

2. General System description

2.1 System design

The system consists of an ECU made up of a PCB plus housing and a sensor mat. The connection between the ECU's printed circuit board and the sensor mat is realised by a conductive glue. A 3 pin connector with the following pinout is used to connect the system to the airbag ECU:

Pin1 +12 V via Terminal 15 R (9V - 16 V)
Pin2 K-Line to realise serial communication to the Airbag ECU or diagnostic device
Pin3 Gnd.

2.1.1 Block diagram

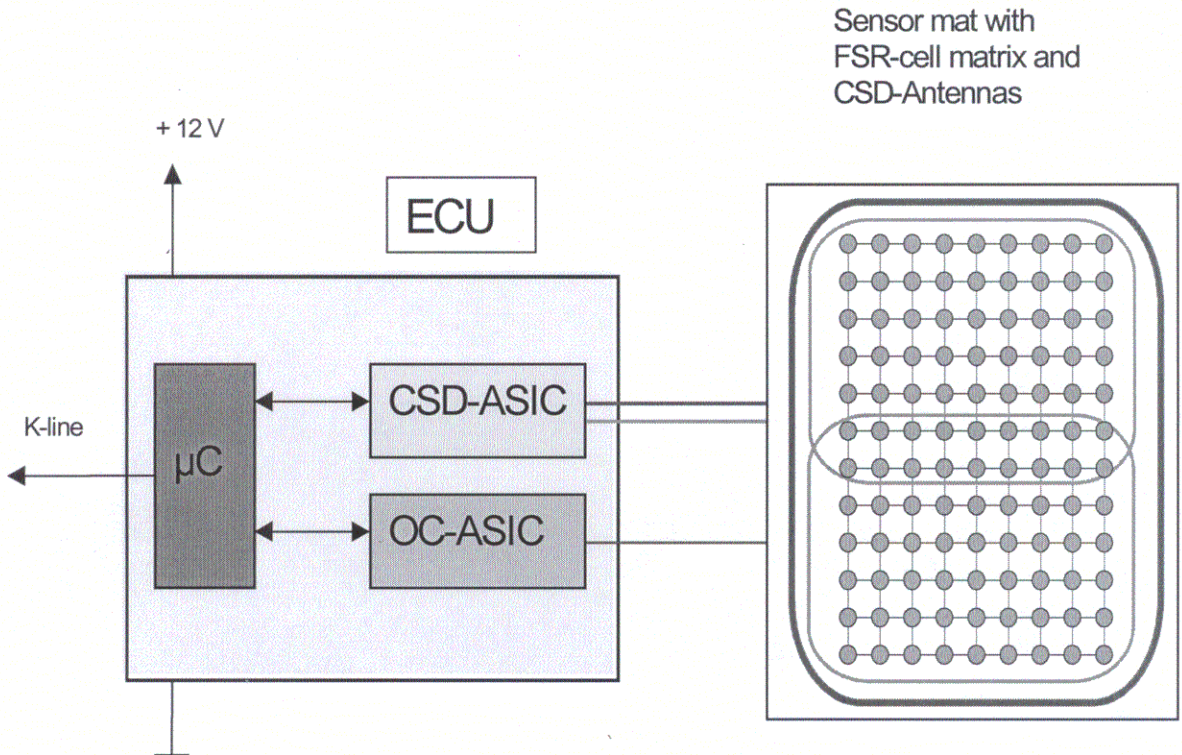


Figure 1: Block diagram of the OC/CSD-System

2.2 System tests

The system performs special system tests at every power on cycle. Also cyclic system tests are performed during normal running. These tests are for example measurements to check the hardware for proper working. In case of a failure the corresponding failure code is stored in the EEPROM. The failure mode itself determines if the failure code is to be transmitted to the Airbag ECU or not. It depends on the failure mode if it is transmitted to the Airbag ECU or not.