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An apparatus may include a current mirror circuit, a cascode circuit, and a current generator circuit. The current generator circuit may produce a Proportional-to-Absolute-Temperature (PTAT) current and a Complementary-to-Absolute-Temperature (CTAT) current. The PTAT current and the CTAT current may be based on a first impedance and a second impedance. A combination of the PTAT current and the CTAT current may serve as a current reference. The values of the first impedance and the second impedance may be chosen to reduce the first-order temperature variation in the current reference. The inversion coefficient of the current generation devices may be modified to reduce the second-order temperature variation in the current reference.