Binary Angle Measurement (5A)

- MSE Variance CORDIC
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BAM Background

S. Y. Park, "Fixed-Point Error Analysis of CORDIC Processor Based on the Variance Propagation Formula", IEEE Trans on Circuits & Systems, 2004

Fixed-point Mean Square Error (MSE) analysis Error source and models Output error Modified CORDIC algorithms FFT processor – output error variance w.r.t. Wordlength

Error Bound

Comparison

References

- [1] http://en.wikipedia.org/
- [2] CORDIC FAQ, www.dspguru.com
- [3] R. Andraka, A survey of CORDIC algorithms for FPGA based computers
- [4] J. S. Walther, A Unified Algorithm for Elementary Functions
- [5] J. P. Deschamps, G. A. Bioul, G.D. Sutter, Synthesis of Arithmetic Circuits
- [6] T.K. Rodrigues, "Adaptive CORDIC: Using Parallel Angle Recording to Accelerate Rotations", IEEE Trans on Computers, 2010