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RTK-4671-HPF series

EVK Quick Guide

(To use Serial Port to get Corrections Data)

About LOCOSYS

LOCOSYS Technology Inc. established in 1995, a company that provide services the scope of which spans from both hardware and software in Global Navigation Satellite System (GNSS), Wireless Communication, Embedded System to Avionics, Automotive and Consumers electronics. LOCOSYS Technology Came from a well-known research organization of information industry, LOCOSYS sustains a strong R&D in Software, Hardware and system integration. Through its self own (International Automotive Task Force, IATF) IATF16949 : 2016 / ISO 9001 : 2015 certified production lines in Taiwan and carefully selected sites in China. LOCOSYS is a qualified supplier to tier 1 & tier 2 manufacture in Automotive industry (design house, EMS, OEM, ODM) and be the 2017 best partner of 'Automotive Dead Reckoning' in China automotive industry and provides solutions and services to various market segments. Stay in α -level qualified module designer and supplier in the international market, deal the partnership with more than 20 Well-known distributors overseas, to provide our customers a complete OEM and ODM services.

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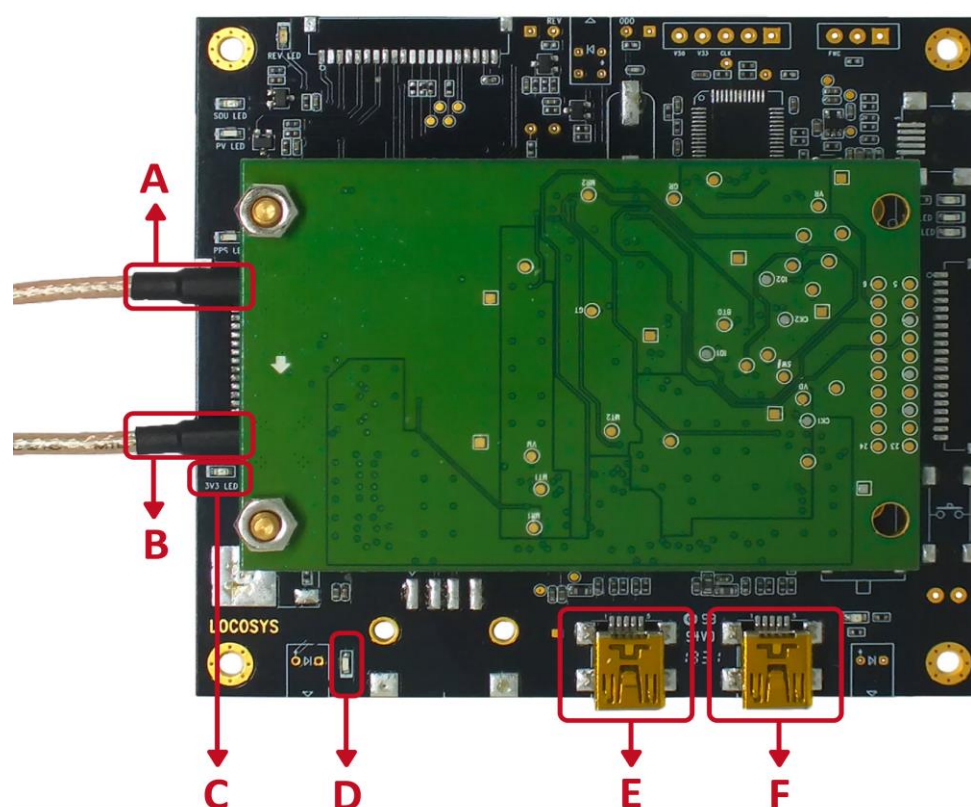
1. Introduction

This document is the user guide of the EVB (Evaluation Board) of LOCOSYS RTK-4671 HPF Series (including RTK-4671-SHPF and RTK-4671-MHPF), RTK-4671-MHPD, RTK-4671-MH.

2. Introduction to EVK

Description about RTK-4671-HPF EVK I/O

The main purpose of “RTK-4671-HPF EVK” is for the evaluation of both its function and its performance of “RTK-4671-HPF series receiver”.



- | | |
|----------|------------------------------------|
| A | ANTENNA INPUT #1 |
| B | ANTENNA INPUT #2 |
| C | LED_1 |
| D | LED_2 |
| E | USB_2 Corrections Data Serial Port |
| F | USB_1 Navigation Data Serial Port |

Figure 1: RTK-4671-HPF EVB I/O

3. Install USB Bridge Driver

1. Install Prolific PL2303 driver: please execute “PL2303-WHQLDriver_Setup_v1230_20190815.exe” for installing this driver.
2. Install Silicon Labs CP210X driver: please execute “CP210xVCPInstaller_x64 (or CP210xVCPInstaller_x86) for installing this driver.

4. RTK-4671-HPF EVK operation steps

Step 1: Please connect USB_1 Serial Port to your Personal computer, this Serial Port (baud rate: 115200bps) refers to “Navigation Data (i.e. ‘TXD_A:pin-15’ & ‘RXD_A:pin-16’)”. After connecting, the “Port” of the “Device Manager” of the personal computer will be displayed as “Prolific USB-to-Serial Comm Port”. Then the light of LED_1 will be “always on”, but the light of LED_2 (this LED refers to the status of TXD_A) will be “Flashing”.

