

QUICK GUIDE

VIA SOM-9X35 Starter Kit



1. Packing List

Items for STK-SOM935-00A0

- 1 x VIA SOM-9X35 Module
- 1 x VIA VAB-935 Carrier Board
- 1 x LCD Module + Touch screen
- 1 x Wi-Fi Antenna
- 1 x 4-pin FFC Cable
- 1 x AC Adapter
- 1 x Camera Module
- 2 x Speaker
- 1 x Microphone
- 1 x RTC Battery
- 1 x USB to UART Debug Board
- 5 x M3*10 mm Bolts
- 5 x M3*20 mm Bolts
- 2 x M2*4 mm Screws



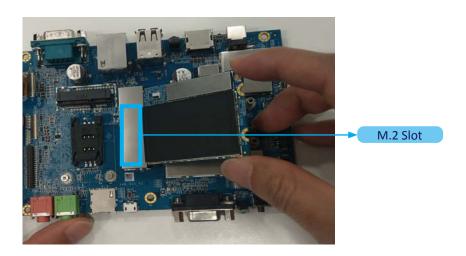


2. Starter Kit Assembly

2.1 Installing the VIA SOM-9X35 Module on the Carrier Board

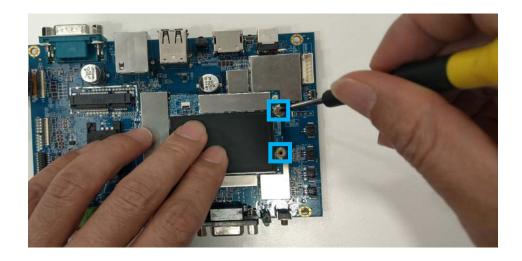
Step 1

Align the VIA SOM-9X35 module's notch with the notch of the M.2 slot located on the VIA VAB-935 carrier board's top side and insert the VIA SOM-9X35 module at a 30° angle.



Step 2

Once the VIA SOM-9X35 module has been fully inserted, gently push down the module until its standoff holes align with the carrier board's screw holes and secure the module with the two M2*4 mm screws provided.







Screws inserted to secure SOM-9X35 Module on Carrier Board

2.2 Connecting the Wi-Fi Antenna

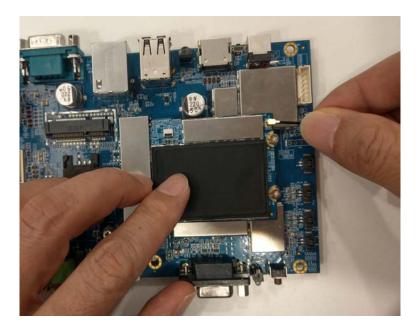
Insert the Wi-Fi antenna cable's plug connector into the J1 RF micro-miniature coaxial connector located on the VIA SOM-9X35 module.

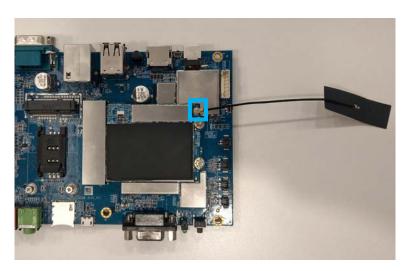


J1 RF Micro-Miniature Coaxial Connector











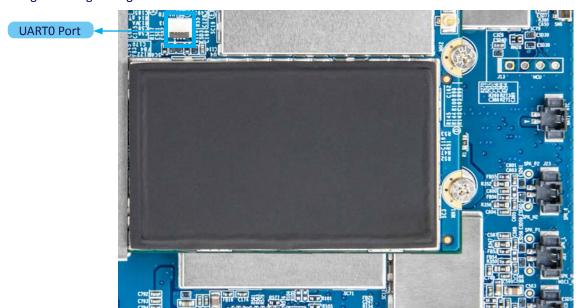
Reminder:

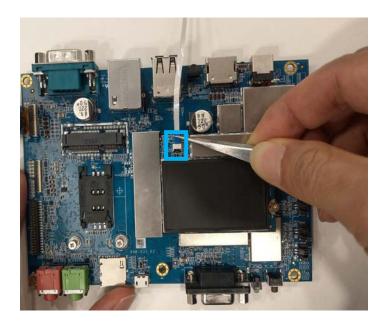
We recommend using a Jig when mating or unmating the plug connector to and from the J1 micro-miniature RF connector on the VIA SOM-9X35 module. For more details, refer to <u>Appendix A</u>.



