MULTI-LEVEL ENVELOPE TRACKING WITH ANALOG INTERFACE

ABSTRACT

Multi-level envelope trackers with an analog interface are provided herein. In certain embodiments, an envelope tracking system for generating a power amplifier supply voltage for a power amplifier is provided. The envelope tracking system includes a multi-level supply (MLS) DC-to-DC converter that outputs multiple regulated voltages, an MLS modulator that controls selection of the regulated voltages over time based on an analog envelope signal corresponding to an envelope of the RF signal amplified by the power amplifier, and a modulator output filter coupled between an output of the MLS modulator and the power amplifier supply voltage.

[FIG.3A]