

Digital subsampling phase lock techniques for frequency synthesis and polar transmission

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20507783&lokasi=lokal>

Abstrak

This book explains concepts behind fractional subsampling-based frequency synthesis that is re-shaping today's art in the field of low-noise LO generation. It covers advanced material, giving clear guidance for development of background-calibrated environments capable of spur-free synthesis and wideband phase modulation. It further expands the concepts into the field of subsampling polar transmission, where the newly developed architecture enables unprecedented spectral efficiency levels, unquestionably required by the upcoming generation of wireless standards.

Guides development of DTC-based Fractional-N Subsampling PLL and Subsampling Polar Transmitters, covering material from fundamental theory, over system level considerations to building block IC implementation;

Describes a fully background-calibrated environment that can be used in general context of fractional frequency synthesis and/or phase/frequency modulation;

Presents three IC implementations, showing system level analysis, design methodology, circuit details and measurement results.