IMPORTANT!

Cooling Requirements for DNV7F4A VCCINT and +5V Power Supplies (PSU1/PSU2/PSU3/PSU4/PSU10/PSU12)

If any of the FPGAs draw greater than ~50A from its respective VCCINT power supply (PSU1/PSU2/PSU3/PSU4) the power supply will overheat and start rising in voltage which, depending on how hot it gets, can go beyond the absolute maximum VCCINT voltage specified in the Virtex-7 datasheet. This has the potential to damage the Virtex-7 device. If a user design is created that draws greater than ~50A from VCCINT, then external airflow is required for cooling PSU1/PSU2/PSU3/PSU4, such as that provided by chassis fans or a desk fan.

Please note that all power headers should have the appropriate power cable plugged in and the board shouldn’t be run unless all cables shown below are plugged in. Running the board with only the large ATX power connector could lead to the overheating of the ATX wires. Power header J34 takes an EPS power cable and should be exactly 8 pins.