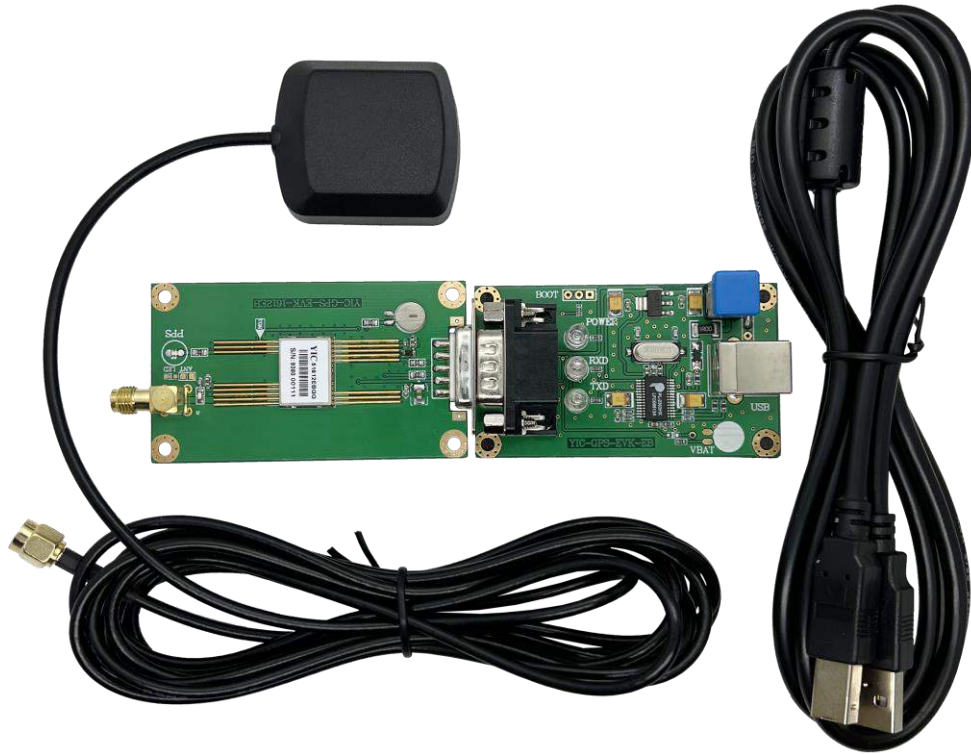


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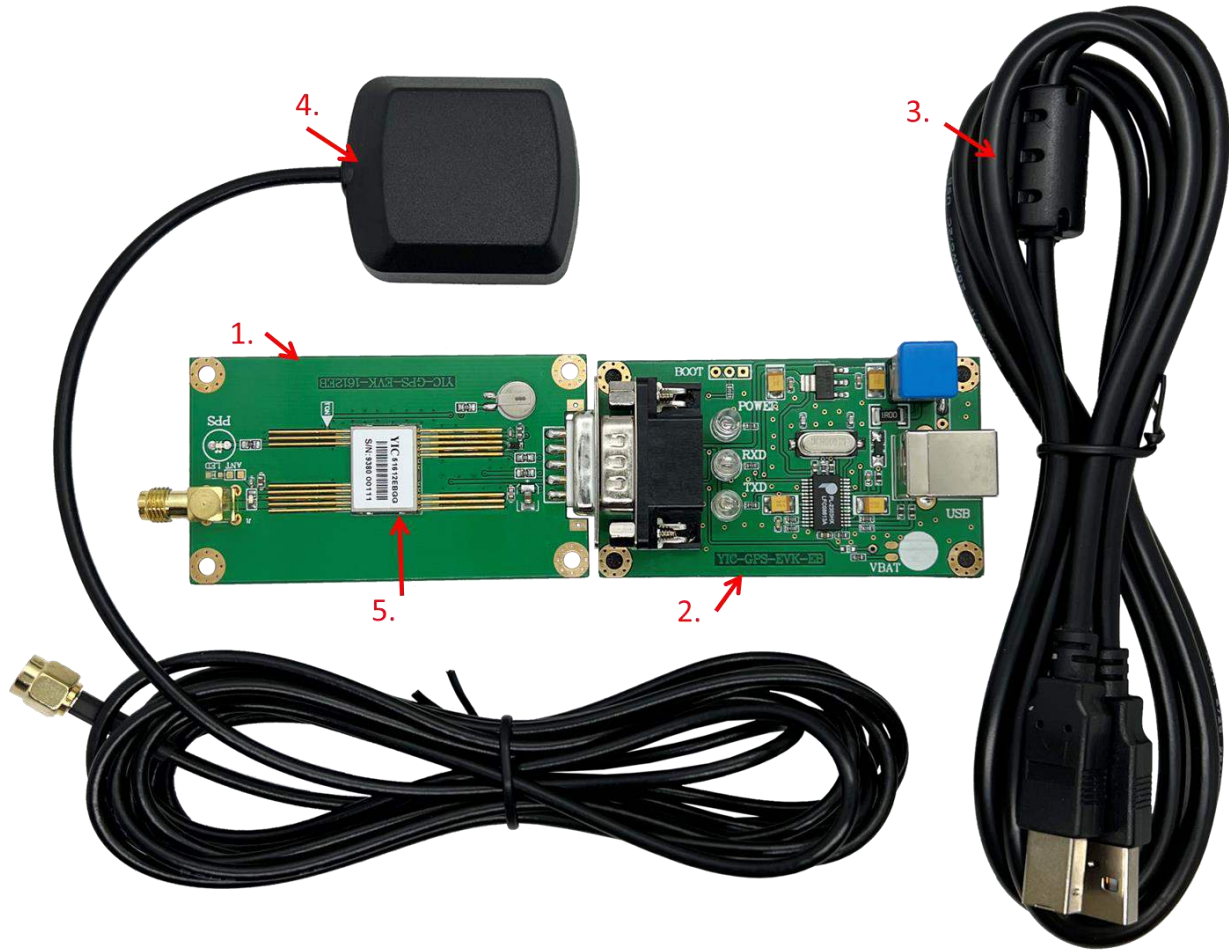


