

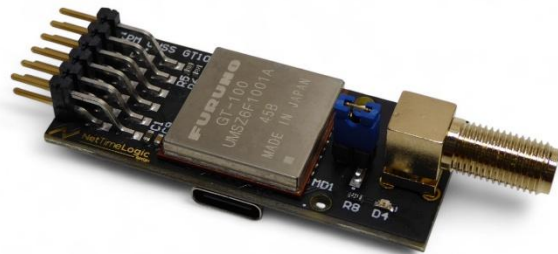
PmGnssFurunoGT100

This Pmod™ module contains the Furuno GT-100 GNSS receiver. The receiver features an UART interface to access it. Also, a PPS is available on the Pmod™ connector. In addition, it offers a direct access via a USB. This connection can be used to configure the module via the GNSS Conductor software by Furuno. The module can be battery backed which allows to maintain known GNSS information.

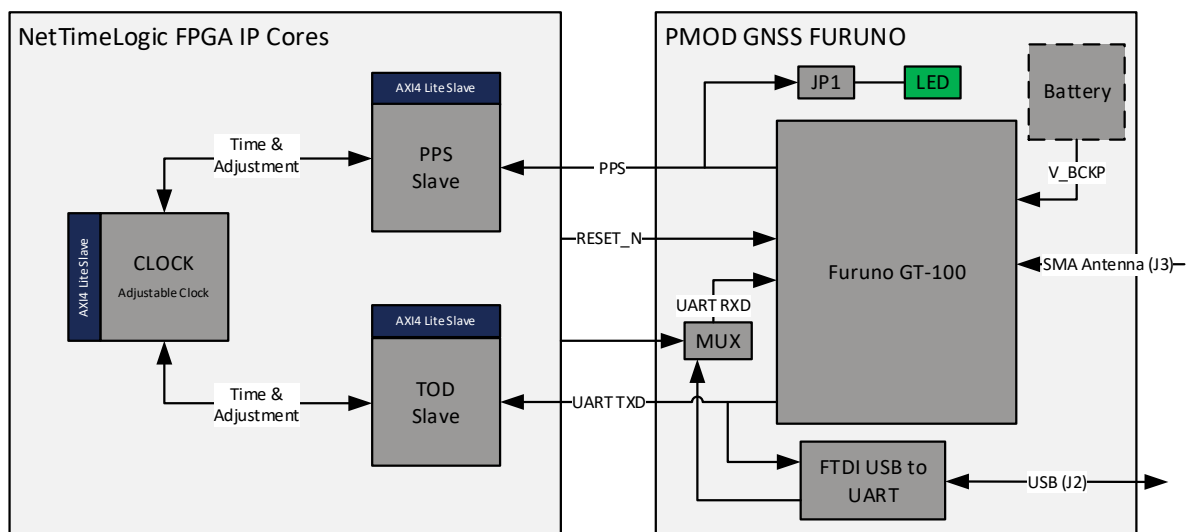
Key Features:

- Furuno GT-100 high precision GNSS module
- Different interfaces to access the module (UART or USB)
- UART, Pulse Per Second (PPS), ECLK, GCLK, GPIO 0/2 and a Reset are available on the Pmod™ connector
- Passive or active antenna
- PPS indication on LED
- Compatible NetTimeLogic IP-Cores: TOD Slave, PPS Slave Adjustable Clock

Module:



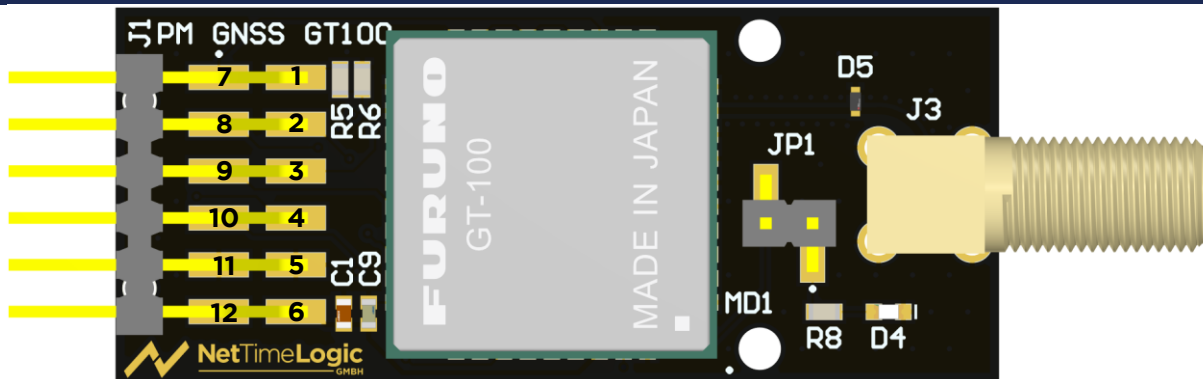
Block Diagram:



Specification:

GNSS Module	Furuno GT-100 module
UART	3V3 TTL UART with configurable baudrate (default 115200 baud, 8 bits, no parity bit, 1 stop bit)
Config	Jumper (JP1) placed → PPS on D4 visualized
Battery	CR1026
Power	~100mA @ 3.3V (dep. on conditions with passive antenna)
Output	max. 85mA @ ~3.3V on J3 for an active antenna

Pmod™ Pins and Module Overview:



Pin	Signal	Direction	Description
Header J1 (Pmod™)			
1	RESET_N	In	RESET_N to the RESET Pin of the GT-100 (Pin 44)
2	ECLK	In	ECLK Pin of the GT-100 (Pin 32)
3	GPIO2	Out	Configurable output, refer to protocol specifications of GT-100
4	GPIO0	Out	Configurable output, refer to protocol specifications of GT-100
5	GND		GND connection to the carrier board
6	VCC		3.3V supply from the carrier board
7	GCLK	Out	GCLK Pin of the GT-100 (Pin 16)
8	RXD	In	RXD Pin of the GT-100 (Pin 29)
9	TXD	Out	TXD Pin of the GT-100 (Pin 30)
10	PPS OUT	Out	PPS output from the PPS Pin of the GT-100 (Pin 38)
11	GND		GND connection to the carrier board
12	VCC		3.3V supply from the carrier board
SMA			
J3	Antenna	In	Antenna connector for active or passive antennas
USB			
J2	USB Con	In/Out	USB-C connector to access the module directly e.g. via Furuno GNSS Timing Monitor