# **C04-6H** GPS smart antenna LEA-6H

# Highlights

- Reference design with LEA-6 GPS receiver
- Simplifies developing customer end-products
- Enables faster time-to-market

### **Features**

- LEA-6 GPS receiver
- GPS patch antenna
- LNA and SAW filter for best RF performance

### **GPS** receiver performance

Please refer to the documentation for LEA-6.

# Characteristics

Power supply	3.5 V - 6.0 V		
Backup power	On-board lithium battery, 5.0 mAh		
Antenna	25 x 25 mm patch antenna		
Operating temp.	–20°C to 60°C		
Dimensions	37 x 37 x 9.0 mm		
Connector	SMT-pads for 10 pin header Pitch: 2.54 mm		
Serial ports	1 UART @ 3 V levels 1 USB		

#### **Pin assignment**

1	TxD1	6	V BAT	
2	RxD1	7	−	
3	V_IN (3.5 - 5.5 V) <sup>1</sup>	8	USB_DM (Data –)	
4	GND	9	USB_DP (Data +)	
5	GND	10	GND	
<sup>1</sup> Pin 3 is internally connected with pin 7				

#### **Ordering information**

C04-6H-0

CO4-6H GPS smart antenna LEA-6H Reference Design

Sold in sample quantities only.

#### Legal Notice

u-blox reserves all rights to this document and the information contained herein. Products, names, logos and designs described herein may in whole or in part be subject to intellectual property rights. Reproduction, use, modification or disclosure to third parties of this document or any part thereof without the express permission of u-blox is strictly prohibited.

The information contained herein is provided "as is". No warranty of any kind, either express or implied, is made in relation to the accuracy, reliability, fitness for a particular purpose or content of this document. This document may be revised by u-blox at any time. For most recent documents, please visit www.u-blox.com. Copyright © 2010, u-blox AG

GPS.G6-CS-10000

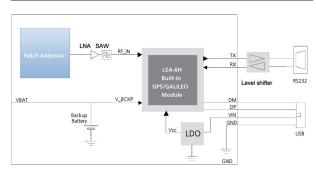


# **Product description**

The CO4-6H GPS Smart Antenna design demonstrates the integration of a LEA-6H GPS module with a ceramic patch antenna, USB and UART interfaces and on-board backup battery. The high performance u-blox 6 GPS engine provides –162 dBm tracking sensitivity and enables navigation even in weak signal environments. An LNA and a SAW filter are included for best RF performance

Reference Designs are intended as a means to help system integrators to develop their own GPS-enabled end products. On request, u-blox provides comprehensive technical documentation including schematics, layouts and design recommendations. Reference Designs are sold in sample quantities only. u-blox assumes no design services for this purpose, nor warranties regarding functionality and performance.

# Block diagram



#### Contact us

HQ Switzerland +41 44 722 7444 info@u-blox.com

EMEA +41 44 722 7477 info@u-blox.com

Americas +1 703 483 3180 info\_us@u-blox.com

APAC – Singapore +65 6734 3811 info\_ap@u-blox.com China +86 10 68 133 545 info\_cn@u-blox.com

Japan +81 3 5775 3850 info\_jp@u-blox.com

Korea +82 2 542 0861 info\_kr@u-blox.com

Taiwan +886 2 2657 1090 info\_tw@u-blox.com



GPS

Reference Design