Evaluation Kit for YIC31612EB Series EVK-YIC31612EBGG

User Guide


www.yic.com.tw

1. Contents of EVK-YIC31612EBGG

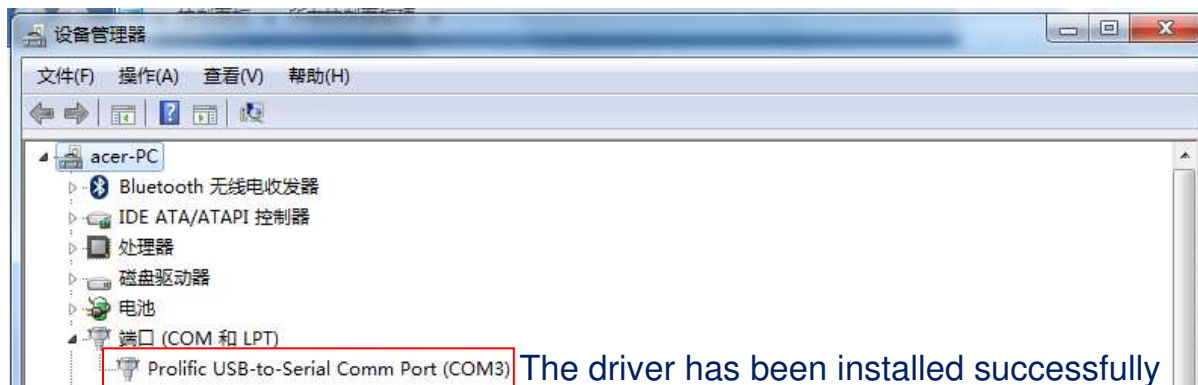


| | Item | Description |
|----|--------------------|-----------------------------|
| 1. | YIC-GPS-EVK-1612EB | Main Board |
| 2. | YIC-GPS-EVK-1612EB | Adaptor Board |
| 3. | USB Cable | USB Type B to USB Type A |
| 4. | ATGG4336M-SMA-3 | Single Band GNSS L1 Antenna |
| 5. | YIC31612EBGG | GPS+GLONASS Module |

