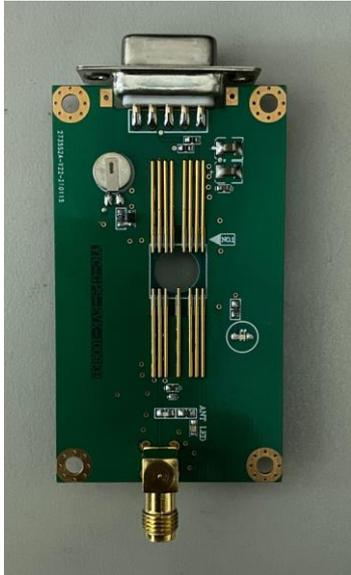
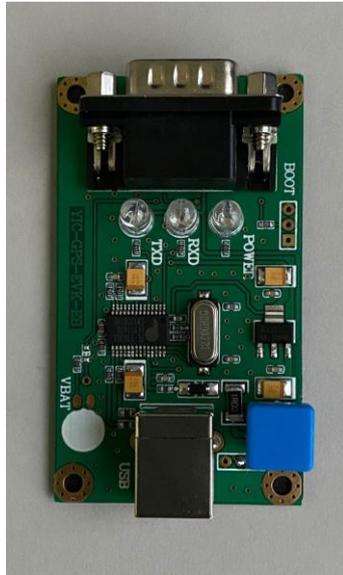


## EVK User Guide for YICx1009EB Series

### 1. Contents of EVK-1009EB



Main Board



Adaptor Board



USB Cable

### 2. Antenna Options

ATGG4336M-SMA-3 (Single Band GNSS L1)



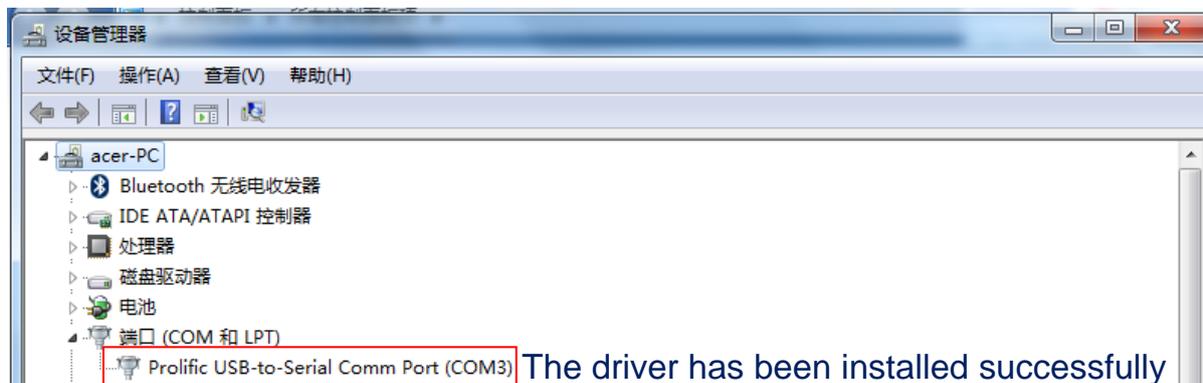
ATGGBL54138M-SMA-3 (Dual Band GNSS L1/L5)



### 3. 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.

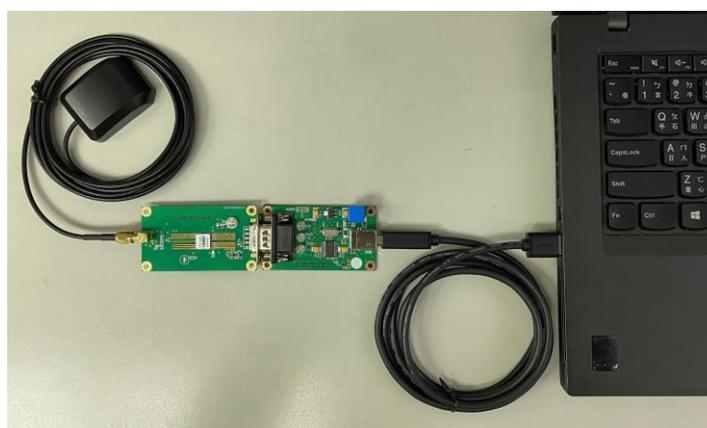


### 4. Connection diagram

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



4.2 Test connection



## 5. Install test software & start

### 5.1 For YIC51009EB series (MediaTeK chip based)

#### 5.1-1 Install test software: GNSS Viewer

#### 5.1-2 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 shows the GNSS Viewer Customer Release V2.0.120 for Venus 8 interface. The 'Positioning time' section displays the following data:

