Skydel’s CDM-5 clock distribution module is a PCIe card that provides 10MHz and 1PPS signals for up to five devices that need tight and precise synchronization.

The clock distribution module is ideal for PCIe-based Software-Defined Radios (SDR) installed in rack-mount or desktop PCs, and can also be used for any other applications that require a precise timing reference.

Key Features

- Timing and frequency source with 5-way distribution of 10MHz and 1PPS signals
- PCIe form factor for rack-mount or desktop PC
- Two operating modes: internal clock (OCXO) or external clock (10MHz and 1PPS)
- Supports standalone operation with 12V DC power supply
Two operating modes

CDM-5 features internal and external operating modes. In internal mode, the internal clock signal is extracted from the onboard high-grade, oven-controlled crystal oscillator (OCXO). In external mode, CDM-5 accepts input signals in the form of 10MHz and 1PPS, which are then re-distributed via five matched-length traces. Split signals are amplified to maintain power levels across all distributed paths.

Additionally, CDM-5 will regenerate 1PPS from an external 10MHz-only source if a 1PPS source is not available.

Integrate it in your own design

CDM-5 can be integrated into a custom assembly simply by removing the bracket plate and powering the board through its 12V DC power pins. The operating mode can then be toggled using the onboard switch.