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(54) ON CHIP TEST ARCHITECTURE FOR CONTINUOUS TIME DELTA SIGMA ANALOG-TO-DIGITAL CONVERTER

(71) Applicant: STMicroelectronics International

N.V., Geneva (CH)

(72) Inventors: Ankur BAL, Greater Noida (IN);

Abhishek JAIN, Delhi (IN); Sharad

GUPTA, New Delhi (IN)

(73) Assignee: STMicroelectronics International

N.V., Geneva (CH)

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(57)ABSTRACT

An integrated circuit includes a continuous time delta sigma analog-to-digital converter (CTDS ADC) and a test circuit for testing the CTDS ADC. The test circuit converts multibit digital reference data to a single-bit digital stream. The test circuit then passes the single-bit digital stream to a finite impulse response digital-to-analog converter (FIR DAC). The FIR DAC converts the single-bit digital stream to an analog test signal. The analog test signal is then passed to the CTDS ADC. The CTDS ADC converts the analog test signal to digital test data. The test circuit analyzes the digital test data to determine the accuracy of the CTDS ADC.

