

Press Releases

PREH TO SUPPLY I3 WITH ECUS AND CONTROL SYSTEMS

NOVI, Mich. – Preh has developed the battery management ECUs for the fully electric BMW i3. Both units are produced at the auto supplier's headquarters in Bad Neustadt, Germany. In addition, Preh supplies control systems for the i3's interior: the iDrive Touch Controller and the so-called Driving Experience Control.

The battery management control components comprise the electronic control unit types BMU (battery management unit) and the CSSU (cell supervising sensor unit). These control units provide a uniform charge for the high-voltage battery for optimum battery performance. The high-voltage batteries are always in use, due to energy consumption in electric-only driving, as well as through the energy recovery during braking and while charging. Moreover, the battery cells have typically different charge levels depending on the degree of aging and manufacturing tolerances. For this reason, the CSSUs permanently monitor every single battery cell with regard to voltage and also temperature. These data will be processed in the battery management unit to offset the different charging states (balancing), and to ensure optimum battery performance.

In addition to the i3, other vehicles of the Munich manufacturer have Preh battery management know-how onboard. These include the purely electrically powered BMW ActiveE, as well as hybrid vehicles, including the ActiveHybrid 5 and also the BMW C evolution e-scooter.