GLE/GPS-IRIG-ENC-100-OEM GNSS based IRIG B/G Time Code Generator board

Available Features

- Compact construction
- 72 channels GPS L1, GLONASS L10F, BeiDou B1 receiver
- High accuracy VCTXO oscillator disciplined to GNSS receiver
- Selectable IRIG-B or IRIG-G time code generator
- Amplitude modulated and DCLS timecode output
- I PPS output
- Serial NMEA 0183 output, including GPS/UTC Time & Position
- UTC time synchronization
- IRIG timecode offset can be applied in term of HH:MM
- Adjustable output level for IRIG modulated signal
- Selectable PPS rising/falling edge
- Leap second determination based on GPS/GLONASS integration
- RS232 setup port for configuration

Benefits

- Highly integrated antenna to IRIG output solution
- Low power consumption
- Multiple output interfaces provide great flexibility

Applications

OEM solution, easily integrated in demanding systems

Overview

GLE/GPS-IRIG-ENC-100-OEM is a flexible, compact, selectable IRIG B or G encoder in a small footprint board, with an embedded GNSS receiver. Designed for easily OEM integration, it has multiple output interfaces: choice

of AM modulated or baseband IRIG DCLS timecode signals, as well as 1 PPS consumption, and a widely available digital output and NMEA0183 RS232 time and position information. Control and data communication are supported by a RS232 interface.

Actual size

Small form factor, low power +5V power supply allow a hassle-free OEM system integration.

Technical specifications

Modulated IRIG Format	B126; G146;	1 kHz 100 kHz	AM Modulated BCDTOY, BCDYEAR;
Modulated IRIG Level	Adjustable from 2Vpp to 5Vpp (Mark), unloaded, in sixteen steps		
Baseband DCLS IRIG Format	B006 G006	100 Hz 10 kHz	BCDTOY, BCDYEAR;
Baseband DCLS IRIG Level	TTL (>3V @ 50 Ohm load)		
IRIG Time Offset	Max ± 12 Hours in HH:MM format		
1 PPS	Selectable between rising and falling edge		
1 PPS Level	TTL (>3V @ 50 Ohm load)		
NMEA 0183	RS232, 19200 Baud, 8 bit, no parity. \$GNRMC,\$GNVTG,\$GNGGA,\$GNGSA,\$GPGSV,\$GNGLL,\$GNZDA		
GPS Engine	Embedded 72 Channels GPS L1, GLONASS L10F and BeiDou B1 receiver		
Timing Accuracy	+/-0.5 PPM (when not locked to GPS / over the entire temp. range)		
Setup port	RS232, 9600 Baud, 8 bit, no parity		
Power supply	+5V, 120mA		
Operating temperature	-40 ÷ +85 °C		
I/O connector	40 pin plug double row 1.27 mm pitch		
Antenna connector	MMCX socket		
Physical	PCB 65 x 40 x 7 mm excluding antenna and I/O connectors		

Due to continuous developments, specifications are subject to change without prior notice. This product is not intended for applications whose its failure to perform can be expected to cause damages to properties and/or persons and/or injury to human life

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