This Sheet Has Been Replaced

BY-PASS WRITE DRIVERS FOR HIGH-PERFORMANCE DATA RECORDING

ABSTRACT

A magnetic-head write-driver circuit (30) includes a write-driver circuit (32) and a by-pass driver circuit (31) coupled in parallel to a signal path between the input and the output of the magnetic-head write-driver circuit (32). The write-driver circuit (32) receives an input signal having transitions and outputs a first write signal related to the input signal. The by-pass driver circuit (31) outputs an assist signal that is coupled to the first write signal to form an output write signal. The assist signal is related to transitions of the first write signal and assists in shortening reversal time of the transitions of a write signal by producing "overshoots" in the write signal at the time of the transitions. Additionally, the assist signal assists in charging and discharging a parasitic capacitance associated with an output of the magnetic-head write-driver circuit (32).

FIG.3