ECO DECLARATION

STONE ITX DESKTOP PC

Brand:
Stone

Model:
ITX Desktop PC

Model number:
PC781-H81I3W8

Date:
January, 2014

Form factor:
Mini ITX

Chipset options:
H81, Q87

CPU options:
Intel Pentium,
Intel Core i3/i5/i7
(restrictions apply)

Storage options:
1x 2.5" HDD/SSD
1x Slim ODD

Product weight:
2.4 Kg approx

Stone and the environment

As a company we are legally required to satisfy that our products are safe and that risk to the environment is minimised in line with EU regulations. However, at Stone we also feel morally obligated to ensure our products meet or exceed these requirements. We ensure that throughout the entire life cycle, Stone branded products offer exceptional design, energy efficiency and recyclability whilst lowering their environmental impact.

Energy Efficiency

A large portion of greenhouse gas emission results from the use of electronic products. Energy efficiency is a key part of a product's design; each successive generation of technology seeks to improve on energy efficiency. Stone products use high performance, power efficient components combined with Microsoft operating systems, configured with an optimised power profile that will intelligently switch between power states during periods of inactivity.

As a result, Stone products are energy efficient from the moment they are plugged in and outperform the stringent requirements of the Energy Star program within the European Union.

Desktop computer power profile settings

Period of Inactivity	System State
10 Minutes	Display Turns Off
30 Minutes	Enters Sleep Mode (s3)
45 Minutes	Enters Hibernate Mode (s4)

Example of power consumption for Stone ITX Desktop PC*

Mode	230v Input	Compliance Standard
Idle	19.98W	Energy Star v5.2
Sleep (s3) WOL enabled	3.17W	Energy Star v5.2
Off (s5) WOL enabled	2.51W	Energy Star v5.2
Off (s5) Deep sleep enabled	1.88W	
Hibernate (s4) Deep sleep enabled	1.87W	
No Load	0.20W	
PSU average efficiency	89%	Efficiency rating V

Example of typical energy consumption & emissions for Stone ITX Desktop PC*

Measurement	Result
ETEC Annual Power Consumption*²	83.5 kWh
Annual Cost @ £0.117 / kWh	£9.76
Annual Carbon Emissions	37.2 Kg CO_2e

Further energy and CO_2e reductions can be achieved if system is turned off at the AC outlet or more aggressive power profile settings are configured.

Acoustic Emissions

As a company dedicated to supplying IT equipment into education and the public sector, it is important that in classroom and office environments noise emissions from our products are minimised. This helps maintain pleasant working conditions as well as addressing health and safety concerns.

Example of noise emissions for Stone ITX Desktop PC*

Mode	Declared A-weighted sound power level L_{WAd} dB (A) *[3]	Declared A-weighted sound pressure level at operator position L_{pAm} dB (A) *[3]
Idle	22.4	12.0
HDD Operating	23.7	13.0

Thermal Output

All electronic equipment produces heat as a by-product during operation. We have provided the below data to allow building managers and thermal engineers to ensure sufficient cooling and maintain acceptable ambient temperatures.

Example of heat output for Stone ITX Desktop PC*

Mode	BTU/h
Idle	68.17
Load (100% utilisation)	202.85

Restricted Substances

All Stone branded products are RoHS compliant as statutory under CE requirements.
Technical files and supplier test / certification documents demonstrating conformance are held on product components.
The following materials in Stone products are restricted as follows:

RoHS Restricted Materials

Material	Max Content of total weight
Lead	0.1%
Cadmium	0.01%
Hexavalent Chromium	0.1%
Polybrominated Biphenyl (PBB)	0.1%
Polybrominated Diphenyl Ethers (PBDE)	0.1%
Mercury	0.1%

Ozone Depleting Materials

Material	Content
Chloroflourocarbons (CFC)	None Used
Hydrobromofluorocarbons (HBFC)	None Used
Hydrochlorofluorcarbons (HCFC)	None Used
Hydrobromofluorocarbons (HBFC)	None Used
Halons	None Used
Carbontetrachloride	None Used
Trichloroethane	None Used
Methyl Bromide	None Used

Product Safety

An important part of product design is adhering legal requirements in force throughout the European Union.

These directives ensure that electrical equipment meets strict safety requirements so that the products can be used safely in applications for which they were made.

All Stone products are compliant with the applicable CE directive and labelled accordingly. Technical files are and supplier test / certification documents are held on product components.

