IMPORTANT!

Cooling Requirements for DNV7F2B VCCINT/VCCO Power Supplies (PSU13/PSU10/PSU11)

If either of the FPGAs draw greater than ~50amps from its respective VCCINT/VCCO power supply (PSU13/10/11) the power supply will overheat and start rising in voltage which, depending on how hot it gets, can go beyond the absolute maximum VCCINT/VCCO 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 ~50amps from VCCINT, then external airflow is required for cooling PSU13/10/11, such as that provided by chassis fans or a desk fan.

Please note that all power headers (J4/J5/J8/J10) should have the appropriate power cable plugged in and the board shouldn’t be run unless all the connectors, referenced with a blue box in the picture above, are plugged in. Running the board with only the large ATX power connector (J5) could lead to the overheating of the ATX wires. Power header J8 takes an EPS power cable and should be exactly 8 pins (PWR/GND is reversed, as noted in the silkscreen, when comparing to the 6-pin PCIE power headers, J4/J10).