SPECIFICATION

High Quality
1U Power Supply

Universal AC Input
250W ATX Output

P/N: P6250S 1F

*** Specification Approval ***

This specification (total 6 pages including cover page) in its entirety is approved by:

Company Name	Print Name	Signature	Date

Specification subject to change without prior notice.

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1. SCOPE

This specification defines electrical performance and characteristic of "**P6250S 1F"** Full Range series Power supplies which comply with Intel P4, ATX12V v1.1, ATX2.03 & AMD requirements.

2. AC INPUT and AC OUTPUT:

	RANGE[1.]		
Limits	Minimum	Maximum	Unit
AC Input voltage	90	264	Vac
AC Input frequency	47	63	Hz
AC Input Current [2.]		4.5	Amp(rms)
Inrush current [3.] (cold start)		100	Amp(peak)
Inrush current (warm start)	NO COMPONENT OVER STRESSED. NO FUSE BLOW. NO DAMAGE TO THE POWER SUPPLY.		

NOTE: 1. The AC input is 90~264 Vac full range. No selectable hard switch is provided.
2. The value of the current is for the model with AC input.
3. Measured at 25 Deg C Ambient.

3. DC OUTPUT REQUIREMENTS:

3.1 DC OUTPUT CURRENT RATINGS

DC OUPTUT		Min.	Nom.	Max.	Peak	Tolerance
Group1	+3.3VDC	0.3A		20A		+5%/-5%
	+5VDC	0.1A		21A		+5%/-5%
	+12VDC	1.0A		13A	16A	+5%/-5%
	-5VDC	0.0A		0.5A		+5%/-5%
	-12VDC	0.0A		0.8A		+10%/-10%
Group2	+5Vsb	0.0A		2A		+5%/-5%

Note: 1. Maximum continuous DC output power shall not exceed 250 Watts.
2. Combined load on +5VDC and +3.3VDC output shall not exceed 110 Watts or 30A.
3. The Combined load for –5V and –12VDC output is 0.8A.

3.2 CROSS REGULATION

The +5V & +3.3V combined load and +12VDC load shall remain within the regulation Defined in section 3.1 over cross load combinations shown Figure 1

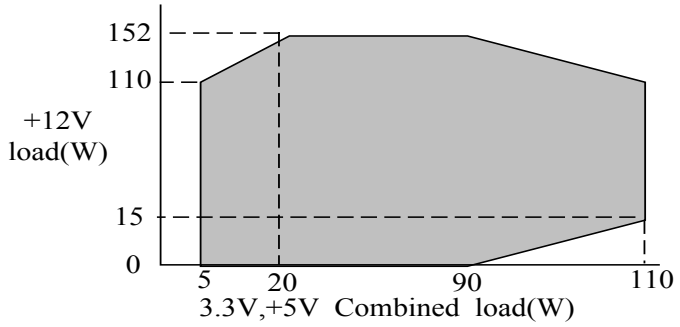

Figure 1 +5V & +3.3V combined,+12V Cross Load Combinations

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3.3 OUTPUT RIPPLE and NOISE

Measurement is made with an oscilloscope with 20 MHz bandwidth. Output should be bypassed at the connector with a 0.1uF ceramic disk capacitor and a 10uF electrolytic capacitor to simulate System load. The length of ground wire on probe should not longer than 40mm, if a Non - differential type of scope was used.

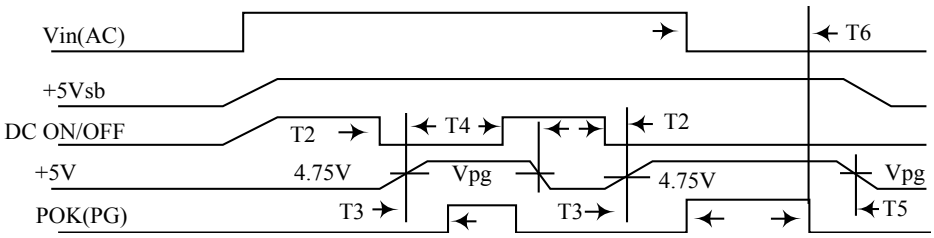
+3.3V	+5V	+12V	-5V	-12V	+5Vsb
50mV	50mV	120mV	50mV	150mV	50mV

3.4 DYNAMIC DC OUTPUT CHARACTERISTICS

+/-10% Max. Excursion for 50% to 100%, or 100% to 50% load change with return to Regulation in 0.5 mS.

