

Receiver For Coherent Optical Transport Systems Based On Analog Signal Processing

Abstract:

Title:

Receiver for coherent optical transport systems based on analog signal processing and method thereof

The present invention discloses a receiver for coherent optical transport systems based on analog signal processing and the method of recovering transmitted data by processing signals in electronic domain. In the present invention, high-speed electrical signals obtained from optical-to-electrical converters which carry transmitted data information in a coherent transport system are jointly processed in analog domain itself without converting these signals to the digital domain using high speed ADCs. Different processing steps which may include carrier phase & frequency offset recovery and compensation, polarization mode dispersion and/or chromatic dispersion, clock & data recovery and deserialization may be performed while keeping the information signals in analog domain itself.

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