TTFF	Date	Time	Boot Status	SW Version	SW Revision
10	2021/01/27	01:29:07			

The 'UTC time' section displays the following data:

Longitude	Latitude	Altitude	Direction	Speed	Hdop
114 2' 43.17" E	22 40' 41.97" N	73.20	0.00	0.01	0.71

The 'Message' section shows NMEA output statements, with a red box highlighting the following text:

```
$GLGSV,2,2,08,79,73,174,38,80,17,202,29,83,07,22  
$GNGLL,2240.69944,N,11402.71942,E,012906.00,  
$GNRMC,012907.00,A,2240.69942,N,11402.7194,  
$GNVTG,,T,M,0.019,N,0.034,K,D*37  
$GNNGGA,012907.00,2240.69942,N,11402.71942,E,  
$GNSA,A,3,10,20,23,12,15,18,32,25,31,24,50,,1,  
$GNSA,A,3,80,84,79,78,69,,,,,1.19,0.71,0.96*1
```

The 'GPS satellite positioning information' section shows a bar chart for GPS and GLONASS satellites. Red arrows point to the 'GPS' and 'GLONASS' labels. The 'GLONASS satellite positioning information' section shows a bar chart for GLONASS satellites. Red arrows point to the 'GLONASS' label. The 'Earth View' section shows a globe with satellite positions. The 'Scatter View' section shows a scatter plot of satellite positions. The 'Command' section shows buttons for 'Hot Start', 'Warm Start', 'Cold Start', 'No Output', 'NMEA0183', 'Binary', 'Scan All', 'Scan Port', and 'Scan Baud'.

## 5.2 For YIC71009EB series (Sony chip based)

5.2-1 Install test software: GNSS\_Monitor for customer

5.2-2 Software setting

- ① Click Setup, select the corresponding serial port and baud rate (9600 or 115200,.....)
- ② Click Target→CXD5603 → NMEA
- ③ Click Connection → On, Connection
- ④ If necessary, click COLD to restart

GPS/GLonass signal strength

No	TID	SVID	PRN	ELV	AZM	SNR	UIS
01	GP	10	010	76	340	49	P
02	GP	12	012	33	67	39	P
03	GP	18	018	16	184	26	P
04	GP	09	009	140	140	25	-
05	GP	06	006	0	0	0	-
06	GP	31	031	32	241	30	P
07	GP	32	032	39	326	48	P
08	GL	68	004	48	55	44	P
09	GL	78	014	39	30	37	P
10	GL	79	015	81	168	29	P
11	GL	01	001	0	0	0	-
12	GL	02	002	0	0	0	-
13	GL	84	020	9	269	0	-
14	---	00	000	0	0	0	-
15	---	00	000	0	0	0	-
16	---	00	000	0	0	0	-
17	---	00	000	0	0	0	-
18	---	00	000	0	0	0	-

