



GNSS100

BeiDou B1, GPS L1, Glonass L1

GNSS 100 是小体积高精度 GNSS 系列产品中的代表作。

它可以在不使用插值的情况下输出 100HZ 原始数据和位置信息。还有一些高级功能，如抗冲击和抗震，高精度定位，低时延速度测量等都在航空工业应用中得到验证，比如火箭的成功发射等。



GNSS100 OEM Board

跟踪特性

- 总共 216 通道:全视野
- BeiDou B1
- GPS L1
- GLONASS L1
- SBAS
- 几乎不限高度和速度 (需授权)
- 超级多路径抑制

数据特性

- 原始数据(码和载波)和实时位置最大 100 Hz 更新率
- 10 cm 码相位和 0.1 mm 载波相位
- RTCM SC104 版本 2.3 输入
- NMEA 0183 版本 3.0 输出
- 大地水准面模型和磁变模型
- RAIM
- 支持不同的基准
- 地理网格坐标输出

输入/输出

- 四个高速 RS232 串口(高达 460.8 Kbps)
- 一个 1 PPS 输出, 两步到 GPS 或者 UTC
- 一个事件标记输入
- 两个外置 LED

电气特性

- 板卡电源接受任何+4.5 到+40V 之间的不规则电压输入
- 功耗: 1.6 瓦

环境指标

- 工作温度: -40 to +80 °C
- 存储温度: -40 to +85 °C
- 抗震和防抖

物理指标

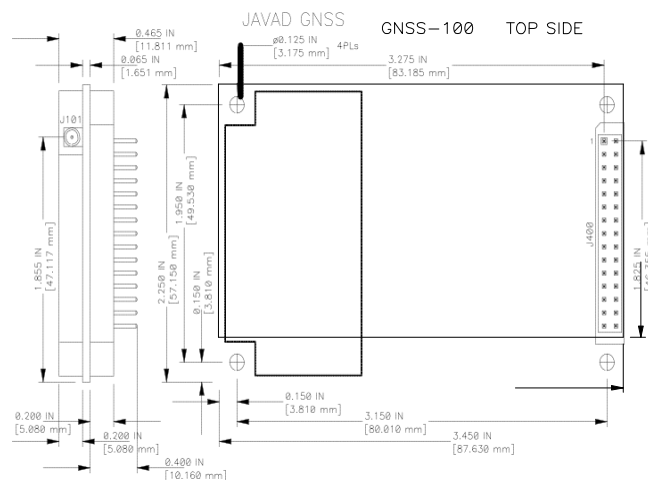
- 尺寸: 88 x 57 x 15 mm
- 重量: 48 g
- 接口: 30 针数据排线接头, MMCX 天线接头

Pin#	Signal	I/O	Description
1	GND	-	Digital Ground
2	CTSA	I	Clear to Send for Serial Port A
3	TXDA	O	Transmitted data for Serial Port A
4	RTSA	O	Request to Send for Serial Port A
5	RXDA	I	Received Data for Serial Port A
6	NC	-	Not Connected
7	GND	-	Digital Ground
8	CTSB	I	Clear to Send for Serial Port B
9	TXDB	O	Transmitted data for Serial Port B
10	RTSB	O	Request to Send for Serial Port B
11	RXDB	I	Received Data for Serial Port B
12	BOOT	I	Boot Loader—Factory use only ¹
13	PWR_IN	PWR	Power Supply ²
14	PWR_IN	PWR	Power Supply ²
15	NC	-	Not Connected
16	NC	-	Not Connected
17	EXT_RESET	I	External Reset Control ³
18	1PPS	O	1 Pulse Per Second ⁴
19	PWR_GND	PWR	Power Ground
20	PWR_GND	PWR	Power Ground
21	LED_RED	O	External LED
22	LED_GRN	O	External LED
23	TXDC	O	Transmitted data for Serial Port C
24	GND	-	Digital Ground
25	RXDC	I	Received Data for Serial Port C
26	GND	-	Digital Ground
27	EVENT	I	Event Marker ⁵
28	TXDD	O	Transmitted Data for Serial Port D
29	NC	-	Not Connected
30	RXDD	I	Received Data for Serial Port D

1. Must be grounded or open
2. +4.5 to +40 volt
3. Connect to ground to activate

4. VVoh > 2.0V (typ) at 50 Ohm load.
5. Internal pull-up 5 kOhm to +3V.

Digital connector: Header, Term Strip, 15X2, 0.1" pitch. Samtec p/n TSW-115-07-G-D.
RF Connector: J101 is GPS/GLONASS antenna input connector, MMCX. The central pin of this connector is power supply for LNA, +5 VDC with sourced current up to 0.1A. **Note:** LED_RED and LED_GRN are used to control the STAT LED of the MinPad. The output is a +3V driver in series with 100 Ohm resistor for each LED. LEDs should be with common cathode.



Specifications are subject to change without notice.



JAVAD GNSS
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