CE Directives

Products comply with following requirements:

- LVD Directive 2006/95/EC - EN60950-1:2006/A2:2013
- EMC Directive 2004/108/EC – EN50561-1:2013, EN55024:2010, EN61000-3-2:2006+A2:2009, EN61000-3-3:2013
- R&TTE Directive 99/5/EC – EN 301 489-1 V1.9.2, EN 301 489-17 V2.2.1, EN 301 893 V1.7.1, EN 300 328 V1.8.1, EN 623311:2008
- Eco Design Directive 2009/125/EC – (EC) No 617/2013, (EC) No 278/2009
- Directive 2011/65/EU – Restriction of Hazardous Substances Directive
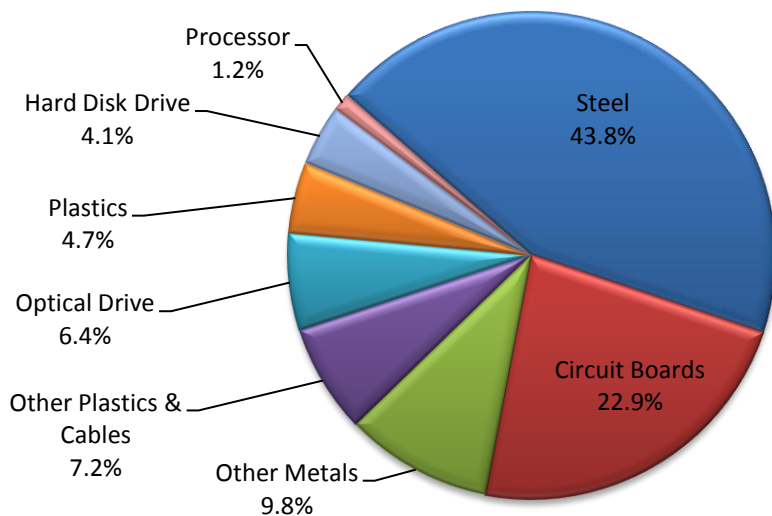
Materials Selection
Products

It is important that our products begin their life by meeting key criteria relating to the composition of the materials used in their manufacture. As a leading UK IT configurator & recycler Stone pledges to affirm that at the end of our products life, those component materials pose the minimum risk possible to the environment and can be handled safely with much of the product being suitable for recycling or reuse.

- Plastic parts forming the enclosure are free from flame retardants.
- Plastic parts forming the enclosure are halogen free.*[4]
- Plastic parts forming the enclosure are free from substances/preparations which are classified as R40, R45, R46, R48, R50, R51, R53, R60, R61 and any combination of these.
- Plastic parts forming the enclosure do not have surface coatings that are incompatible with recycling methods.
- Plastic enclosure parts >100g consist of one material.
- All plastic enclosure parts >25g having material codes according to ISO 11469 (referring ISO 1043).
- Plastic enclosure parts are free from metal inlays and molded in metal components.
- Labels are easily separable (This does not apply to safety or regulatory labels).
- Product does not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain.
- Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations.
- Removable Cell Button battery contained within the product is a lithium manganese dioxide CR2023 with mercury content less than 2% of battery weight.
- A majority of the product is made from materials which are desired by recyclers or PC refurbishing operators:

Pie chart:
- Steel 43.8%
- Circuit Boards 22.9%
- Other Metals 9.8%
- Other Plastics & Cables 7.2%
- Optical Drive 6.4%
- Plastics 4.7%
- Hard Disk Drive 4.1%
- Processor 1.2%

Materials are reusable, recyclable or recoverable via a variety of processes.

Packaging

Stone cardboard packaging cartons are produced from 100% recycled fibre content and the protective foam inserts are produced using up to 20% recycled content. Packaging also contains less than 100ppm heavy metals as required by EU packaging regulations.

Stone ITX Desktop PC individual packaging

Material	Shipping weight
Corrugated cardboard	817g
PE open cell foam	182g
EPE foam bag	30g
Other plastic (security tape and accessory bag)	15g
Total	1054g

Reusable bulk packaging options are also available for many Stone products; this allows for a smaller delivery foot print, less packaging use and reduced vehicle emissions.
Bulk packaging is made from corrugated cardboard which is 100% recyclable.

Stone ITX Desktop PC bulk packaging (for up to 35 systems or multiples of)

Material	Total shipping weight
Corrugated cardboard	6500g
EPE Foam bag	1050g
Other plastic (accessory bag)	280g
Total	7830g

Shipping systems in bulk can save up to 78% of packaging by weight.

Product Life Cycle

Stone products are of modular design allowing ease of both repair and upgrade of individual parts, extending the overall life of the product.

To aid product life extension these modular components can be replaced using commonly available tools allowing persons with basic knowledge of computer hardware to perform these tasks.

Stone provide next day on-site warranty support for up to 5 years on its products. Stone can also provide an out of warranty repair service from its approved Repair centre with spare or replacement parts available for up to 5 years from date of manufacture.
Online customer advice, driver downloads and updates are available the Stone Knowledge base: http://kb.stonegroup.co.uk/

Stone
Knowledgebase

Stone Recycling Brochure

Book a Recycling Collection

Recycling

Waste Electrical & Electronic Equipment (WEEE)

Stone have fully embraced their obligation under WEEE Regulations as a producer and is the only UK IT configurator providing its own onsite treatment facility for redundant IT equipment (WEEE).

