Low Distortion Signal Generation for ADC Linearity Test
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Industrial Background
- Need for ADC low-cost test
- Need for ADC high-quality test

Research Goal
High Quality ADC test with a low cost AWG
Conventional test
Proposed test

Principle of distortion signal cancellation
- 3rd order harmonic disappear

Test signal generation with an AWG
Conventional and Phase switching signals

Comparison of conventional and phase switching signals

Conclusion
- ADC linearity test with AWG
- Phase switching signal & simple LPF
- Only AWG program change