## **TFT-NTP Firmware Spec (Draft v0.1)**

**Module Name**: TriadicTimeSync

**Core Functions**:

* TriadicTimestamp(): Returns timestamp as {P, N, F} tuple
* ResonantSync(): Applies @() to align local time with network time
* LoopInvariantCheck(): Verifies resonance across nested time loops

**Data Packet Format**:

{  
 "P": "past\_entropy\_trace",  
 "N": "current\_oscillation\_state",  
 "F": "frequency\_modulator",  
 "T": "@(P + N) / F"  
}

**Compatibility**:

* Backward-compatible with standard NTP via fallback UTC mode
* Optional quantum-ready mode for entangled timestamping