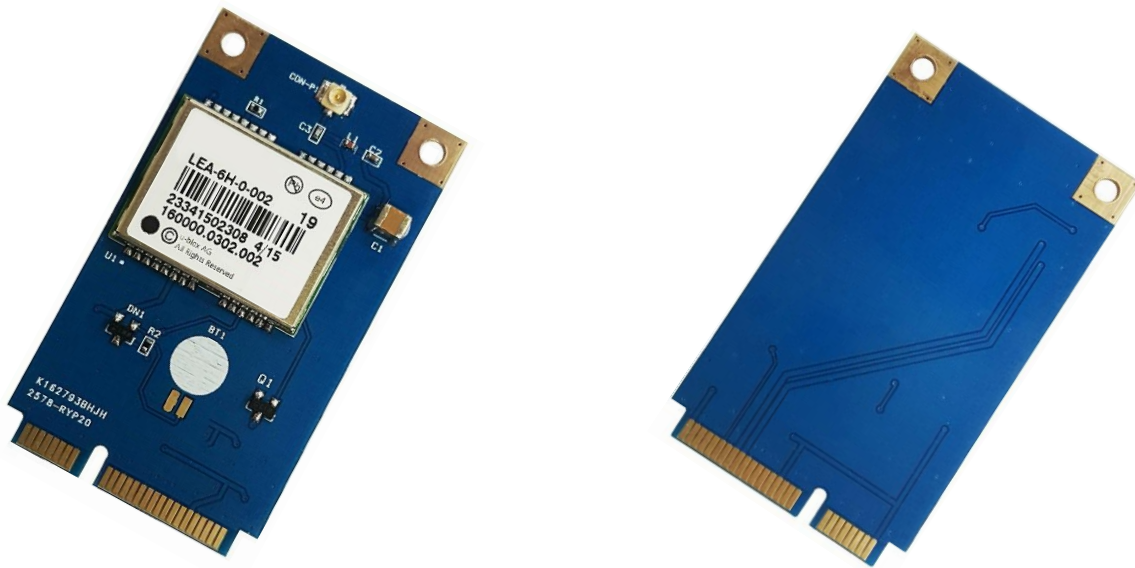


RYP600H

High Performance GPS Mini PCIe Card

Datasheet



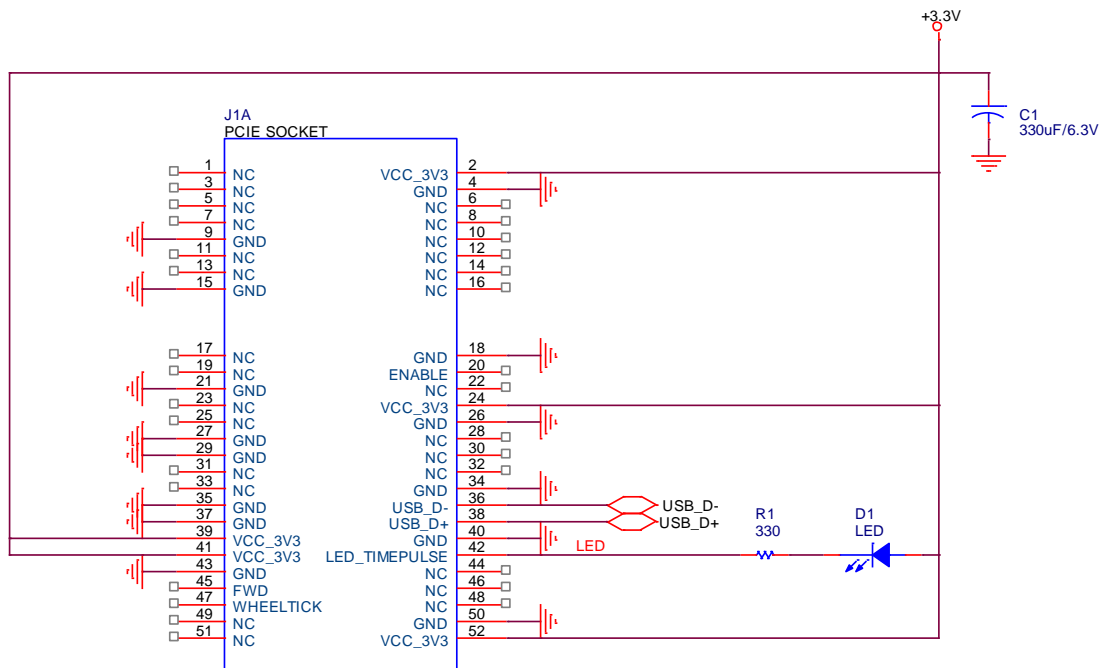
PRODUCT DESCRIPTION

The RYP600H of standalone concurrent GPS mini PCIe card is based on the exceptional performance of the LEA-6H GPS engine. The RYP600H provides high sensitivity and minimal acquisition times while maintaining low system power.

FEATURES

- 50-channel LEA-6H engine
- Max. 2Hz Navigation update rate
- Position accuracy 2.5m CEP
- Temperature range: -40 to +85°C
- Mini PCIe Signal Type USB2.0
- Standard Full-size Mini PCIe Card connect to computer easily.