2.3 Connecting the USB to UART Debug Board

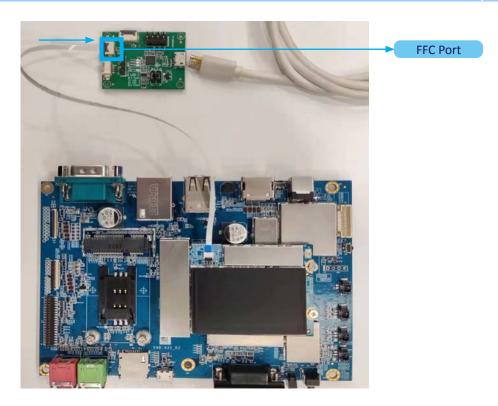
Insert one plug connector of the 4-pin FFC cable into the J3 port labeled 'UARTO' on the VIA SOM-9X35 module, ensuring that the gold finger of the FFC cable faces down





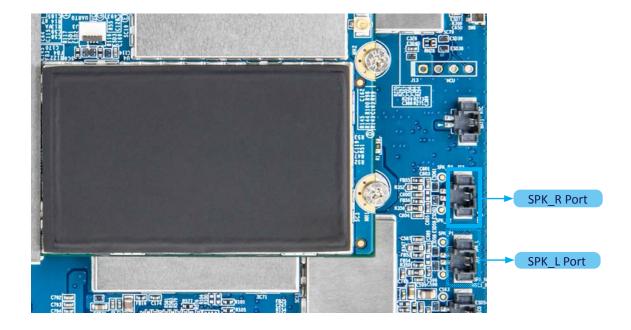
Insert the other plug connector of the 4-pin FFC cable into the 4-pin FFC port located on the USB to UART debug board, ensuring that the gold finger of the FFC cable faces down.





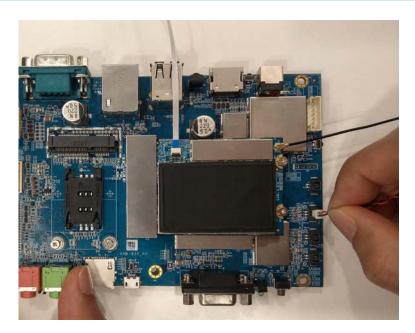
2.4 Connecting the Speakers

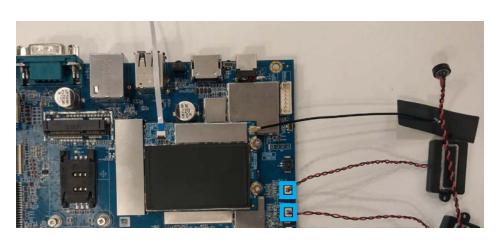
Insert the 1st speaker's plug connector into the 2-pin J22 port labeled 'SPK_L' on the carrier board's top side. Insert the 2nd speaker's plug connector into the 2-pin J23 port labeled 'SPK_R' on the carrier board's top side.







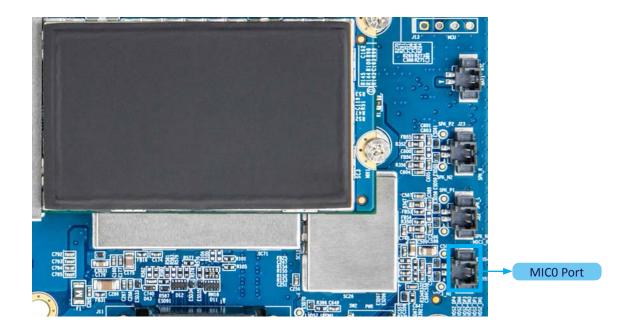






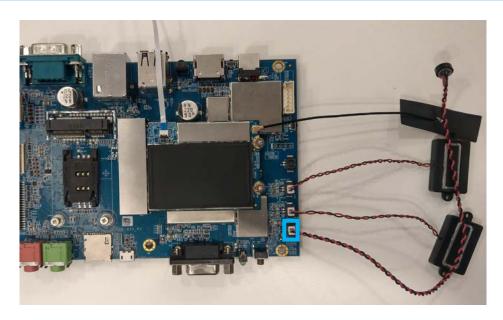
2.5 Connecting the Microphone

Insert the microphone's plug connector into the 2-pin J20 port labeled 'MICO' on the carrier board's top side.



