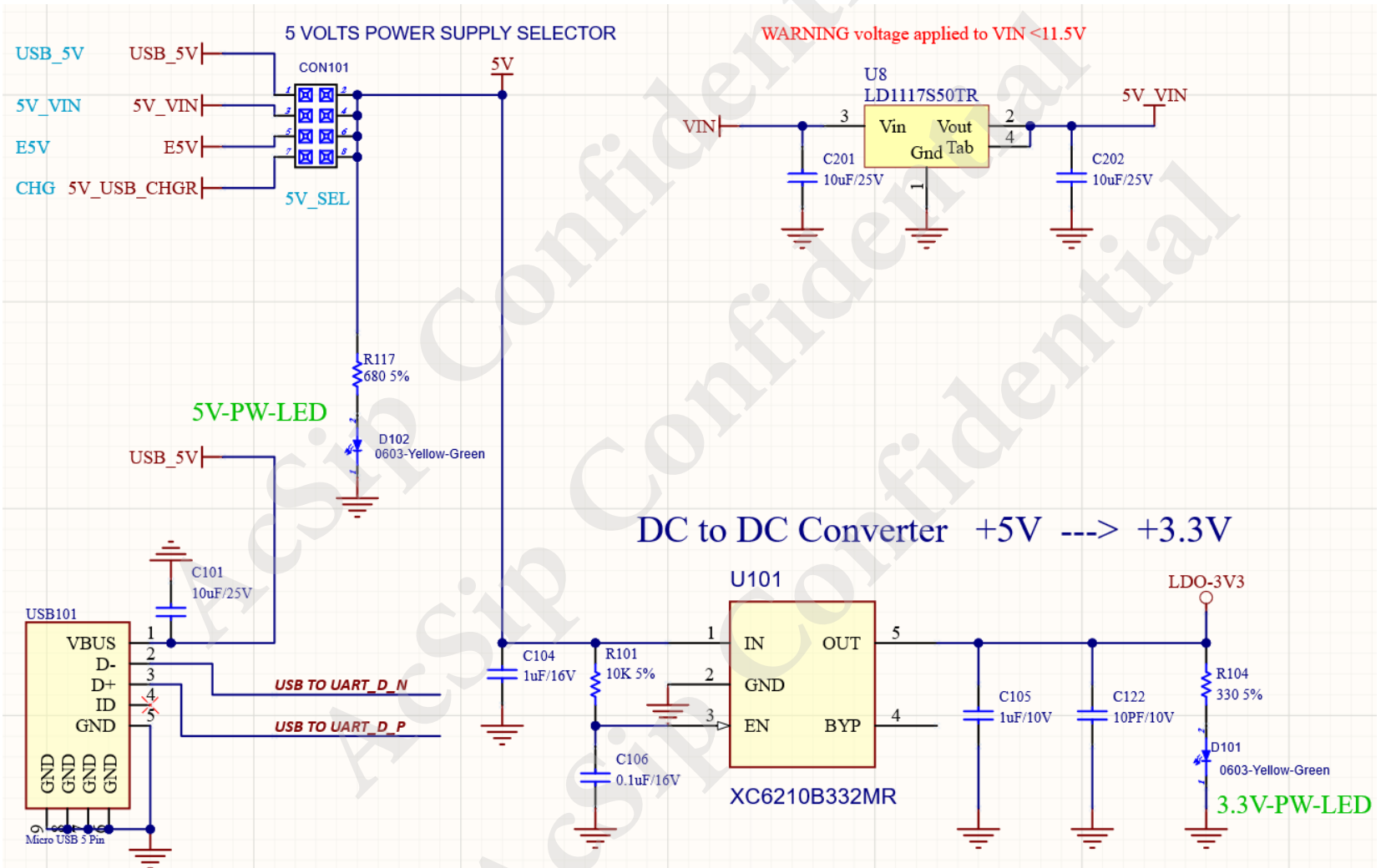
USB to UART Circuit Diagram

Uart to USB



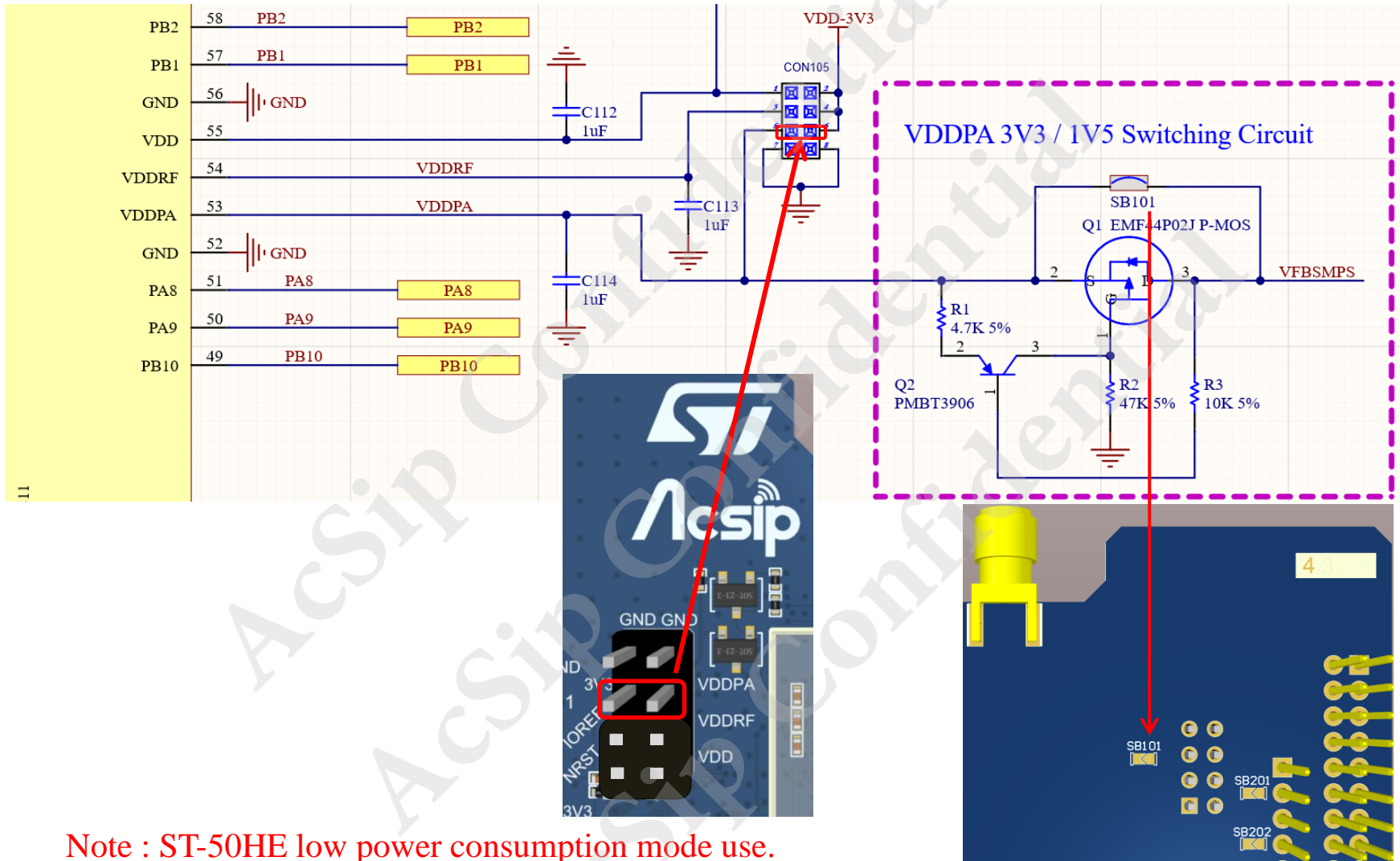
