

Summary

- A Quadratic-interpolated LUT-based pre-distortion method is proposed
 - High accuracy inverse function
 - Low ACLR
 - Fast adaption speed
- Experiment result shows
 - Qua-interpolated method is suitable to any PA characteristics
 - Even though the nonlinearities are further serious, the performance still be performed well
 - WCDMA application, the ACLR in the first channel is reduced by 22.41 dB
 - Without DPD : -29.21 dB
 - Qua-inter : -51.62 dB
 - The output power of the PA bias at 0.28 V when passing the specification
 - Without DPD : 4 dBm
 - Qua-inter DPD : 18.17 dBm