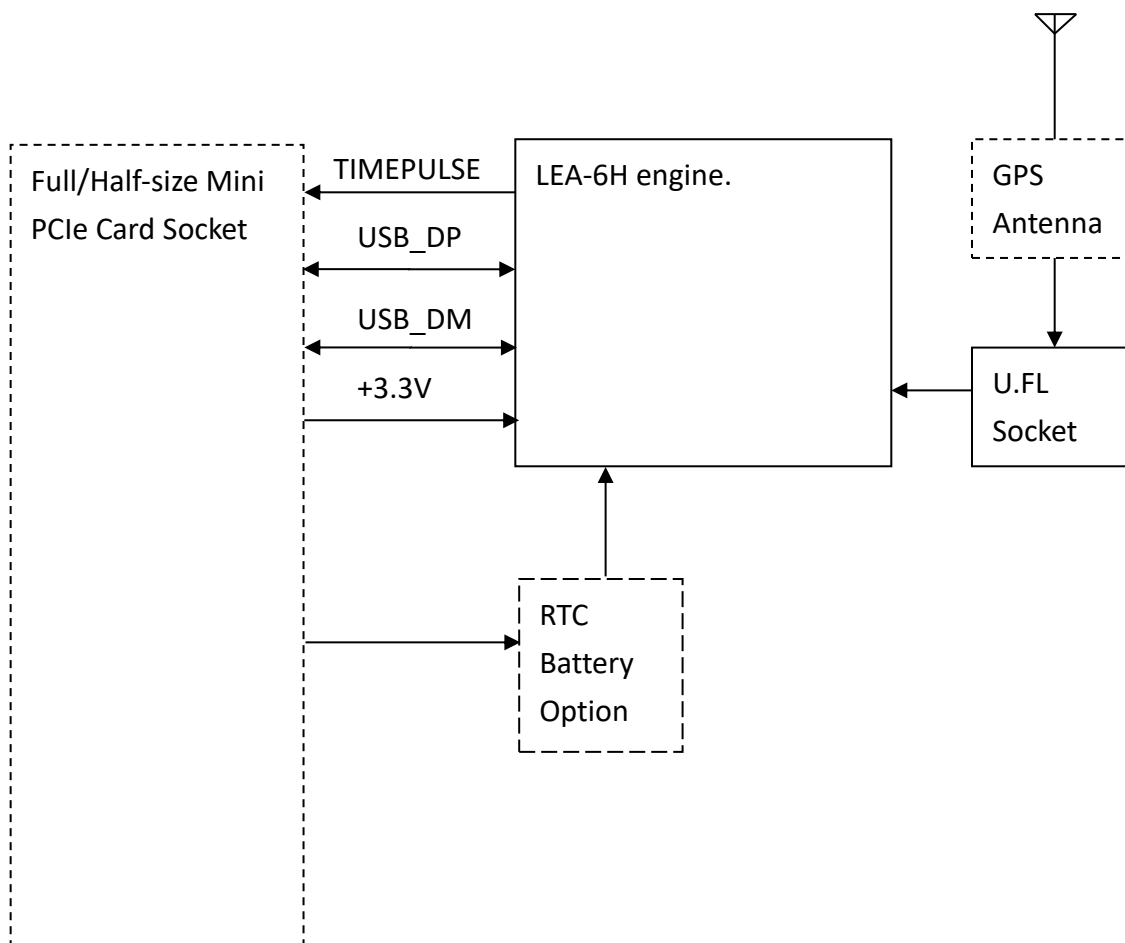
APPLICATION SCHEMATIC



PIN DESCRIPTION

Pin	Name	I/O	Condition
2,24,39,41,52	VCC_3V3	I	Supply voltage
4,9,15,18,21,26,27, 29,34,35,37,40,43, 50	GND	-	Ground
36	USB_DM	I/O	USB Data
38	USB_DP	I/O	USB Data
42	LED_TIMEPULSE	O	Time pulse, Open Collector
U.FL	U.FL Socket	I	+3.3V Active GPS Antenna

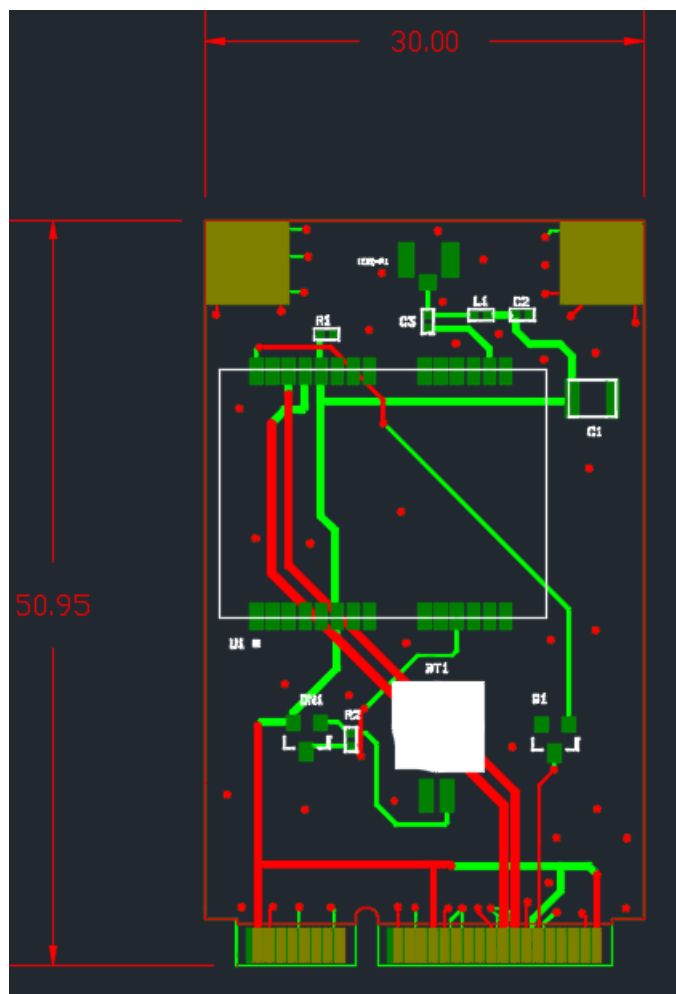
BLOCK DIAGRAM



SPECIFICATION

Item	Min.	Typical	Max.	Unit	Condition
Operation Voltage	2.7	3.3	3.6	V	VCC
Current		41		mA	
USB Interface					V2.0
GPS Center Frequency		1575.42		MHz	
Receiver type					50-channel 6 engine GPS/QZSS L1 C/A code GLONASS L1 FDMA
Navigation update rate		1	2	Hz	Configurable
Accuracy		2.5		M	CEP
Cold starts		26		Sec.	
Aided starts		1		Sec.	
Reacquisition		1		Sec.	
Tracking Sensitivity		-162		dBm	
Cold starts Sensitivity		-148		dBm	
Hot starts Sensitivity		-157		dBm	
Operating Temperature	-40	25	+85	°C	
Antenna supply current			100	mA	+3.3V Active GPS Antenna
Weight		4		g	

DIMENSIONS



Unit: mm

PCB Thickness: 1mm

DRIVER AND CONFIGURATION TOOLS

Complete software along with host driver for various operating systems such as Windows, Linux, Windows CE, and Android.

Please download the driver from <http://www.u-blox.com>

ORDER INFORMATION

Ordering No.	GNSS Engine
RYP600H	LEA-6H