GPS satellite positioning information

GLonass satellite positioning information

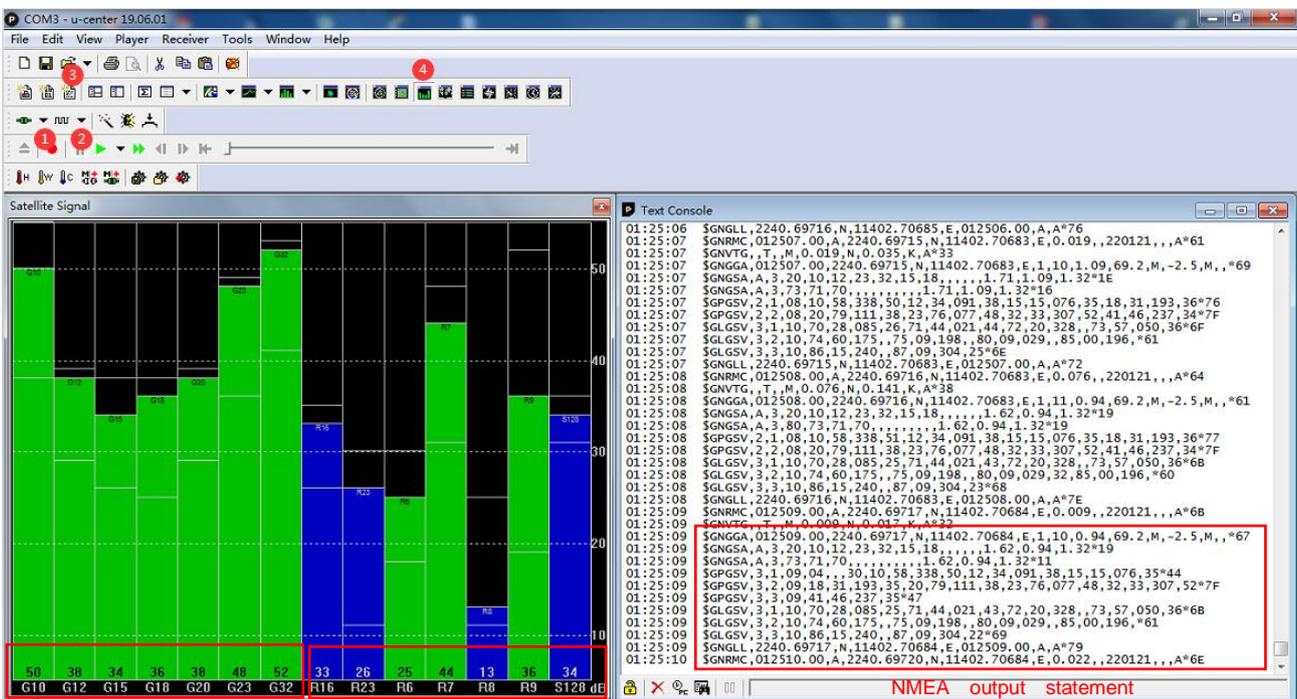
Blue is positioned and gray is unpositioned

## 5.3 For YIC91009EB series (ublox chip based)

5.3-1 Install test software: u-center\_v19.06

5.3-2 Software setting

- ① Select the corresponding serial port
- ② Select the corresponding baud rate (9600 or 115200,.....)
- ③ NMEA output statement
- ④ Open the satellite signal map

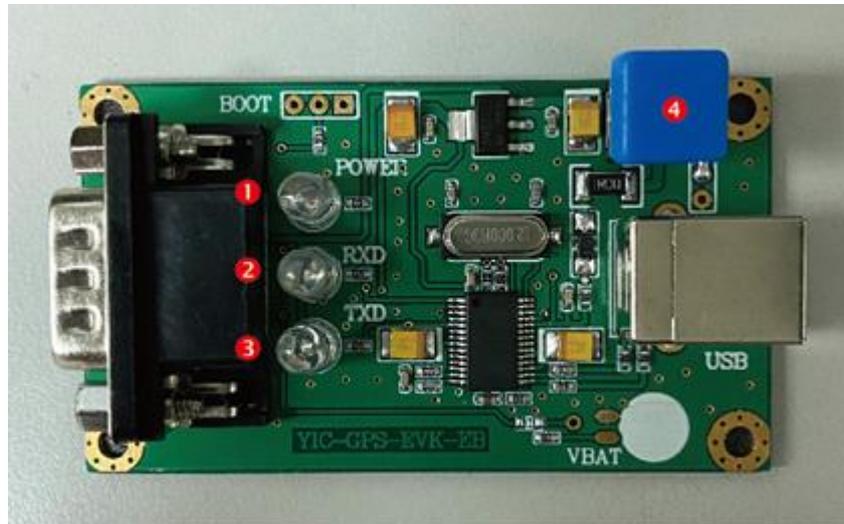


Supplemental instruction :

Gxx:GPS Rxx:GLONASS Bxx:BD Exx:Galileo Sxx:SBAS Qxx:QZSS xx:Satellite number

## 6. LED and Push Button description

### 6.1 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

### 6.2 Main Board

PPS LED: Flash once per second after satellite position fixed