

Microelectronic temperature-to-frequency converter contains a DC voltage source, a thermosensitive single-gate field-effect transistor, a resistor, and a blocking capacitor. It also includes a thermosensitive dual-gate field-effect transistor, a temperature-sensitive bipolar transistor, four resistors, and two capacitors. The first terminal of the DC voltage source is connected to the first terminal of the first resistor, to the first terminal of the blocking capacitor, to the drain of the thermosensitive single-gate field-effect transistor, and to the first terminal of the fourth resistor. The second terminal of the first resistor is connected to the channel of the thermosensitive single-gate field-effect transistor and to the second terminal of the first capacitor. The first terminal of which is connected to the drain and gate of the thermosensitive single-gate field-effect transistor, to the first terminal of the second resistor, and to the drain of the thermosensitive dual-gate field-effect transistor, which is connected to the second gate of the thermosensitive dual-gate field-effect transistor. The first gate of which is connected to the second terminal of the fourth resistor. The second terminal of the DC voltage source is connected to the second terminal of the blocking capacitor and to the second terminal of the fifth resistor, the first terminal of which is connected to the first terminal of the second capacitor and to the base of the thermosensitive bipolar transistor. The first terminal of the fifth resistor is connected to the second terminal of the second resistor and to the first terminal of the third resistor, the second terminal of which is connected to the source of a thermosensitive dual-gate field-effect transistor and the emitter of a thermosensitive bipolar transistor, whose collector is connected to the second terminal of the second capacitor, to the second terminal of the fifth resistor, to the second terminal of the blocking capacitor, and to the second terminal of the DC voltage source, all of which are connected to ground.