

PRESS RELEASE

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Through a variety of recent projects with electric vehicle and fuel cell suppliers, **Axiomatic has developed a series of capabilities useful for hybrid technologies.** Key areas of development are high voltage handling (up to 750 Vdc) and extremely efficient and low power operating modes. Applications can include hybrid and electric vehicles (buses, delivery trucks, work trucks, etc.).

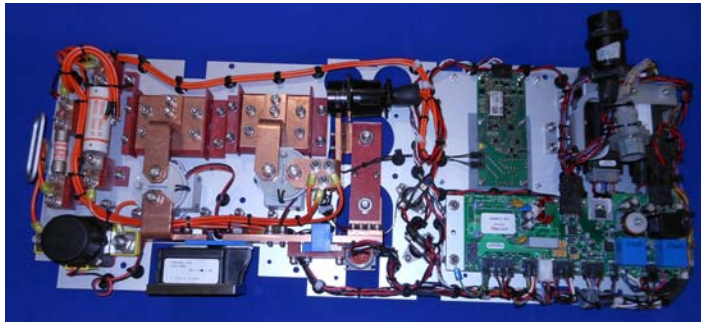
Model AX130601, Wake-On-Charge Module (shown above):

A **wake-on charge module** manages a hybrid vehicle controller power mode for wake and sleep. It has a charger status indication when the vehicle is plugged in (on charge). The module wakes up when the vehicle is plugged into the Electrical Vehicle Supply Equipment (EVSE). It provides an SAE J1772-compatible Control Pilot signal (shared with the on-vehicle charger) and draws minimal current.

Features:

- Accepts 1 Control Pilot Input Signal
 - Detects presence of a Control Pilot signal and triggers the module to wake up within 100 ms.
 - Reads PWM duty cycle of the Control Pilot Signal input (3-95% D.C.) from an EVSE
 - With a resolution of 0.5% and accuracy of 1%.
 - Impedance compatible with SAE J1772 Vehicle States B, C (State D is an option.)
 - SAE J1772 Vehicle States A, E and F are detectable
- 200 mA @12VDC, high side driver acts as the WAKE command to the Vehicle Control Unit or other controls/relay coils
- 2 LED outputs (50 mA) are commanded over the CAN bus to provide charge port status indication.
- 1 CAN 2.0 B port; 500 kbps baud rate; 11-bit ID
- Fully sealed and encapsulated in an Aluminum housing with Deutsch IPD connector
- Rugged IP67 rating and can withstand shock or vibration

Power Distribution Unit for a 750 Vdc Fuel Cell Stack:



Features:

- Includes a 24Vdc/12Vdc power converter, 150W
- Isolated current and voltages monitoring sensors
- High voltage bus Ground Fault Detection System (GFD)
- GFD is monitored by a Bender IR module outputting a PWM signal to an Axiomatic I/O controller
- Axiomatic I/O (AX021900) engages/disengages 24Vdc contactors on the high voltage lines
- Includes an electronic switch for a starter motor controlled by the Axiomatic I/O module
- Supplied as a component to be assembled into a cast Aluminum housing as part of the entire Fuel Cell Stack assembly
- Can handle EMI/EMC transients, high vibration, mechanical shock as well as tilt and high altitude conditions

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VISIT US AT BAUMA 2013 in Munich, Germany April 15-22nd, Hall A3, Stand # 537/636!