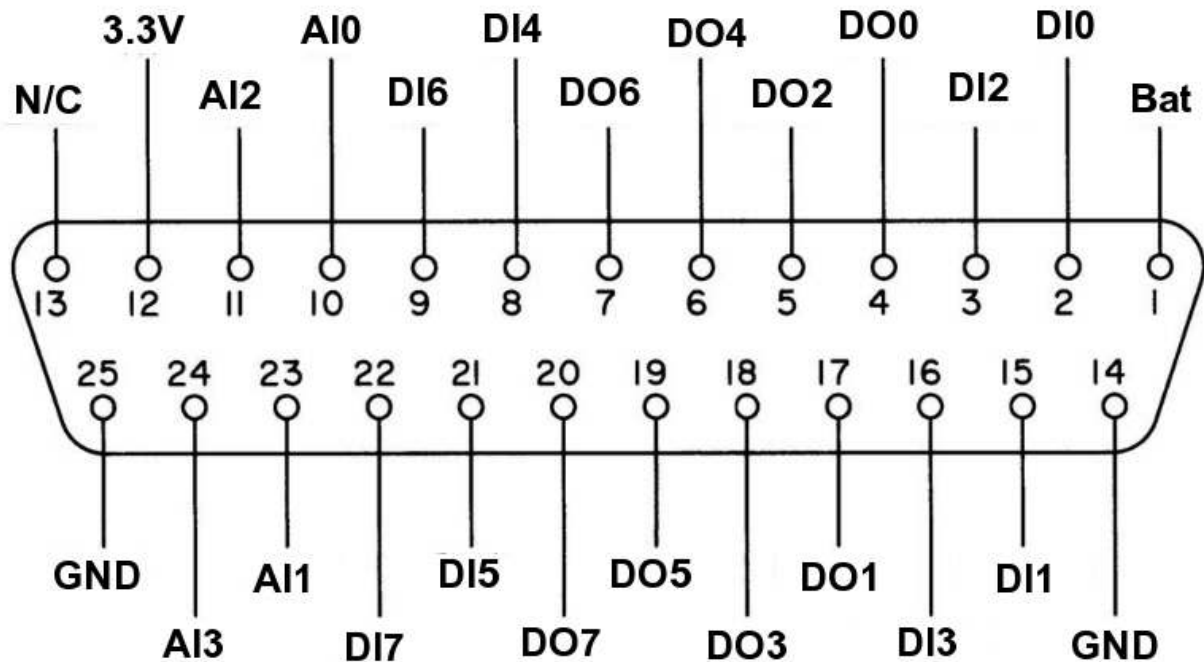


These specifications will be changed over time. The OmniDC500 is designed from the ground up to be very flexible thus supporting many different hardware and software configurations. These specifications are for revision 1.0 of the OmniDAC500 hardware.



Input/Output Connector Pin Descriptions

1. Battery Voltage
2. Digital Input 0
3. Digital Input 2
4. Digital Output 0
5. Digital Output 2
6. Digital Output 4
7. Digital Output 6
8. Digital Input 4
9. Digital Input 6
10. Analog Input 0
11. Analog Input 2
12. 3.3V
13. Not Connected
14. Ground
15. Digital input 1
16. Digital Input 3

17. Digital Output 1
18. Digital Output 3
19. Digital Output 5
20. Digital Output 7
21. Digital Input 5
22. Digital Input 7
23. Analog Input 1
24. Analog Input 3
25. Ground

Notes:

- The battery voltage is approximately 4.2V – use at your own risk, specs coming.
- The analog and digital inputs cannot exceed 3.3 volts
- The digital output voltage will not exceed 3.3 volts. It is regulated and should not vary by more than 0.2 volts.
- The digital outputs cannot drive more than 25ma. If driving an LED there should be a 150 Ohm resistor in series.
- The 3.3v output can be used to drive a sensor. The sensor should not draw more than 150ma of current.
- Analog Input 3 has a 100K Ohm resistor tied to ground. This resistor combined with another resistor tied to 3.3V is used to determine which sensor is attached, permitting automatic configuration of the microcontroller software and mobile computer software.
- Only data from Analog Input 0 is stored to the OmniDAC500 internal Micro SD card.