CMOS Scaled Architecture and Circuit Choices for 5G

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Abstract

In system and circuit designs for 5G, new challenges are encountered to build an efficient, high-performance phased array transceivers as 5G covers a huge amount of available spectrum in the millimeter wave bands. Basically, this chapter focuses on the CMOS circuit and system trades for large millimeter wave power consumers such as power amplifier, local oscillator generation and distribution in the framework of beamforming system design and mobile link requirements. An appropriate millimeter wave transceivers for 5G and their application for E-band 71–76 GHz circuit blocks in Intel 22FFL FinFET process have been discussed in detail.

Notes

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