

# ENERGY STAR® Power and Performance Data Sheet

Model Name: MAGNIA T1340b



## System Characteristics

Form Factor	1 socket pedestal server
Available Processor Sockets	1
Available DIMM Slots / Max Memory Capacity	4slots / 32GB max.
ECC and/or Fully Buffered DIMMs	Yes
Available Expansion Slots	3 PCI-E 2.0, 1 PCI
Minimum and Maximum # of Hard Drives	0 to 4
Redundant Power Supply Capable?	No
Power Supply Make and Model	Flextronics NQB-S-0400ADU00
Power Supply Output Rating* (watts)	400W
Minimum and Maximum # of Power Supplies	1
Input Power Range (AC or DC)	100-240VAC
Power Supply Efficiency at Specified Loadings*	88.5%@20%, 90.8%@50%, 88.5%@100%
Power Supply Power Factor at Specified Loadings*	0.950@20%, 0.990@50%, 0.999@100%
Operating Systems Supported	Microsoft Windows Server 2008 R2 Standard etc.
Installed Operating System for Testing	Microsoft Windows Server 2008 R2 Standard

\* Note: Power supply information is for a single power supply only

## System Configurations

	Minimum	Typical	Maximum
Configuration ID	SYU4630C	SYU4630C	SYU4630C
Processor Information	Intel Xeon E3-1220v2 3.10GHz x1	Intel Xeon E3-1220v2 3.10GHz x1	Intel Xeon E3-1220v2 3.10GHz x1
Memory Information	DDR3-1600 2GB x1	DDR3-1600 8GB x2	DDR3-1600 8GB x4
Internal Storage	SATA 6Gbps 7200rpm 250GB x1	SAS 6Gbps 10000rpm 900GB x2	SAS 6Gbps 10000rpm 900GB x4
I/O Devices	None	SAS Raid Card x1	SAS Raid Card x1 Ethernet card x1 SAS HBA card x1
Power Supply Number and Redundancy Configuration	NQB-S-0400ADU00 400W x1	NQB-S-0400ADU00 400W x1	NQB-S-0400ADU00 400W x1
Management Controller or Service Processor Installed?	Yes	Yes	Yes
Other Hardware Features / Accessories			

## Power Data

	Minimum	Typical	Maximum
Idle Category (1S and 2S only)	Category B: Managed Single Installed Processor (1P) Servers		
ENERGY STAR Idle Power Allowance (1S and 2S only)	65.0	133.0	193.0
Measured Idle Power (watts)	26.7	44.9	82.2
Power at Full Load* (watts)	51.1	70.9	109.5
Benchmark / Method Used for Full Load Test	Use SiSoftware Sandra Engineer (.NET Multi-Media)		
Test Voltage and Frequency for Idle and Full Load Test	230V / 60Hz		
Range of Total Estimated Energy Usage ** (kWh/year)	468 to 895	0,787 to 1,242	1,440 to 1,918
Link to Detailed Power Calculator (if available)			

\* Note: Full load power represents the sustained, average power at 100% load of the given workload, and does not necessarily represent the absolute peak power or the highest average, sustained power possible for other workloads.

\*\* Note: Estimated kWh/year gives the absolute range of energy use a user could expect from continuous operation (24x7x365) and ranges from 100% Idle usage to 100% full load operation. The calculation also includes typical data center overhead at a ratio

## Power and Performance for Benchmark #1

	Minimum	Typical	Maximum
Benchmark Used and Type of Workload	SiSoftware Sandra Engineer (.NET Multi-Media)		
Avg. Power Measured During Benchmark Run	51.1	70.9	109.5
Benchmark Performance Score	15.13Mpixel/s	15.20Mpixel/s	15.32Mpixel/s
Power Performance Ratio (perf score/avg. power)	0.30	0.21	0.14
Link to Full Benchmark Report (Where Available)	N/A	N/A	N/A

## Power and Performance for Benchmark #2 (optional)

	Minimum	Typical	Maximum
Benchmark Used and Type of Workload			
Avg. Power Measured During Benchmark Run			
Benchmark Performance Score			
Power Performance Ratio (perf score/avg. power)			
Link to Full Benchmark Report (Where Available)			

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<b>Power Saving Features</b>	<b>Enabled on Shipment</b>	<b>End-User Enabling Required</b>
Processor Dynamic Voltage and Frequency Scaling	<b>Yes</b>	<b>No</b>
Processor or Core Reduced Power States	<b>Yes</b>	<b>No</b>
Power Capping	<b>No</b>	<b>Yes</b>
Variable Speed Fan Control Based on Power or Thermal Readings	<b>Yes</b>	<b>No</b>
Low Power Memory States	<b>No</b>	<b>No</b>
Low Power I/O States	<b>No</b>	<b>No</b>
Liquid Cooling Capability	<b>No</b>	<b>No</b>
Other1:		
Other2:		
Other3:		
Other4:		

## Power and Temperature Measurement and Reporting

Input Power Available & Accuracy?	Yes, +/- 5%
Input Air Temp Available & Accuracy?	Yes, +/- 2 degree C
Processor Utilization Available?	Yes
Other Data Measurements Available & Accuracy?	
Compatible Protocols for Data Collection	IPMI
Averaging method and time period	Non Averaging, 1 sec. interval sampling

## Thermal Information \*

	<b>Minimum</b>	<b>Typical</b>	<b>Maximum</b>
Total Power Dissipation (watts)	51.1	70.9	109.5
Delta Temperature at Exhaust at Peak Temp. (°C)	2.6	2.0	4.8
Airflow at Maximum Fan Speed (CFM) at Peak Temp.	26.6	28.2	30.1
Airflow at Nominal Fan Speed (CFM) at Nominal Temp.	21.4	22.7	25.9

\* References: ASHRAE Extended Environmental Envelope Final August 1, 2008  
 Thermal Guidelines for Data Processing Environments, ASHRAE, 2004, ISBN 1-931862-43-5  
 Peak temperature is defined as 35 °C, Nominal Tempera

## Notes

1. SPECpower\_ssj2008 is a registered trademark of the Standard Performance Evaluation Corporation (SPEC). Benchmark results stated above reflect results published on XX/XX/XX. For the latest SPECpower\_ssj2008 benchmark results, visit <http://www.spec.org>

## ENERGY STAR Qualified Configurations

**Include specific information on ENERGY STAR Qualified SKUs or configurations**

Qualified Configuration ID: SYU4630C

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### **ENERGY STAR Qualified Configurations (Continued)**

**Include specific information on ENERGY STAR Qualified SKUs or configurations**

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