2. Install the PL2303 USB driver to PC

 PL2303_Prolific_DriverInstaller_v1210.exe

3.1 Install the PL2303 USB driver, open the computer control panel, check the corresponding serial port.

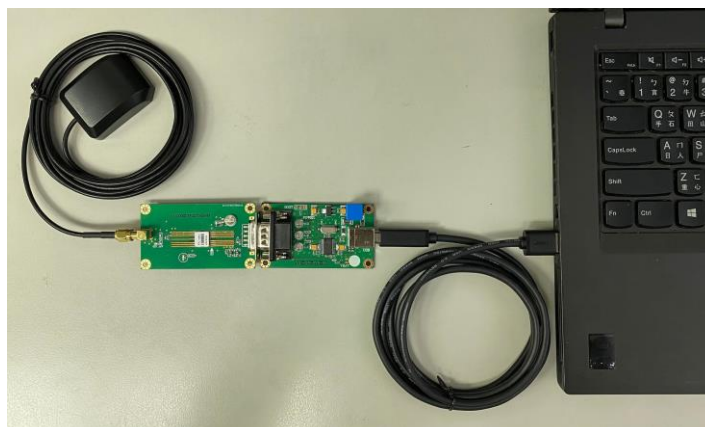


3. Connection diagram

3.1 Carefully slide the DUT GPS module into main board, pin 1 of the module corresponds to the arrow on main board.



3.2 Test connection



4. Install test software & start

4.1 For YIC31612EB series (Goke chip based)

4.1-1 Install test software: naviTrack

4.1-2 Software setting

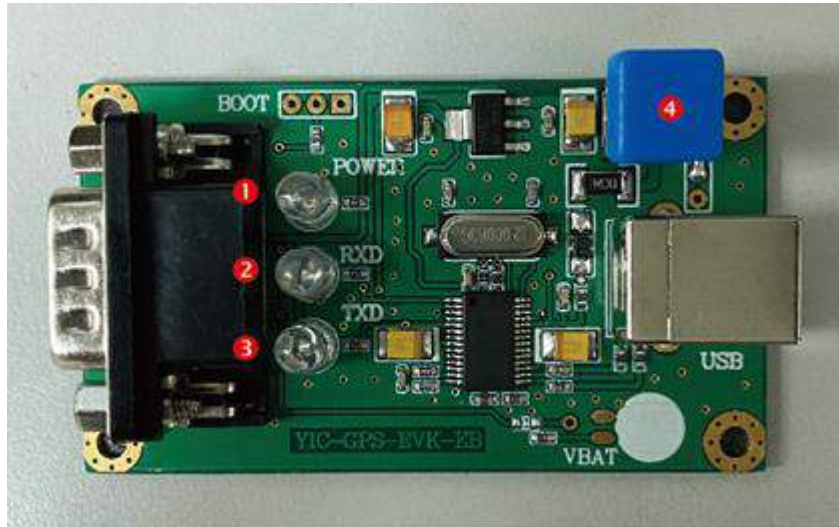
- ① Select the corresponding serial port
- ② Select the corresponding baud rate (9600 or 115200,.....)
- ③ Click Connect to start the test

The screenshot displays the naviTrack software interface with several panels and controls:

- Top Left:** Control panel with 'COM' dropdown, 'BAUDRATE' set to 9600, and 'DisConnect' button. Three red circles (1, 2, 3) highlight the COM dropdown, BAUDRATE dropdown, and the 'DisConnect' button respectively.
- Top Middle:** 'Track' panel showing 'Reference Position' with fields for 'First Lat', 'Lat', '[D] Log', '[D] Hgt', and '[m] OK'. A small green dot is visible on the track plot.
- Top Right:** 'Velocity' panel with two analog gauges. The left gauge shows 0.0000 Km/h, and the right gauge shows 250.15 W.
- Middle Right:** 'Signal' panel titled 'GNSS satellite positioning information' showing a bar chart of C/N0 vs PRN. The chart shows bars for PRNs 03, 04, 08, 16, 17, 24, 25, 31, 32, 33, 34, 35, 37, 39, 40, 41, 42, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
- Bottom Left:** 'Sky view' panel showing a circular plot of satellite positions.
- Bottom Middle:** 'NMEA info' panel displaying real-time data including UTC Time, Date, Latitude, Longitude, Altitude, and various sensor readings. A red text label 'NMEA output statement' is overlaid on the bottom of this panel.
- Bottom Right:** 'Fix mode' panel showing a plot of 'Fix Mode' vs 'Time'.

5. LED and Push Button description

5.1 Adaptor Board



- ① Red LED: POWER, always on when power on
- ② Blue LED: RXD, often light while DUT GPS module receiving data
- ③ Green LED: TXD, flash once per second when DUT GPS module start sending data
- ④ Push Button: POWER, push to power on and off the EVK

5.2 Main Board

PPS LED: Flash once per second after satellite position fixed