EK-ST50 Schematic Diagram

Power Supply Circuit Diagram



EK-ST50 Schematic Diagram

VDDPA Switching Circuit Diagram

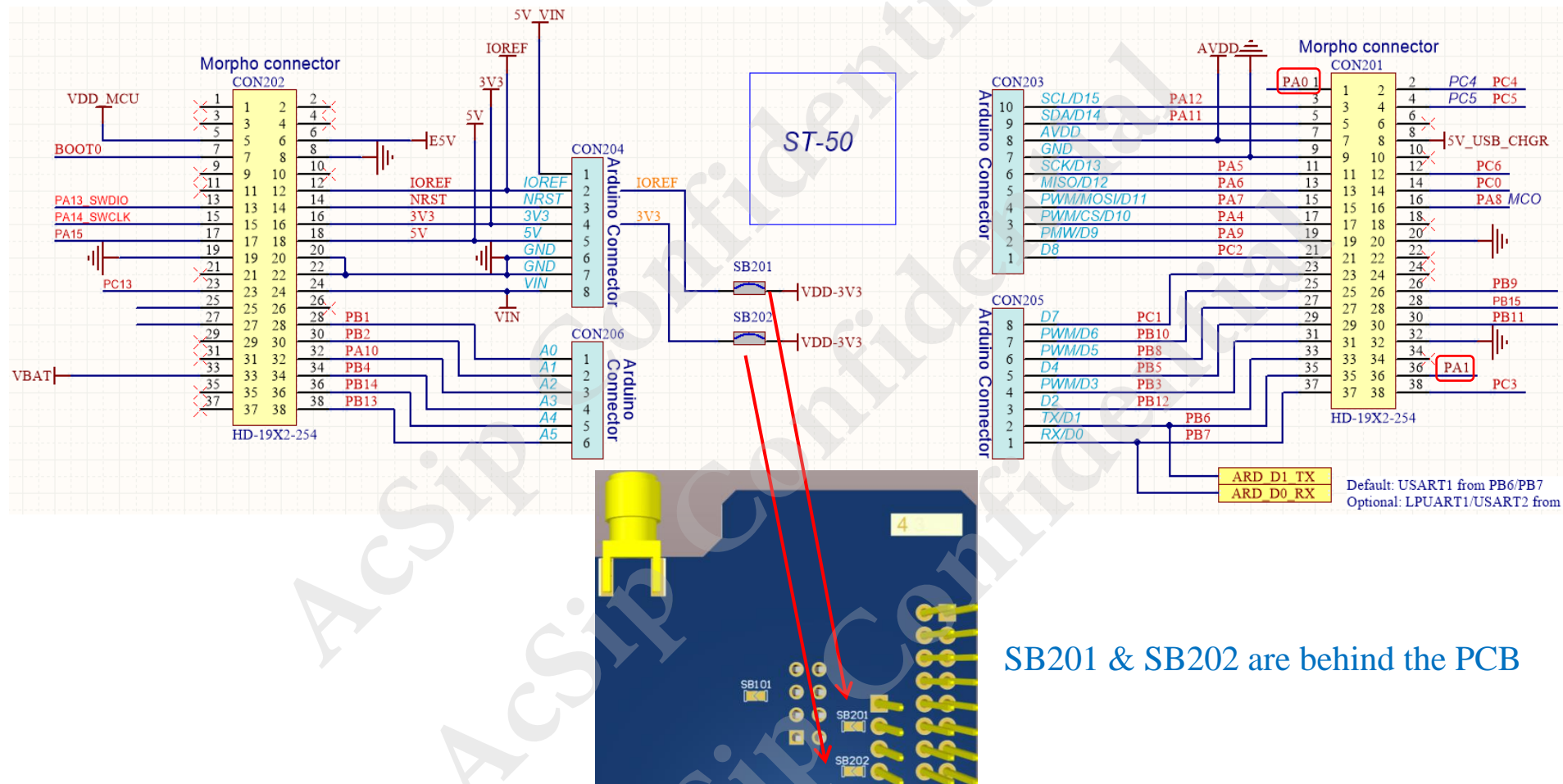


Note : ST-50HE low power consumption mode use.
(Jumper must be remove)

