



INSTALLATION AND OPERATION

# QUICK GUIDE

[WWW.UNICORECOMM.COM](http://WWW.UNICORECOMM.COM)

# High Precision Products Evaluation Kit (EVK)

# Revision History

Version	Revision History	Date
R1	First release	Dec., 2020
R1.1	Optimize the overview and the figures; update the function/description of the COM5 related interfaces; add the footnotes	Dec., 2021
R1.2	Update	Dec., 2023

## Disclaimer

This manual provides information about the products of Unicore Communications, Inc. This document does not transfer the patent, trademark, copyright of the company or any third party, or any right or permission under it by implication, estoppel or otherwise. Except as stated in the sales terms and conditions of the products, the company shall not assume any other responsibilities. Furthermore, Unicore Communications, Inc. makes no warranty, express or implied, for the sale and/or use of its products, including the suitability of a particular purpose and marketability of products, or liability for infringement of any patent, copyright or other intellectual property rights. If the connection or operation is not in accordance with the manual, the company is not liable. Unicore Communications, Inc. may make changes to product specifications and product descriptions at any time without prior notice.

The company's products may contain certain design defects or errors, which will be included in the corrigendum once found, and may therefore result in differences between the products' actual specifications and the published ones. Updated corrigendum is available upon request.

Before placing an order, please contact our company or local distributors for the latest specifications.

\* Unicore Communications, UNICORECOMM, Nebulas and its logo have been applied for trademark registration by Unicore Communications, Inc.

Other names and brands are the property of their respective owners.

© Copyright 2009-2023 Unicore Communications, Inc. All rights reserved.



## Foreword

This document provides the information about the HPL EVK5.0 Kit from Unicore.

### **Target Readers**

This document applies to technicians who possess the expertise on GNSS receivers.

## Contents

1	OVERVIEW.....	1
2	APPEARANCE.....	1
3	INTERFACE.....	2

# 1 Overview

The HPL EVK is mainly used to evaluate the function and performance of Nebulas modules<sup>1</sup> and boards for the convenience of the users.

## 2 Appearance

The appearances of the HPL EVK are shown in the figures below.



(1) HPL EVK

(2) Board to be tested

Figure 2-1 Appearance of HPL EVK (1)

---

<sup>1</sup> To test the module, an adapted expansion board should be installed on the EVK.

