

# Methods for pulse height measurement

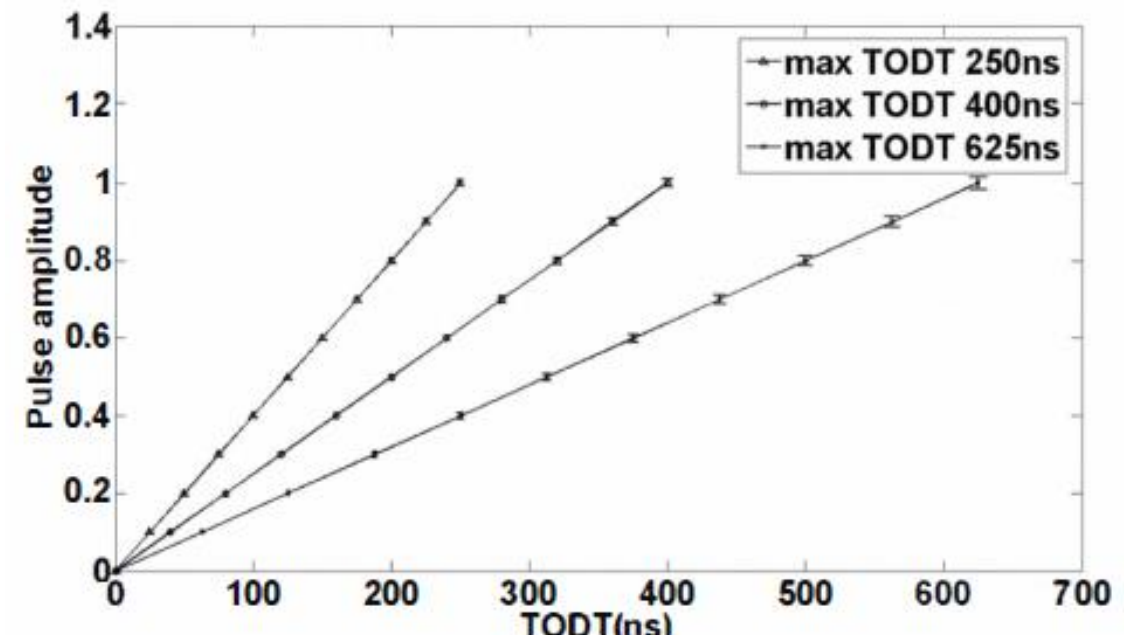
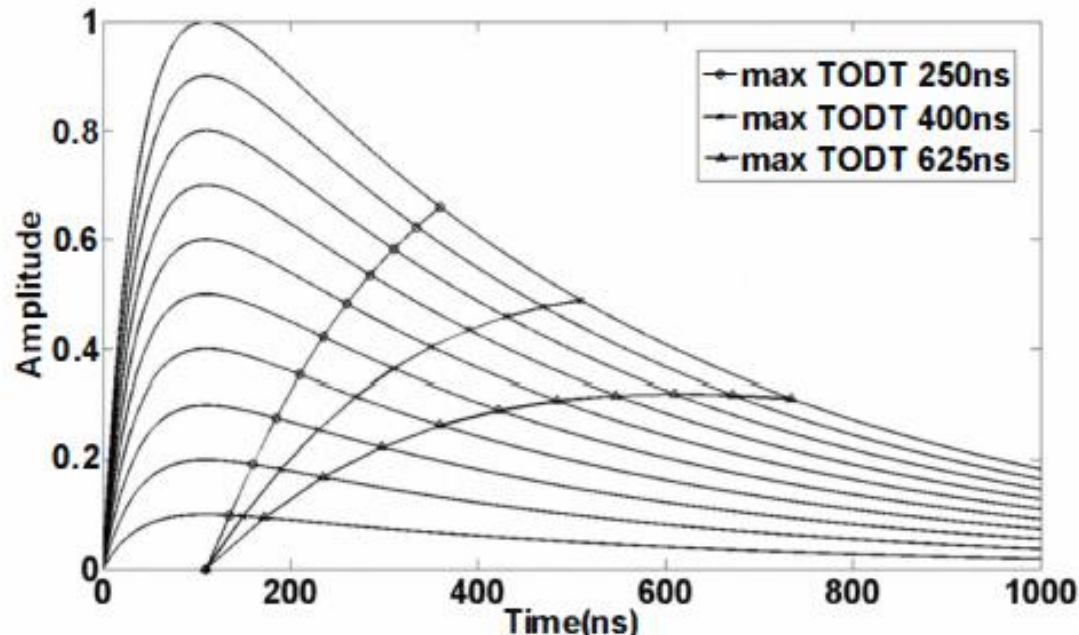
**ADC:** High precision, but with high-cost and limited Integration level.

**TOT(Time-Over-Threshold)method:**

Circuit would be much more simpler since only one comparator would be needed. But it has lower precision.

**TODT(Time-Over Dynamic Threshold)method:**

Deliberately designed DT can linearize the Time over DT and height, hence we can achieve high precision height measurement



**Complexity of circuit for deliberately designed DT generation could set a limit to higher channel count. Generating linear ramping threshold would be much easier and related circuit could be simpler. Simple correction would be implemented so TOLT method can reach high precision of height measurement.**

**With this method, we can achieve both high precision and channel count with lower cost.**