SB101 is behind the PCB

EK-ST50 Schematic Diagram

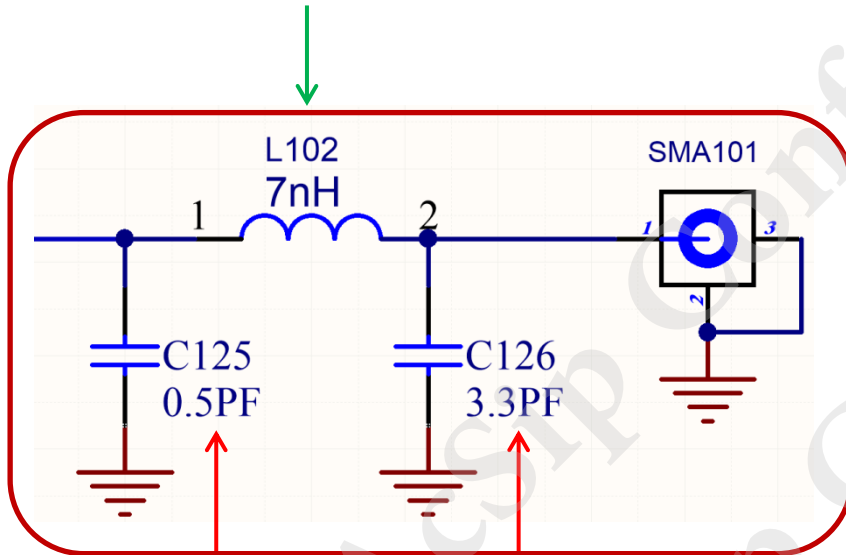
Pin definition Circuit Diagram



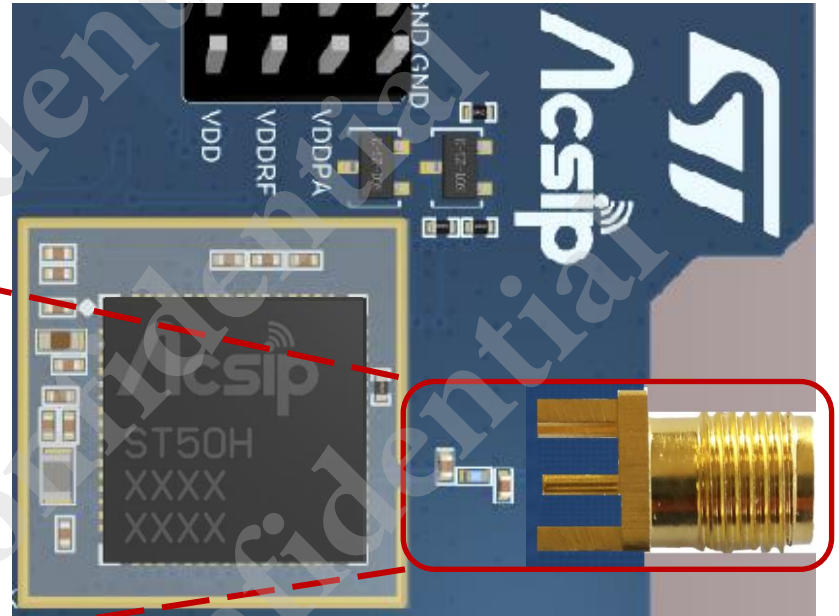
Note : The PA0 and PA1 pins in ST50H have been controlled by Acsip's software , So these two pins on the PCB are NC pins.

Low-Pass Filter Circuit for EMI Test

Inductor : Murata LQW15AN7N0G00



Capacitor : Murata GRM1555C1HR50BA01D
GRM1555C1H3R3CA01D



The screwed and glue-fixed antenna to connect on the SMA connector and provided in the blister is Antenna (RFA-08-C58-U-B70) from ARISTOTLE company.

This antenna have been used for the FCC/CE certifications.

This antenna must be used as a reference antenna for radiation test on EK-ST50 board.

Antenna Specifications

ARISTOTLE
ENTERPRISES INC.

Specifications

RFA-08-C58-U-B70

Specifications

Frequency range	863 –928 MHz
Peak gain	1.6dBi
Average gain	0.8dBi
VSWR	2.5 : 1 Max.
Polarization	Linear, vertical
Impedance	50 Ω
Connector	SMA PLUG

Environment & Mechanical Characteristics

Temperature	- 10°C to +55°C
Humidity	95% @ 25°C