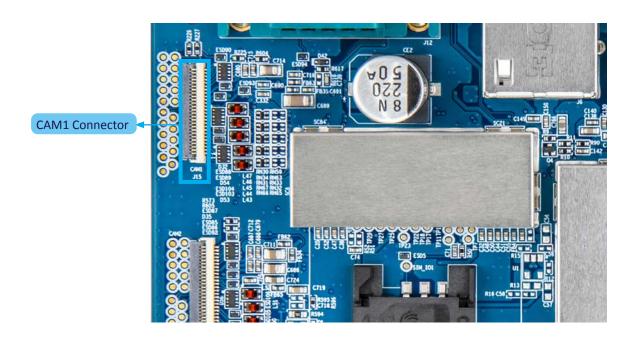






2.6 Connecting the Camera Module

Insert the camera module's plug connector into the J15 connector labeled 'CAM1' on the carrier board's top side, ensuring that the gold finger of the camera module's plug connector faces down.





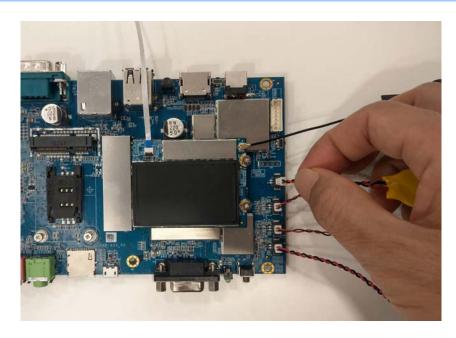


2.7 Connecting the RTC Battery

Insert the RTC battery's plug connector into the 2-pin port labeled 'BAT1' located on the carrier board's top side.

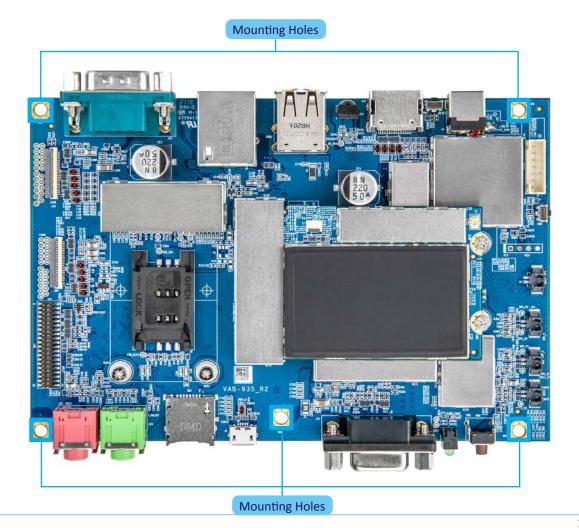




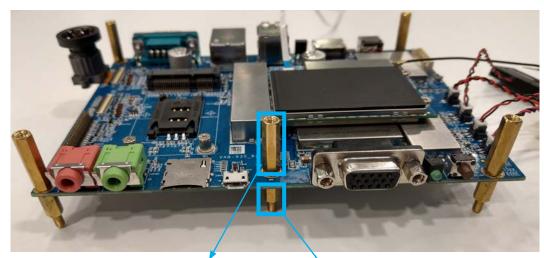


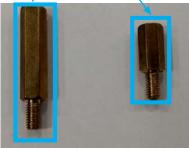
2.8 Secure the VIA SOM-9X35 Carrier Board

Keeping the carrier board's top side facing up, insert the M3*20mm bolts into the 5 mounting holes from above and insert the M3*10mm bolts into the 5 mounting holes from below.









