

**RECOVERY OF CLOCK PARAMETERS
FROM A DATA SIGNAL**

ABSTRACT

A system for recovering parameters of an underlying clock signal from data modulated signals (12) includes a time digitizer (22), or time stamping device, for sampling and locating edges of the data modulated signals, thereby selectively providing time stamp readings identifying incoming edges of the data signals. The time stamp readings are used, along with a user-input nominal clock frequency (36), to determine (30) an array of actual clock cycle stamps (46), each representing an integral number of actual clock cycles occurring between adjacent time stamps (48). The array is then used in conjunction with the time stamps to characterize parameters (46,48) of the underlying clock data. Once the clock parameters are recovered, a wide variety of information, for example, frequency and phase information, including jitter, can be determined (20) with a very modest rate of sampling compared to the high data bandwidth.

This Sheet Has Been Replaced

