

Decision Matrix of Boards

Requirement	Weight	Board(Abby)	Board(Jinxuan)	Board(Weiyi)	Board(Han)	Board(Gary)	Board(together)
The input voltage must not be within +/- 10% of either of the output voltage (5V and 12V)	7	10	10	10	10	10	10
The DPS shall maintain voltage output specifications with an input voltage +/-20% from nominal	7	5	10	10	5	10	10
The DPS shall have a power efficiency of >60% with 20 mA current load on either of the two outputs.	8	7.3	7.8	7	9.3	7.5	8.7
The DPS shall generate maximum 30mA output current under a short circuit condition on either output	7	10	7	7	6	6	10
The DPS shall have a 5 V with +/-0.5 V output	9	0	10	10	5	10	10
The DPS shall have a 12 V with +/- 1.2 V output	9	10	10	10	10	10	10
Total score	470	323.4	431.4	425	356.4	422	459.6

Decision Matrix of Designs

Requirement	Design of Abby	Design of Jinxuan	Design of Weiyi	Design of Gary	Design of Han
The input voltage must not be within +/- 10% of 5V or 12V	Pass	Pass	Pass	Not pass	Pass
Track to track separation should be minimum of 0.4mm	Pass	Pass	Pass	Pass	Pass
The DPS shall have a 5V output with +/-1V with a current range 0-20mA	Pass	Pass	Pass	Not pass	Pass
The DPS shall have a 12 Voutput with +/- 2.4V with a current range 0-20mA	Pass	Pass	Pass	Pass	Pass
The designed DPS shall generate a maximum 30mA current output under short circuit conditions	Pass	Pass	Not pass	Pass	Not pass