

All-Digital CMOS Time-to-Digital Converter with Temperature-Measuring ...

In this project, an all-digital CMOS pulse-shrinking Time to Digital Converter (TDC) with temperature measuring capability is presented. The proposed TDC consists of Pulse Generator (PG), a Cyclic Delay line (CDL), a Time Subtractor (TS), and a Counter (CNT). The pulse generator is proposed to generate either a time-added pulse or a temperature-sensing pulse. A Cyclic Delay Line (CDL) is used for temperature sensing and a pulse-shrinking time measurement. A time subtractor eliminates the effect of the offset error enhances accuracy.

Domain: Back End Domains / Transistor Logic

Technology: VLSI