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## (54) INTERNALLY CALIBRATED ANALOG-TO-DIGITAL CONVERTER

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ABSTRACT (57)

An analog-to-digital converter (ADC) system for providing a calibrated voltage measurement without an external reference voltage may include an ADC circuit, including an analog ADC input and a digital ADC output. The ADC system may also include circuitry to generate a first internal reference voltage and a second internal reference voltage. The ADC system may also include circuitry configured to provide a selected output from a number of inputs, wherein the inputs include inputs to receive (1) the first internal reference voltage, (2) the second internal reference voltage, and (3) a user-provided analog signal of interest, wherein the selected output can be connected to the analog ADC input, an external voltage measurement device, or both.