Stone will collect all redundant IT equipment from any source (FOC) and assure secure and ethical treatment of the equipment.

Stone primarily targets the reuse of received WEEE and secondarily the recovery of recyclable materials.
Stone operates a zero landfill policy.

Recycling brochure and approvals:
http://www.stonegroup.co.uk/sustainability/recycling.aspx

E mail: recycling-enquiries@stonegroup.co.uk

Collections of redundant equipment can be arranged via online request system:
http://www.stonegroup.co.uk/sustainability/recycling/book-a-recycling-collection.aspx

Collections can be coordinated with new product deliveries in order to maximize transport use and reduce emissions.

Stone Products

Stone products facilitate best practice recycling and are easily disassembled which offering opportunity for repair, reuse or segregation of components and material types.

- Plastic parts forming the enclosure do not have surface coatings that are incompatible with recycling methods.
- Plastic enclosure parts >100g consist of one material.
- All plastic enclosure parts >25g having material codes according to ISO 11469 (referring ISO 1043).
- Plastic enclosure parts are free from metal inlays and molded in metal components.
- Labels are easily separable (This does not apply to safety or regulatory labels).
- A majority of the product is made from materials which are desired by recyclers or PC refurbishing operators.

Stone Recycling mechanical and manual disassembly methods ensure that materials are segregated and passed on to approved processors for the recovery and reuse of materials where direct reuse is not technically viable.

Stone Packaging

Stone standard packaging is recyclable as follows:

Stone ITX Desktop PC individual packaging

Material	Recyclable
Corrugated cardboard	Yes
PE open cell foam	Yes
EPE foam bag	No
Other plastic (security tape and accessory bag)	Accessory bag only
Total	**95%**

Stone ITX Desktop PC bulk packaging (for 35 systems)

Material	Recyclable
Corrugated cardboard	Yes
EPE Foam bag	No
Other plastic (accessory bag)	Yes
Total	**86%**

Stone also offer a packaging take-back service and full install to desk services with returned packaging being reused or segregated for recycling.

Appendix 1

* Product evaluation and statistical examples are based on Stone ITX Desktop PC with the following hardware specification:

System Specification
Stone Black and Chrome ITX Chassis
H81 Chipset based motherboard
Intel Core i3 processor
4GB DDR3 1600Mhz memory
320GB 7200RPM 3.5 inch Hard Disk Drive
24x Speed Dual Layer DVDRW

*[2] Energy Star Typical Energy Consumption (ETEC) is an internationally recognised method of calculating yearly energy consumption for electronic equipment, which was introduced in the United States by the EPA and adopted by the European Union and other territories.

*[3] Data represents the standard Stone system listed in Appendix 1; configured with one single hard drive in the primary mounting location. If additional hard drives are added or the existing hard drive is mounted in a secondary location, this would affect the result.

*[4] Halogen Free: A material is defined as halogen free if it contains less than 900 parts per million (ppm) of bromine and of chlorine (or 1500ppm combined total).

Definitions

Energy efficiency terms: The energy values in this report are based on the ENERGY STAR Program Requirements for Computers Version 5.2 and/or ENERGY STAR program requirements for Single Voltage External AC-DC and AC-AC Power Supplies Version 2.0. For more information, visit www.energystar.gov.

• **Idle—Display on**: System is on and has completed loading OS; the display is set to its full brightness (only applicable to systems with integrated displays).

• **Idle—Display off**: System is on and has completed loading OS; the display is turned off (only applicable to systems with integrated displays).

• **Idle**: System is on and has completed loading OS.

• **Sleep**: Low power state that is entered automatically after 30 minutes of inactivity, or by selecting Sleep from the shutdown menu within the operating system. Wake on LAN is enabled by default with all shipped systems.

• **Off**: Lowest power mode when the system is shut down, also referred to as Standby.

• **Hibernate**: Similar to Off power mode, with a faster resume capability by loading a cache file from the hard drive containing data previously stored in memory.

• **Power supply efficiency**: Average of the internal power supplies measured efficiency when tested at 100 percent, 75 percent, 50 percent, and 25 percent of the power adapter's rated output power (only applicable to systems with internal power supplies).

• **Power adapter, no-load**: Condition in which the power adapter is connected to AC power, but not connected to the system (only applicable to systems with external power supplies).

• **Power adapter efficiency**: Average of the power adapter's measured efficiency when tested at 100 percent, 75 percent, 50 percent, and 25 percent of the power adapter's rated current (only applicable to systems with external power supplies).

Note: Deep sleep is a BIOS option which disables power consuming features such as WOL allowing the system to consume less power in Off and Hibernate power modes.
By default all Stone systems are shipped with WOL enabled as network wake capability is a required feature of the product within our customer base.
All systems are ErP 2013 capable.