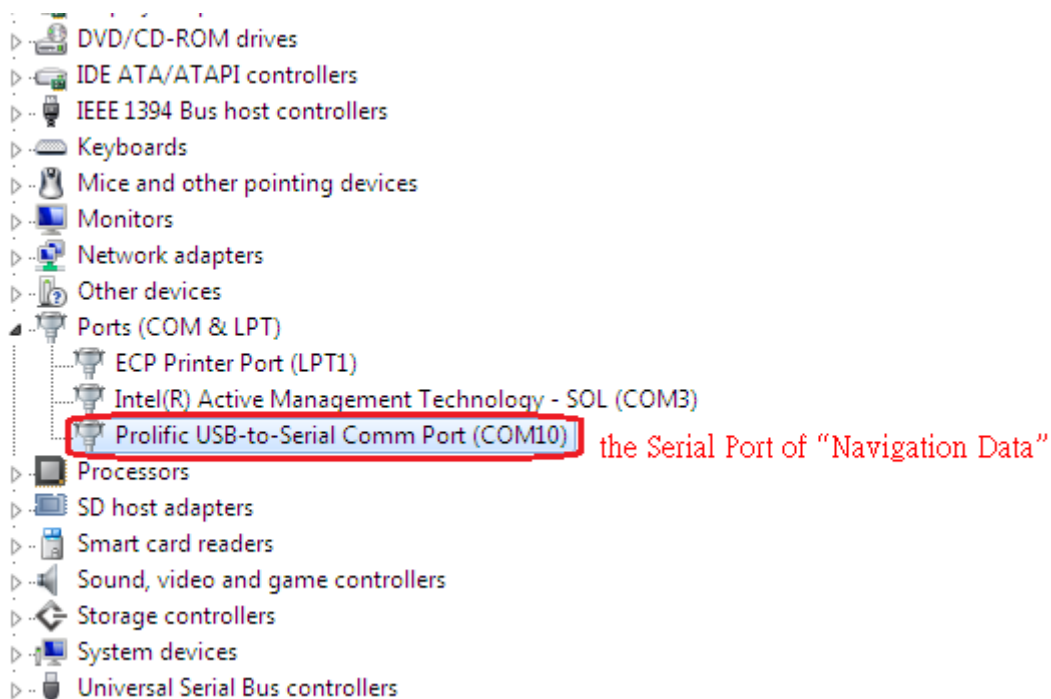


Figure 2: the Serial Port of “Navigation Data”

Step 2: Please also connect USB_2 Serial Port to your Personal computer. After connecting it, there will be two “COM Port”. One of them is “Silicon Labs Dual CP2105 USB to UART Bridge: Standard COM Port”. It refers to this Serial Port (baud rate: 115200bps) of “Corrections Data” (i.e. ‘TXD_B: pin-18’ & ‘RXD_B:pin-19’).

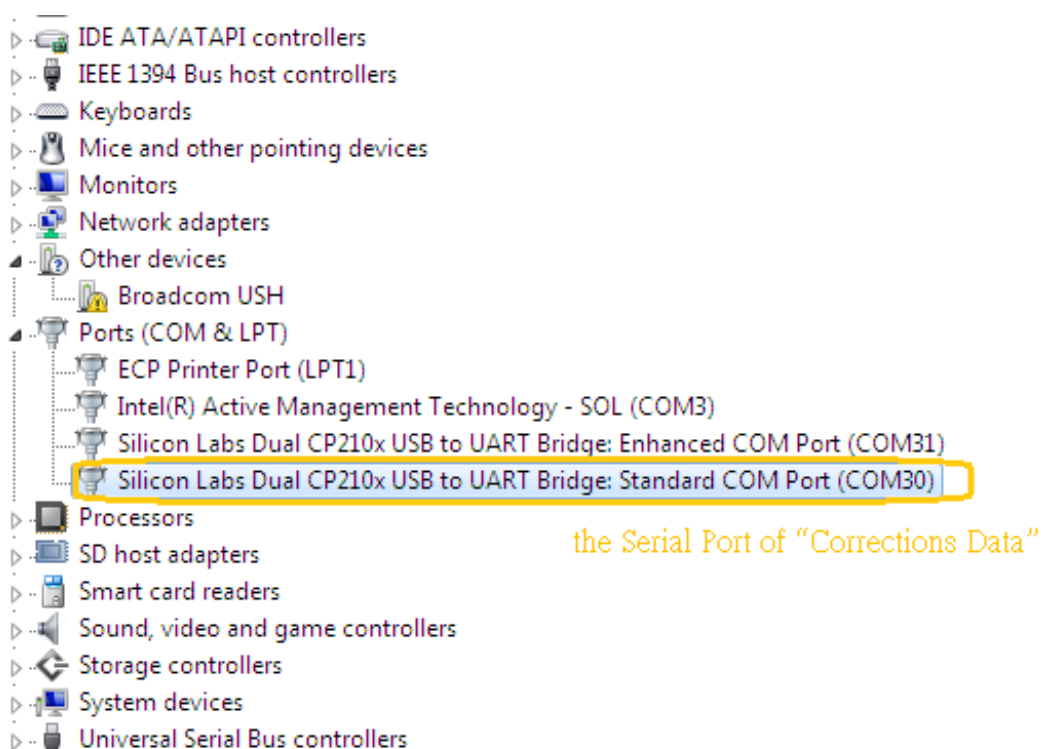


Figure 3: the Serial Port of “Correction Data”

Step 3. Please connect two antennae to ANTENNA INPUT#1 and ANTENNA INPUT #2 respectively. The two MMCX female RF input connectors have supply 3.3 VDC to power active antenna. “HDT” in NMEA sentences refers to “the Included Angle” between “the base line among two antennae” and “the True North”. The Heading Direction is alignment of two antennas from “ANTENNA INPUT #1” → “ANTENNA INPUT #2”.

Step 4. It can use Ntrip Client and other softwares to receive “Corrections Data” by entering the “UART_B (pin-18.19)” of RTK-4671-xHPF.

Remark 1: The software operation can refer to the document of “GPSFox for RTK-4671 series Quick User Guide.pdf”.