3.5 DC OUTPUT ON/OFF CONTROL

A low active PS-ON (DC ON/OFF) input signal is equipped, which provide the interface to **ENABLE** or to **DISABLE** the **GROUP1** of DC output. This signal is electrically compatible to interface with **TTL,OPEN COLLECTOR** and the **HARD SWITCH.**



SIGNAL NAME			MAXIMUM	MINIMUM
T2	+5V TURN-ON DELAY		20 mS	
T3	RESET TIME		500 mS	100 mS
T4	DC SAVE TIME			1 mS
T5	SAVE TIME	Vpg= 4.75V		1 mS
T6	HOLD-ON TIME (AT NOMINAL AC INPUT)			16 mS

4. OUTPUT PROTECTION

4.1 TOTAL POWER PROTECTION: (OPP)

Total power 135% max with shut-down and latch off protection.

4.2 OVER VOLTAGE PROTECTION: (OVP)

OVER VOLTAGEAT	ACTIVE RANGE		RESULT
	Min.	Max.	
+3.3V	3.76V	4.8V	Shut down & Latch OFF The Group 1 DC Output
+5V	5.7V	7.0V	
+12V		15.6V	

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4.3 SHORT CIRCUIT PROTECTION: (OCP)

The short between any output of group 1 will shut down all group1.
The short at group 2 will Shut down both group 1 and group 2.

4.4 RESET AFTER SHUTDOWN

Whenever the power supply latches into shutdown state due to fault condition on its output, The power supply will return to normal operation only after the fault has been removed and the power switch has been cycled off/on with **A MINIMUM OFF TIME OF 20mS.** (PS-ON)

5. POWER GOOD SIGNAL:

Signal Type: open collector +5DC, TTL compatible.
Logic Level: <0.4V while sinking 4 mA.
Logic Level High: between 2.4VDC and +5V output while souring 200 uA.

6. EFFICIENCY:

6.1 AT FULL LOAD:

220-240VAC 76% typical
100-120VAC 72% typical

6.2 *ENERGY STAR MODE*

Over 50% at 30W max power consumption with 15W or more delivered to DC power output

6.3 *STANDBY MODE*

Over 50% (PS-ON inactive)5W max power consumption with at least 500mA output on +5Vsb

7. COOLING OF PSU

A DC FAN was equipped to Cooling The Power Supply and system Load , The FAN will draw in AIR Through The vent Holes in DC Output Cable Side , and Exhaust it in The AC Receptacle Side.

Fan parameters

Rated voltage	12VDC
Dimensions	40*40*20 (mm)
Air flow	34 CFM min.
Noise	<35 dBA

8. ACTIVE POWER FACTOR CORRECTION (PFC):

8.1 Harmonic current meets IEC1000-3-2 / EN61000-3-2 standards.

8.2 PFC >0.95 at full load.

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9. ENVIRONMENT

9.1 OPERATING

Temperature: 0 to 50 °C. (The rated power will derate from 100% to 80% from 40°C to 50 °C Linearly)

Relative Humidity: 20% to 80%

9.2 SHIPPING / STORAGE

Temperature: -40 to 85 Deg C

Relative Humidity: 10% to 95%

10. MTBF

Over 100,000 hours at 25 Deg C.

11. EMC

Comply to CE EN50081-1(1992) , EN55024(1998), EN61000-3-2, EN61000-3-3 & FCC (B) regulation.

12. SAFETY:

Conform to IEC950 (EN60950) standards: CB, C-UL, TUV

13. MECHANICAL DRAWING:

Dimension: L190*W100*H40.5 mm

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