

Compact and Silent Power Solution

120W DC-DC CONVERTER POWER BOARD SPECIFICATION (REV.1.0)



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1.0 Function Description

DC.power2 is the specially design the smallest size device for Personal Computer power supply . Fully fit **INTEL ATX Specification Version 2.1 standard Specification** . Provide over voltage protect , Power Voltage Output protect , short circuit protect and process PS—ON control .Electrical voltage security PGI s Signal Protect .

DC.power2 available provide continues 100W-120W efficiency power output (120W version available provide continues output 120W to 150W efficiency) . DC Power input , efficiency power AC ADAPTER INPUT and Voltage is 120W to 160W/minmum DC17V to 19V output request .

2.0 Input AC ADAPTER specially function description

2.1 Output Voltage : DC17V—DC19V

2.2 Output Current : 17V@7.5Amin 19V@6.5A(120W)
17V@9.0Amin 19V@8.0A(150W)

3.0 Output specially function description

Internal 200KHz Oscillator . Output side fully used with the LOW ESR high Performance efficiency wave fillet capacitor and with the BYPASS CAP0.1UF . rising the Power over loading and deduct the NOISE .

3.1 Output Electrical Voltage

| | | | | | | |
|----------------|---|-------|-------|------|------|------|
| Output Voltage | V | +5VSB | +3.3V | +5V | +12V | -12V |
| Current max | A | 2 | 10.0 | 12.0 | 4 | 0.1 |

| | | | | | | |
|------------------|-----|-----|-----|-----|-----|------|
| Power Output max | W | 10 | 33 | 60 | 48 | 1.2 |
| Over All Reg | . % | ±5% | ±4% | ±5% | ±5% | ±10% |
| Ripple & Noise | mV | 50 | 50 | 50 | 120 | 120 |

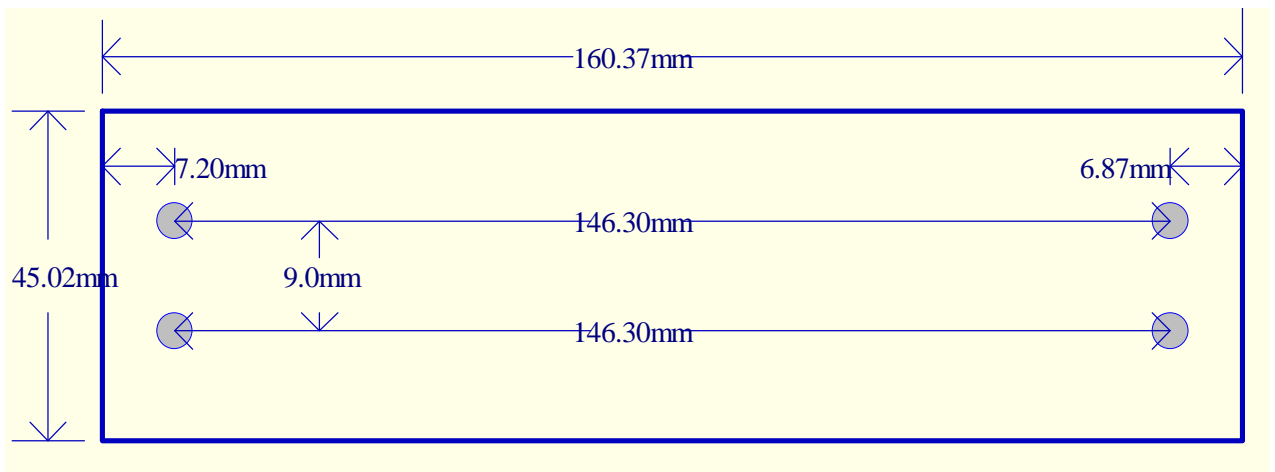
3.2 PROTECT

DC—DC.MW120A1INSIDE PWM CHIPSET Provide the excellent the over loading power short circuit over loading , power output , over voltage-protect function . Normally because the +12Voutput side without PWM chipset adjustment , DC—DC.MW120A1 specially design the +12V power output protect . DC—DC.MW80A1h provide the Electrical Voltage protect functions , also provide the far side remote control PS—ON chipset control and system disk testing device control OK signal PG.

3.3 Overloading:80%min : 80%min

4.0 PCB Description

4.1 PCB Board Dimension : 160.37mm * 45.02mm * 23mm



4.2 Installment Hole : ϕ 3.50mm

4.3 Installment Dimension Draw

4.4 Weight : 100G

5.0 Input/Output Connector description

5.1 Input connector : WAFER 3.96mm 1*2Pin Connector

| Pin | Signal |
|-----|-----------------|
| 1 | GND |
| 2 | DC+17V or DC19V |

5.2 Output Connector : ATX 2*10Pin Connector

| PIN | Signal | PIN | Signal |
|-----|--------|-----|--------|
| 1 | +3.3V | 11 | +3.3V |
| 2 | +3.3V | 12 | -12V |
| 3 | GND | 13 | GND |
| 4 | +5V | 14 | PS-ON |
| 5 | GND | 15 | GND |
| 6 | +5V | 16 | GND |
| 7 | GND | 17 | GND |
| 8 | PG | 18 | NC |
| 9 | +5VSB | 19 | +5V |
| 10 | +12V | 20 | +5V |

5.3 ATX+12V Connector : WAFER 3.96mm 1*4Pin Connector

| Pin | Signal |
|-----|--------|
| 1 | +12VDC |
| 2 | GND |
| 3 | GND |
| 4 | +12VDC |

