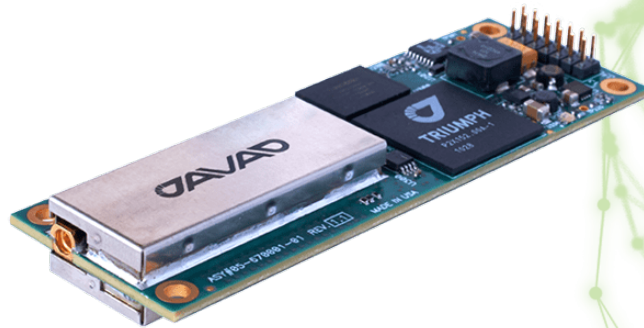




TRH-G2P

OEM Board



Key Features

- Advanced Multipath Reduction
- Fast acquisition channels
- High accuracy velocity measurement
- Almost unlimited altitude and velocity
- SBAS/QZSS SAIF/BeiDou/ wide area code differential mode
- Phase differential (RTK) Base/Rover
- Support of upload of user geoid data

TRH-G2P OEM board is based on our TRIUMPH Technology implemented in our 216-channels TRIUMPH Chip. The TRH-G2P board tracks GPS L1, Galileo E1, BeiDou B1, and QZSS L1.

The on-board power supply on TRH-G2P OEM board accepts any voltage from +4.5 to +40 Volts and delivers clean filtered voltage where needed. This eliminates the risk of power contamination (ripples) that can be created when clean power is generated elsewhere and delivered to the board via cables.

TRH-G2P provides UART interface and timing strobe. In addition, the board comes with large amount of flash for data storage.

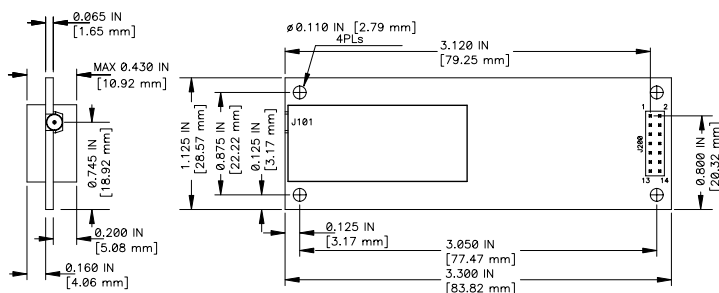
The dimensions are just 4x1 inches.

PINOUT

Pin #	Signal Name	I/O	Description	Pin #	Signal Name	I/O	Description
1	PWR_IN	I	+4.5V to +40 VDC Power input	8	GND (1)	-	Signal Ground
2	PWR_IN	I	+4.5V to +40 VDC Power input	9	CTSL* (3)	I	Serial port CTS line
3	PGND (1)	-	Power Ground	10	TXDL* (3)	O	Serial port TXD line
4	PGND (1)	-	Power Ground	11	RXDL* (3)	I	Serial port RXD line
5	-	-	Factory Use Only. Must be left open or connected to Ground	12	RTSL* (3)	O	Serial port RTS line
6	-	-	Factory Use Only. Must be left open or connected to Ground	13	1 Pulse Per Second output (4)	O	1PPS
7	RESET_IN* (2)	-	Active Low Reset Input	14	Not Connected	-	-

GNSS Constellations	GPS Galileo BeiDou QZSS SBAS	C/A, P1 E1 (B+C) B1 C/A, L1C(I+Q), SAIF L1
Data storage	Memory Raw Data Recording	Up to 256MB of onboard non-removable Up to 100 times per second (100Hz)
I/O	Serial port I/O I/O Output Output	Up to 460.8 Kbps, UART, Logical signals RTCM SC104 ver. 2.x and 3.x CMR/CMR+ 1 PPS synchronized to GPS, Galileo or UTC NMEA 0183 ver. 2.x and 3.0
Electrical	On-board Central pin Power consumption	power supply accepts any unregulated voltage between +4.5 to +40 V DC power supply for LNA, +5 VDC and sourced current up to 0.12A (max) 1 W (typical, without antenna current)
GNSS Antenna	Type LNA gain Noise Figure Current consumption	External 30 dB 1.8 dB typ. up to 120 mA @ 5 V DC
Physical & Environmental	Operating t° Storage t° Digital connector RF connector Dimensions Weight	-40° C to +80° C -40° C to +85° C Header, 2x7 pins, 2.00 mm pitch, 0.50 mm SQ post, Samtec p/n TMM-107-03-S-D55 x 40 x 11 mm (2.16 x 1.57 x 0.43 in) MMCX Jack, edge mount. Amphenol p/n 908-22100 101.6 x 25.4 mm (4 x1 inches) 14 g (0.002 lbs)

JAVAD GNSS TRH-G2P RECEIVER TOP SIDE



- (1) Power Ground and Signal Ground internally connected into the board.
- (2) Connect to Ground to activate. Internal pull-up 2.2 kOhm to +3.0V.
- (3) UART Logical signals (default - High, active - Low) with 3.0V CMOS level for output and input. Inputs 5V tolerant.
- (4) Voh > 2.0 V (ty p) at 50 O