

Saturn Body Control Module Description

The Saturn Body Control Module (BCM) is a factory installed automotive module, powered from the automotive 12 Volt system and is used to control two categories of functions.

In the first category it accepts information from switch/sensor inputs and the vehicle data bus, processes this information and then sends outputs to drive various loads and the vehicle data bus. There are three versions of the BCM that have different hardware populations for this category. They are referred to as the V6, SUV and L4/RFA models.

The second category is Remote Keyless Entry (RKE), also known as Remote Function Actuation (RFA), which controls the power door locks and the trunk lock. It receives the 315 MHz on-off keyed transmitted signal from the driver carried Key Fob. This signal is received on an antenna mounted on the printed circuit board of the module. The antenna drives a high integration superheterodyne receiver integrated circuit, specifically manufactured for this type of application. It contains the mixer, local oscillator, IF amplifier, demodulator, and data slicer. It uses a 314.5 MHz SAW resonator to control the local oscillator, resulting in an IF of 500 KHz. The data slicer output is fed to an on module microprocessor for decode and finally lock operation. The RKE receiver is identical on each of the three models V6, SUV and L4/RFA.