Frequency and Timing

GNSS Disciplined Oscillator Modules

Small-Form-Factor Advanced Timing Systems

Microchip's GNSS Disciplined Oscillator (GNSSDO) modules combine high-performance oscillators and Microchip's proprietary holdover, aging and environmental correction algorithms into a small-form-factor PNT system. These flexible GNSSDOs and GPSDOs can be integrated as a stand-alone system or as the critical PNT subsystem within a larger design. The modules are excellent options for defense applications, 5G base stations, digital audio broadcasts and general timing and instrumentation applications.

Product	Product Photo	Product Features
MD-300 Harsh-Environment GNSSDO		• Internal MEMs-based OCXO or TCXO • Embedded dual-band GNSS receiver • Board-to-board or board-to-cable connector options • Two external reference inputs
LM-010 Leo Satellite PPSDO		• 1 PPS to 75 MHz reference frequency input • 1 PPS TTL output signal • 10 MHz sine wave output • Other RF output frequencies available (OCXO version only)
MD-013 GNSS Disciplined Module		• Embedded GNSS receiver • Single-band and dual-band receiver options available • 1 PPS TTL output signal • 10 MHz since wave and square wave outputs
MD-013 Ultra Clean GNSS Disciplined Module		• Ultra-high-performance OXCO • Embedded GNSS receiver • Single-band and dual-band receiver options available • 1 PPS TTL output signal
MD-015 GNSS Disciplined Atomic Oscillator Module		• Embedded GNSS receiver • Single-band and dual-band receiver options available • 1 PPS TTL output signal • 10 MHz since wave and square wave outputs
MD-175 High Stability GNSS Disciplined Oscillator Module		• Embedded GNSS receiver • 1 PPS LVCMOS output signal • 10 MHz sine wave RF output • Other RF output frequencies available

Support

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Training

If additional training interests you, Microchip offers several resources including in-depth technical training and referencematerial, self-paced tutorials and significant online resources.

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