

HYDRA-X EH-PROTOx-1 Heads

Power Application Controllers™

PAC52xx Expansion - HYDRA-X Prototype Head User's Guide



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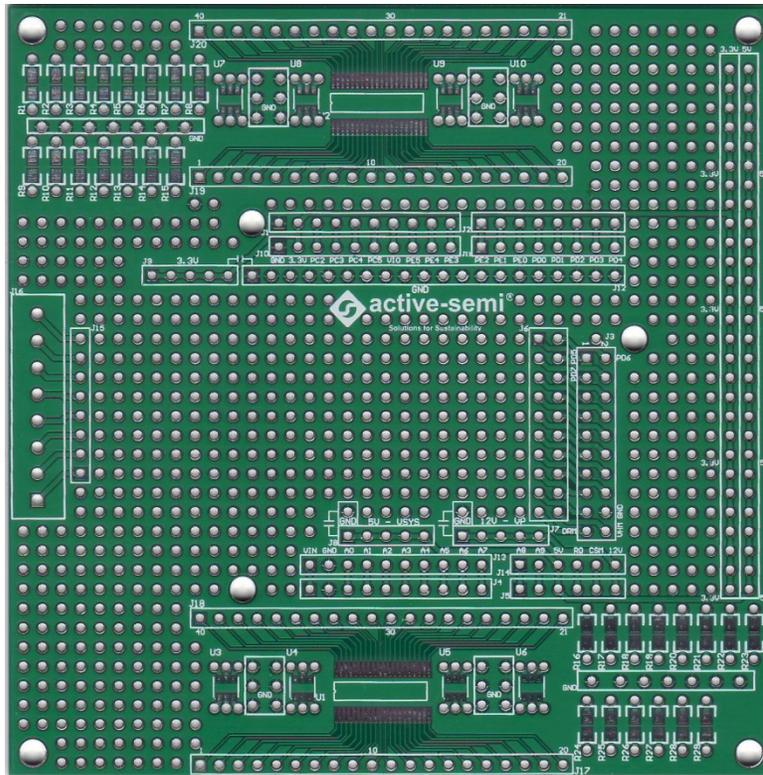


Figure 3: HYDRA-X EH-PROTOL-1 (Large Prototyping Area) Head

Solution Benefits:

- Ideal for implementing most small add-on applications to interface to any of the HYDRA-X Body boards.
- Gives access to all Body board signals.
- Provides multiple access points to important nodes such as GND as well as voltage rails (VP, VSYS, V3P3).
- Contains the footprint for a pitch terminal block.
- Schematics and Layout drawings available

Prototyping Space

HYDRA-X Prototype Heads will revolve around the same connectivity structure. It consists of:

1. A group of connectors to directly attach the Head to the Body Board.
2. A group of parallel connectors to grant access to the Body Board signals.
3. A group of header connectors giving access to the 3.3V, 5V and 12V rails.
4. A good number of holes connected to the GND plane.
5. Other connectors or footprints put in place to allow for further expansion.

