

Abstract

The invention concerns an electronic module (2) for a contactless smart card or dual contact and contactless smart card comprising at least a first antenna (3a), a second antenna (3b), a third antenna (3c) and a microelectronic chip (1) , characterized in that:

said microelectronic chip comprises a microprocessor, at least a first contact (P1), a second contact (P2), a third contact (P3), a fourth contact (P4), a first tuning capacitor (C1) connected between the first contact (P1) and the third contact (P3), a second capacitor (C2) connected between the second contact (P2) and the fourth contact (P4), said first and third contacts (P1, P3) being connected to the inputs/outputs of the microprocessor and being configured to transmit to said microprocessor a radio-frequency communication signal exchanged through the antennas,

said first antenna (3a) is connected between the first contact (P1) and the third contact (P3) and is configured to be brought into resonance by said first capacitor (C1),

said second antenna (3) is connected between the second contact (P2) and the fourth contact (P4) and is configured to be brought into resonance by said second capacitor (C2) in order to capture the energy transmitted by induction by a remote reader,

said third antenna (3c) is connected in series with said second antenna (3) between the second contact (P2) and the fourth contact (P4) for transmitting the captured energy to the microelectronic chip (1) and coupled with the first antenna (3a) for transferring to the microelectronic chip (1) through the first antenna (3a) the energy captured by the second antenna (3b).

Figure 3