

75 Word Abstract

Gain Calibration and Feedforward Automatic Gain Control for CMOS Radio-Frequency ICs

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A radio frequency (RF) amplifier gain calibration circuit used a dummy amplifier to calibrate voltage gain and output voltage swing against temperature, bias and process variations. Fabricated in 0.18 μ m CMOS, it achieved gain control within ± 0.5 dB. An interleaved multi-stage filter and intermediate frequency (IF) amplifier for a low-IF receiver, had a novel feedforward automatic gain control (AGC) circuit that achieved convergence within 5 μ sec, given a Bluetooth signal, even for worst case blocking signal conditions.

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Willy Hioe
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Hitachi, Ltd.,

Dear Sir,

I submit a paper entitled

“Gain Calibration and Feedforward Automatic Gain Control for CMOS Radio-Frequency ICs”
for the 2003 Symposium on VLSI Circuits.

Please find enclosed the following:

- a) Two original camera-ready copies of 4-page paper
- b) 52 double-sided copies of paper
- c) 75-word abstract original copy
- d) 5 copies of 75-word abstract
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Yours sincerely,

Willy Hioe