# HPL EVK5.0 Kit Quick Guide

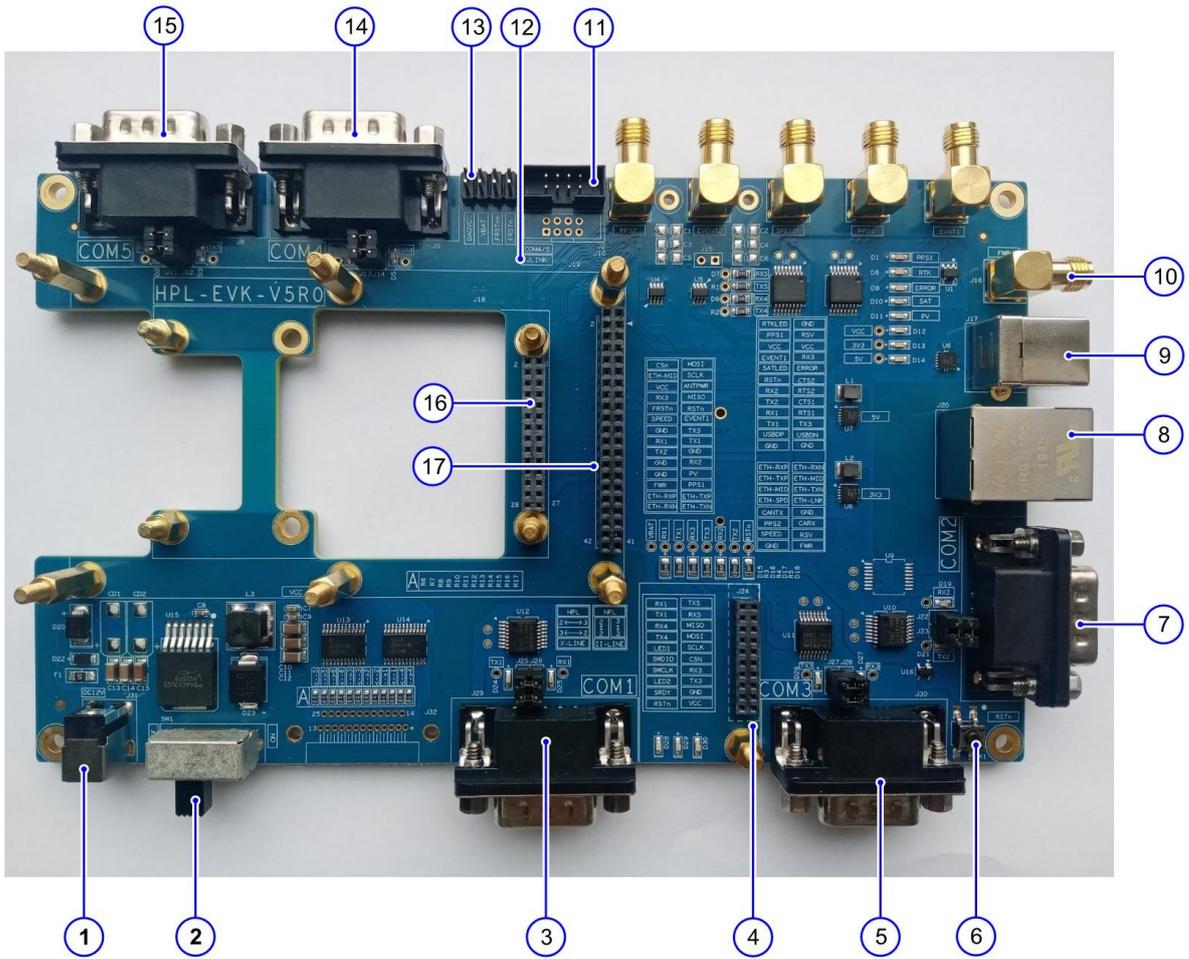


Figure 2-2 Appearance of HPL EVK (2)

## 3 Interface

The main interfaces and buttons of the HPL EVK are shown in Figure 2-2. See Table 3-1 for the detailed descriptions.

Table 3-1 Interface/Button description

Interface	Function	Description
1	EVK power supply interface	12 V power supply
2	EVK power supply switch	Turn to the right to turn on the power
3	COM1	Connect to COM1 of the board to be tested
4	Data acquisition card interface	Connect DAQ card
5	COM3	Connect to COM3 of the board to be tested
6	Reset	Press the Reset Button to reset the board to be tested
7	COM2	Connect to COM2 of the board to be tested

Interface	Function	Description
8	RJ45	Ethernet interface <sup>2</sup>
9	USB-B	USB interface <sup>2</sup>
10	SMA	The six SMA interface functions are: FWR, EVENT1, PPS1, SPEED, EVNET2, PPS2
11	COM4 interface	The functions of pins 1 ~ 8 are: NC/NC/TXD4/NC/RXD4/NC/GND/GND
12	JLINK	JLINK interface of DAQ card, not soldered by default
13	Function set pin	Connected by jumper caps, the functions from left to right are: <ul style="list-style-type: none"> <li>● DAQ card power supply (standby)</li> <li>● board to be tested backup power</li> <li>● factory reset (applicable to the tested module with the adapted expansion board)</li> <li>● factory reset (UB482/ CLAP-B /UB4B0M)</li> </ul>
14	COM4	Connect to Pin3/5 of COM4 interface through RS232 conversion chip
15	COM5	RSV.
16	28-Pin board interface	28-Pin connector to connect Unicore products
17	42-Pin board interface	42-Pin connector to connect Unicore products

☞ COM1 ~ COM5 can be set up as a direct or cross connection through a jumper cap near the DB9 interface. The jumper cap is installed parallel to DB9 as a cross and perpendicular to DB9 as a direct connection.

☞ If the power supply of the DAQ card should be under control, disconnect the power supply resistor R270 of the DAQ card, and control the power supply of the DAQ card through the jumper cap.

☞ If the board to be tested needs to be provided with backup power, weld 0 Ω resistance R118.

<sup>2</sup> Whether supporting this function, please refer to the related user manuals of the boards/modules to be tested.

和芯星通科技（北京）有限公司

**Unicore Communications, Inc.**

北京市海淀区丰贤东路 7 号北斗星通大厦三层  
F3, No.7, Fengxian East Road, Haidian, Beijing, P.R.China,  
100094

[www.unicorecomm.com](http://www.unicorecomm.com)

Phone: 86-10-69939800

Fax: 86-10-69939888

[info@unicorecomm.com](mailto:info@unicorecomm.com)



[www.unicorecomm.com](http://www.unicorecomm.com)