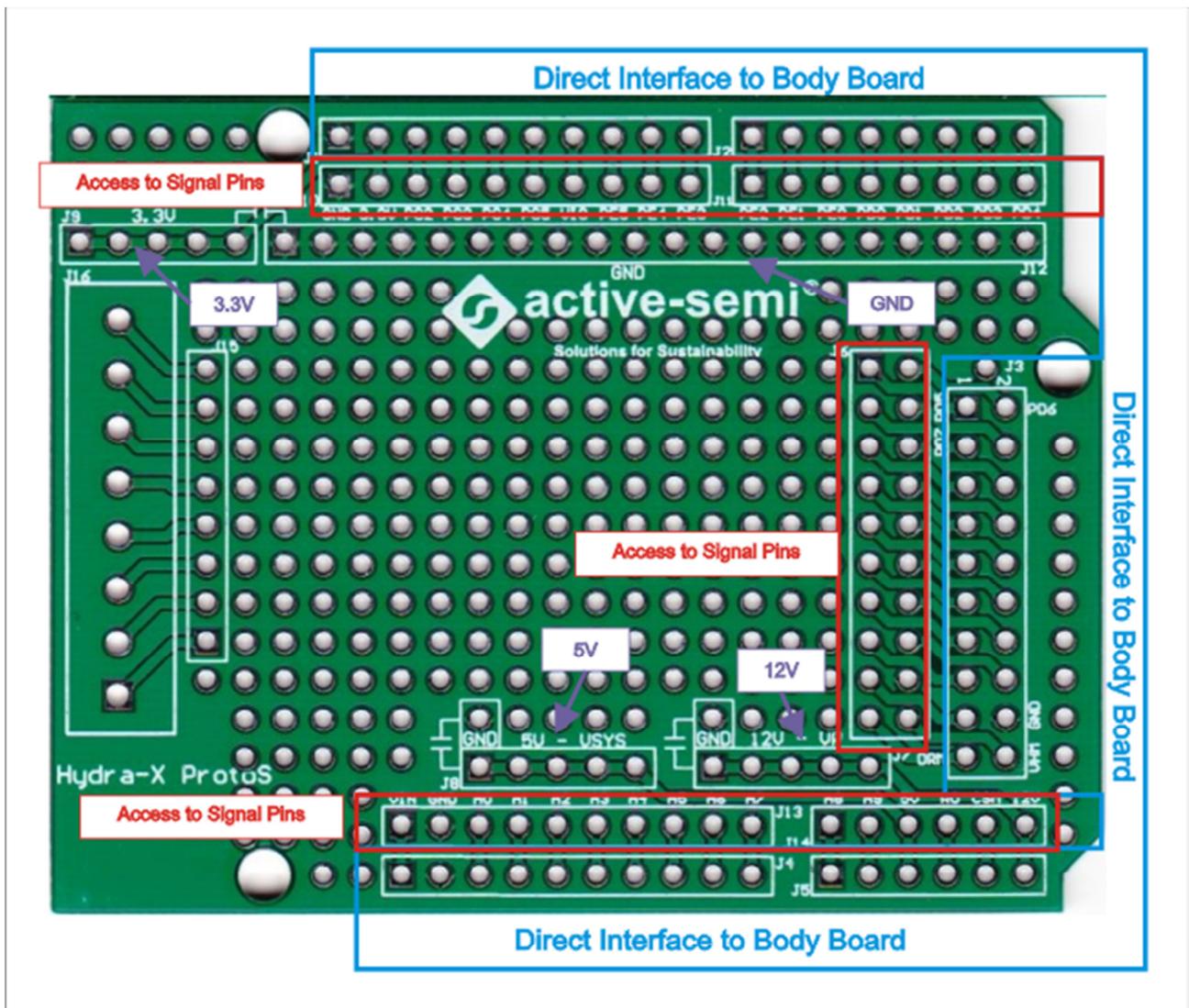


Figure 4 Typical Prototype Space

Bypass Capacitor Placeholders

If desired, the user can add bypass capacitors to the rails. Although not present on the schematic, the board layout was designed such that certain pads are connected to the GND plane, making it easier to add bypass capacitors to the available rails (e.g. 3.3V, 5V and 12V).

Bypass capacitors could be ceramic capacitors of 0.1uf or 1uf and rated to the rail voltage.

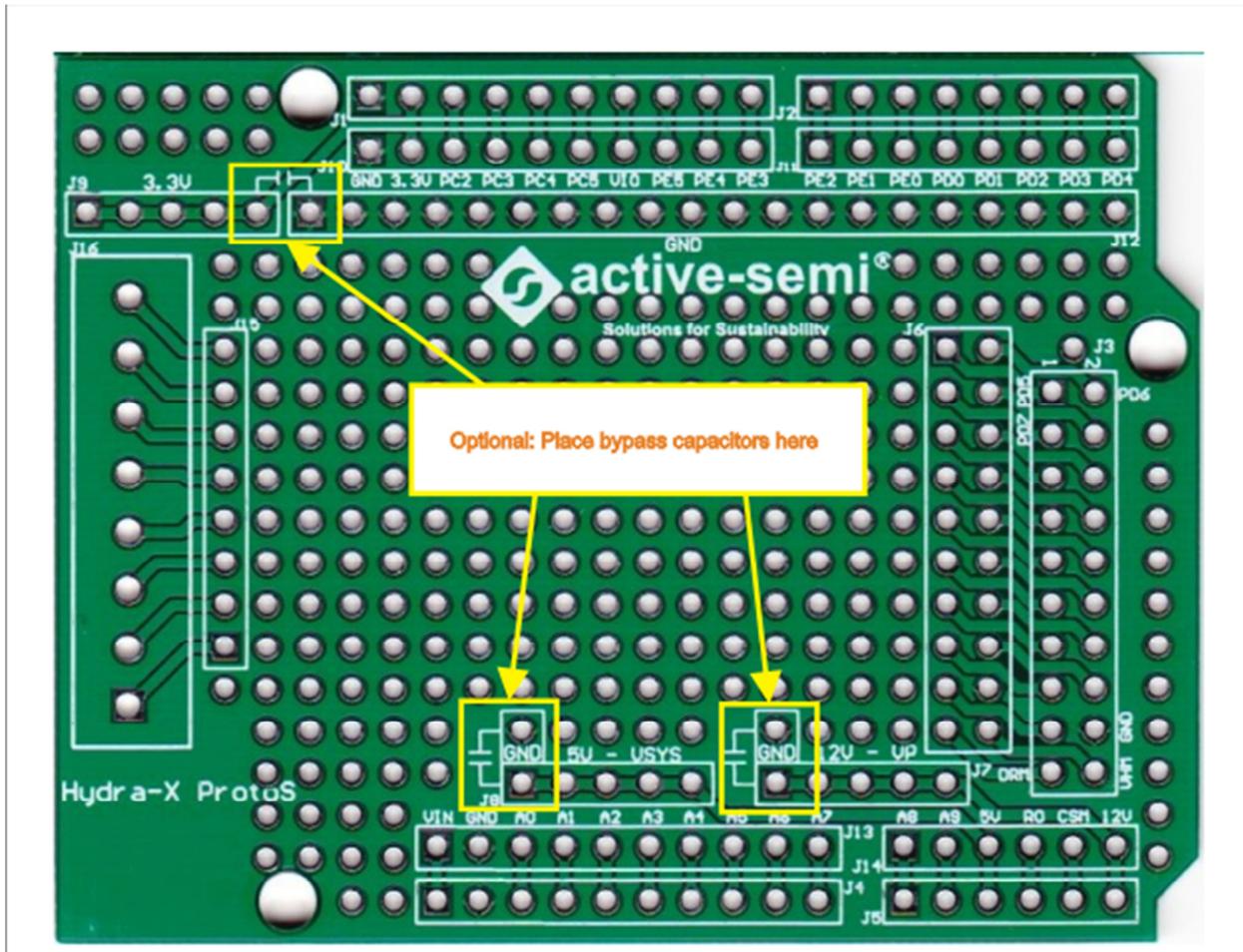


Figure 5 HYDRA-PROTOx Optional Bypass Capacitor Placeholder Locations

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