2.9 Connecting the LCD Module and Touch Screen Panel

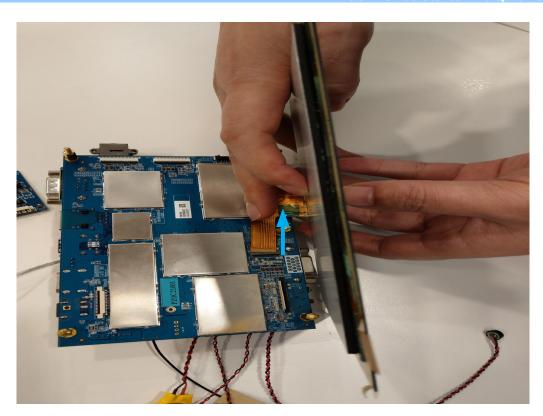


Caution:

To prevent the LCD Touch Panel's metal shell from shorting PCBA pins below, it is highly recommended to apply insulation mylar or a piece of paper pasting on the LCD Touch Panel's metal shell before connecting the LCD Touch Panel's plug connector to the carrier board.

Insert the plug connectors of the LCD module and touch screen panel into the J8 and J9 ports respectively. The ports are located on the bottom side of the carrier board. While connecting the LCD module to the carrier board, ensure that its connector cable's gold finger faces up.





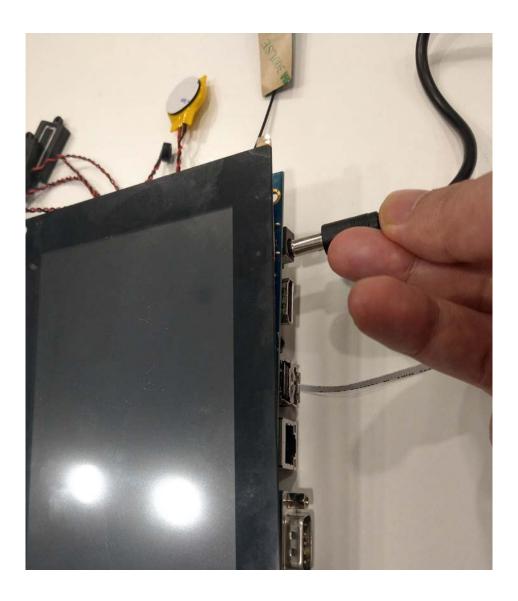
While connecting the touch screen panel to the carrier board, ensure that its connector cable's gold finger faces inward.





2.10 Connecting the AC Adapter

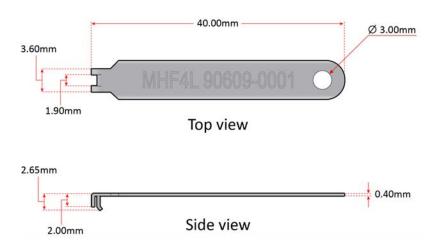
Connect the AC adapter to the LCD Touch Panel's DC-in jack located on the panel's side to supply power to the assembled VIA SOM-9X35 starter kit.





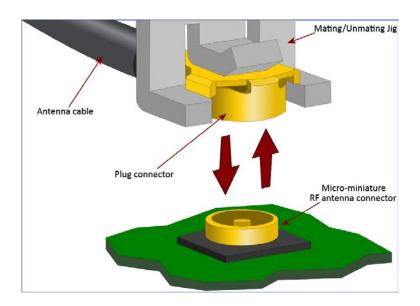
Appendix A Recommended Mating/ Unmating Jig

A.1 Jig Dimensions



A.2 Mating Method of Plug Connector

Using the jig, align the plug connector with the micro-miniature RF antenna connector. Then push down gently until the plug connector is fully connected. The recommended force is 30N (maximum).







Taiwan Headquarters

1F, 531 Zhong-zheng Road, Xindian Dist., New Taipei City 231 Taiwan

Tel: 886-2-2218-5452 Fax: 886-2-2218-9860 Email: embedded@via.com.tw



USA

940 Mission Court Fremont, CA 94539, USA

Tel: 1-510-687-4688 Fax: 1-510-687-4654 Email: embedded@viatech.com



3-15-7 Ebisu MT Bldg. 6F, Higashi, Shibuya-ku Tokyo 150-0011 Japan

Tel: 81-3-5466-1637 Fax: 81-3-5466-1638 Email: embedded@viatech.co.jp



China

Tsinghua Science Park Bldg. 7 No. 1 Zongguancun East Road, Haidian Dist., Beijing, 100084 China

Tel: 86-10-59852288 Fax: 86-10-59852299

Email: embedded@viatech.com.cn



Email: embedded@via-tech.eu