

ABSTRACT

SYSTEM FOR CHARACTERIZING PHASE-MODULATED SIGNALS USING A TIME INTERVAL ANALYZER

A system for characterizing phase modulated signals (12), e.g., $\pi/4$ DQPSK signals, includes a time interval analyzer (10) coupled to a system processor (18) for determining a variety of signal characterizing parameters (26) as a function of readings (14, 16) made on a phase modulated signal (12) by the analyzer (10). The system processor (18) includes a phase/frequency determining section (20) for generating a phase deviation curve (22) and decoding (70) the modulated signal (12). The system processor (18) further includes a processing section (24) for determining various signal defining parameters (26) including origin offset (90) and I/Q mismatch (92) as a function of the phase deviation (22).

(Please note that Figure 1 should accompany the abstract when published)