

# Quick Start Guide DC386A

David Chen

DC386A is a 3.3V input, high current power supply mainly for networking systems. Its two main outputs are 2.5V and 1.5V, respectively, and the maximum current of either output is 15A. A third output is 5V and is capable of providing up to 100mA bias current.

## **Initial status of jumpers:**

1. VOSENSE (JP5) = OFF
2. ITH (JP4) = OFF
3. STBYMD (JP2) = "H"
4. FCB (JP1) = "BURST"
5. RUN/SS1 (JP3) = "L"
6. RUN/SS2 (JP6) = "L"

## **Start-Up Procedure**

1. Apply input voltage 3.3V;
2. Monitor the voltage at "+5V" turret to be 5V;
3. Put RUN/SS1 jumper to "H";
4. Apply load (up to 15A) across "Vo1+" and "Vo1-" terminals and monitor output voltage to be 2.5V;
5. Put RUN/SS2 jumper to "H";
6. Apply load (up to 15A) across "Vo2+" and "Vo2-" terminals and monitor output voltage to be 1.8V;
7. To turn off Vout1, put RUN/SS1 jumper to "L", or
8. To turn off Vout2, put RUN/SS2 jumper to "L", or
9. To turn off both outputs, put STBYMD jumper to "L".

## **To Combine Both Outputs**

If more output current is needed, Vout1 and Vout2 can be paralleled together to provide up to 30A load current. DC386A is designed so that the user can combine both outputs fairly easily. Following procedure explains how to do so.

1. Connect "Vo1+" to "Vo2+" terminal (caution: since the load current can be up to 30A, at least 3 strands of AWG18 wire are needed in making this connection);
2. Connect "Vo1-" to "Vo2-" terminal (caution: since the load current can be up to 30A, at least 3 strands of AWG18 wire are needed in making this connection);
3. Put VOSENSE jumper ON;
4. Put ITH jumper ON;

5. Take out R16, R17, R18, C32 and C34;
6. Set R23 and R24 to right values to get desired output voltage;
7. Apply 3.3V input;
8. Put RUN/SS1, RUN/SS2 and STBYMD jumpers to “H”;
9. Apply load (up to 30A) across “Vo1+” and “Vo1-” terminals and monitor the output voltage;
10. To turn off output, put STBYMD jumper to “L”.