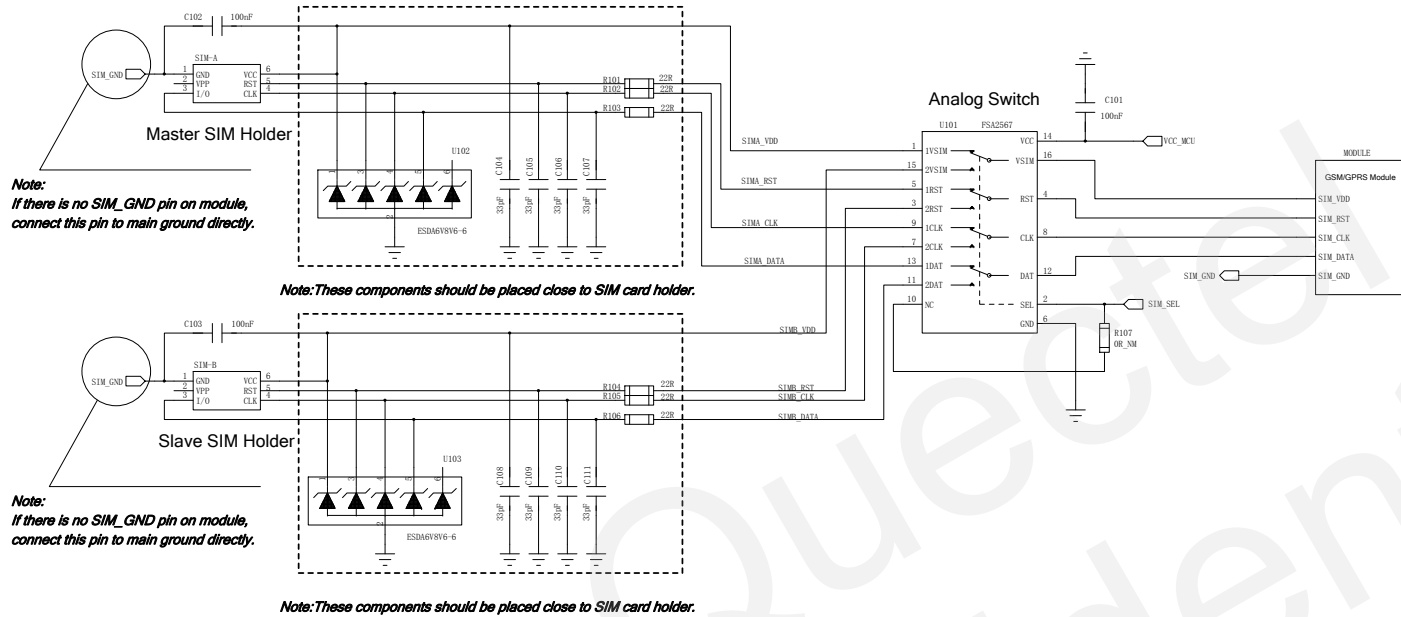


## Solutions for Dual SIM Card Switch



### Notes for SIM Card Layout

1. Place SIM card holder to the module as close as possible.  
Ensure the trace length of SIM signals do not exceed 200mm.
2. Keep the SIM signals far away from VBAT power and RF trace.
3. The width of SIM\_VDD and SIM\_GND trace is not less than 0.5mm.  
Place a bypass capacitor that less than 1uF close to SIM card power pin.
4. To avoid cross talk between SIM\_DATA and SIM\_CLK, keep them away from each other and shield them with ground.  
Furthermore, the SIM\_RST should also be protected with ground.
5. In order to ensure good ESD performance, it is recommended to place a TVS array such as ESDA6V8AV6 as close to the card holder as possible.  
The capacitance of ESD component should be less than 50pF.
6. The 22Ω resistors should be added in series between the module and the SIM card so as to suppress the stray EMI for enhancing ESD protection.  
Place the RF bypass capacitors (33pF) close to the SIM card holder on all signals line for improving EMI.

#### Notes:

- 1) The power supply range of FSA2567 is 1.65~4.3V.
- 2) SIM\_SEL is controlled by MCU.
- 3) The power supply of VCC\_MCU is same as the power of MCU.
- 4) When using analog switch FSA2567, the R107 needs not to be soldered.  
If the analog switch NLAS3699 or STG3699 is used, the R107 should be soldered.

Truth Table of Analog Switch

SEL	Function
Low	1VSIM=VSIM, 1RST=RST, 1CLK=CLK, 1DAT=DAT
High	2VSIM=VSIM, 2RST=RST, 2CLK=CLK, 2DAT=DAT

### Analog Switch Component Recommendation

Manufacturer	Part Number	Note
Fairchild	FSA2567MPX	Compatible footprint
ON Semi	NLAS3699MN1R2G	
ST	STG3699QTR	

## Quectel Wireless Solutions

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