

# Fullbridge V1

This is a Simplis simulation model of a 400V input Fullbridge that has a 400V supply and a separate 12V supply. The output voltage is 48V and capable of up to 14A. The PWM is a UC3825 by Unitrode.

To better view the schematic, do the following from the SIMetrix command shell to set up the fonts for the text:

File → Options → Font → Schematic – user 1 → Arial,Bold,14

File → Options → Font → Schematic – user 2 → Times New Roman,Bold,22

The following are simulation circuits:

**Fullbridge\_Combo.sxsch** - This finds the periodic operating point, then performs an AC analysis and last performs a load transient of 10A at 20usec. Takes 18 sec to run on a 1Ghz machine.

**Fullbridge\_Startup.sxsch** - This model shows how the converter starts up. Takes 82 sec to run on a 1Ghz machine.