## **P78**

## Implementation of Time-to-Digital Converter with Self-Calibration

Daiki Hirabayashi†, Takeshi Chujo†, Haruo Kobayashi†, Kentaroh Katoh††, Koshi Sato‡

†Electronic Engineering Department, Gunma University ††Tsuruoka National College of Technology ‡Hikari Science

TDC measures the time interval between the edges of two digital signals.

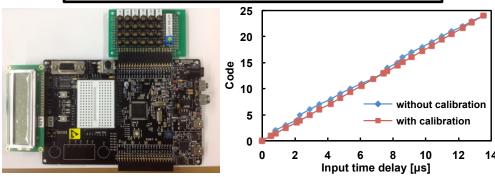
Our Work

Measure mismatches from histogram
&
Self-calibration

## Improvement

Nonlinearity due to mismatches of delay cells  $(\Delta \tau)$ 

**Implementation & Measurement Result** 



Nonlinearity reduction to 1/4

