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(54) DECOUPLING CAPACITOR CIRCUITS

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(57)ABSTRACT

An integrated circuit includes a first metal-insulator-semiconductor capacitor, a second metal-insulator-semiconductor capacitor, and a metal-insulator-metal capacitor. A first terminal of the first metal-insulator-semiconductor capacitor is configured to receive a first reference voltage for a higher voltage domain, while a first terminal of the second metalinsulator-semiconductor capacitor is configured to receive a second reference voltage for the higher voltage domain. A second terminal of the first metal-insulator-semiconductor capacitor is conductively connected to a first terminal of the metal-insulator-metal capacitor, while a second terminal of the second metal-insulator-semiconductor capacitor is conductively connected to a second terminal of the metalinsulator-metal capacitor. The first terminal of the metalinsulator-metal capacitor is configured to receive a first supply voltage for a lower voltage domain, and the first terminal of the second metal-insulator-semiconductor capacitor is configured to receive a second supply voltage for the lower voltage domain.

