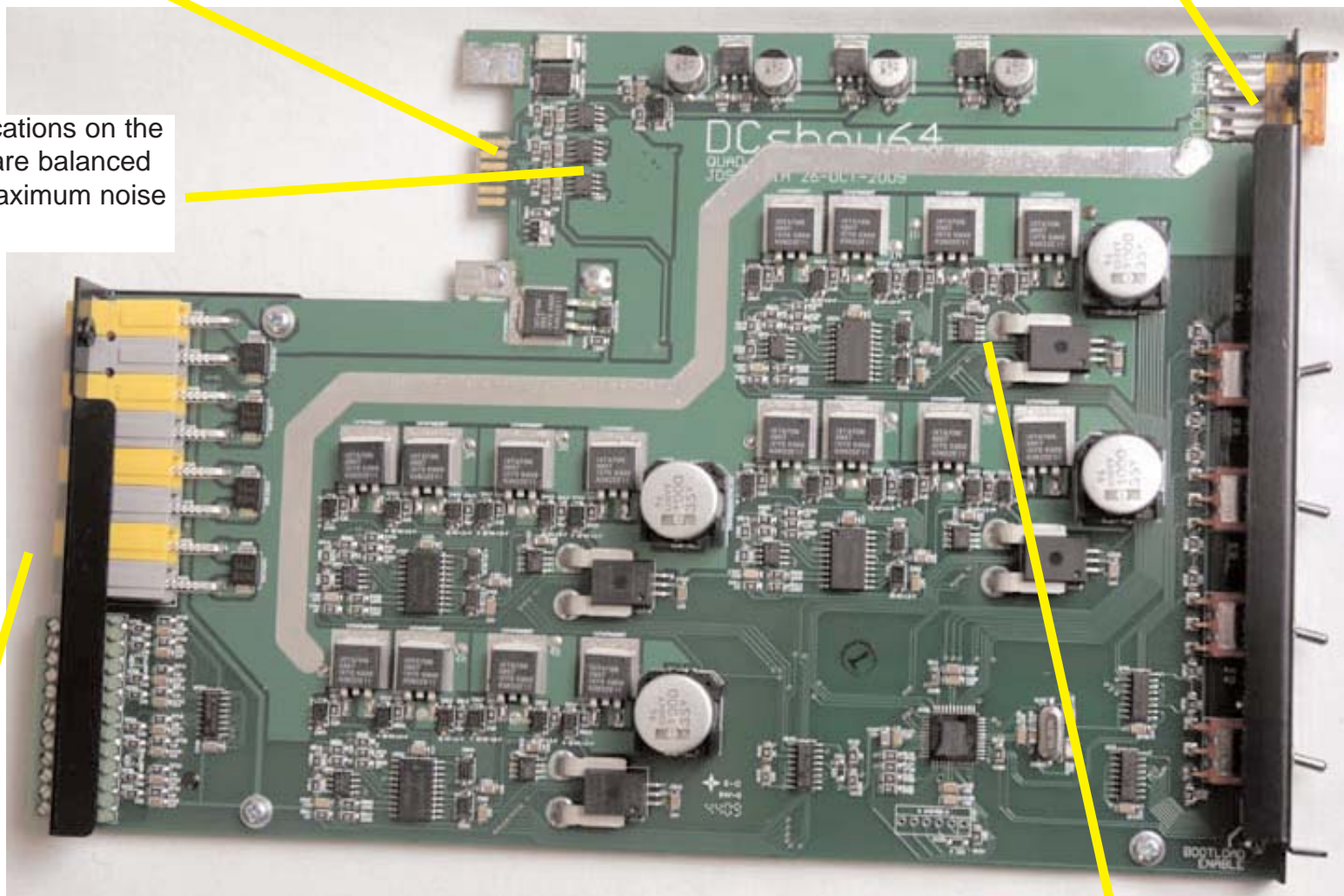# DCshow64 - Quad Bidirectional Motor Drive

Gold plated data contacts mate with gold plated receptacles on backplane. High-current power is delivered through copper L-brackets that screw into the busbars (not shown).

40A fuse will open only if extensive on-board electronic protections fail.

All communications on the internal bus are balanced RS485 for maximum noise immunity.

Anderson connectors for motor power outputs. Removeable screw-terminal block for limit switch inputs. Each motor driver has two limit switch inputs, for cw and ccw limiting.

State-of-the-art Microchip dsPIC33 Microcontroller includes an onboard DSP engine, multiple PWM generators and two high-speed data ports.

Each of four H-bridge motor drivers has it's own temperature and current sensor. The temperature sensor is positioned over copper in the current supply path to the power mosfets. These sensors are the core of electronic protection.