VDB-800S

Embedded u-blox6 GPS Mini PCIe Card

Features

- 50-channel u-blox6 Engine with Over 2 Million Effective Correlators
- -147dBm SuperSense® Acquisition and Tracking Sensitivity
- AssistNow Online and Offline A-GPS Services,OMA SUPL Compliant
- 5 Hz Position Update Rate
- Standard Mini PCIe V1.2 Full-Mini Card (USB 2.0 Interface)
- Time To First Fix (TTFF) : <1 sec
- Operating Temp. : -40ºC to 85ºC

Receiver Type

Chipset	LEA-6S
Frequency	GPS L1, C/A Code
	GALILEO L1 Open Service (with upgrade)
	SBAS : WAAS, EGNOS, MSAS, GAGAN
Channels	Supports 50 Channels

Sensitivity

Tracking & Navigation	-160dBm
Acquisition	-160dBm
Cold Start(Autonomous)	-147dBm

Time to First Fix (TTFF)

Cold Start	28 sec
Warm Start	28 sec
Hot Start	<1 sec
Aided Start	<1 sec

Accuracy

Horizontal Position	Autonomous : <2.5m CEP, SBAS : <2.0m CEP
Accuracy of Timepulse Signal	RMS 30ns
Max Navigation	99% <60ns
Update Rate	5 Hz (Max.)

Dynamic Conditions

Velocity	<500 m/s (972 knots)
Acceleration	<= 4g

Output Message Format

GPS Protocol	NMEA, UBX Binary, GGA, GLL, GSA, GSV, RMC, VTG, TXT

Multipath Suppression

Intelligent multipath detection and suppression

A-GPS

Supports AssistNow® Online and Offline, OMA SUPL Compliant

Environmental Characteristics

Operating Temp.	-40ºC to +85ºC
Storage Temp.	-40ºC to +85ºC
Peak Supply Current	Max=150mA
Max Performance	Acquisition[note1]=74mA
Eco Mode	Tracking[note2]= 43mA
Power Input	3.3V +-10% VDC input
Dimensions	51 x 30 (mm)

Ordering Information

Part Number	VDB-800S-000
Description	Embedded u-bloxx6 GPS Mini PCIe Card