EcoLeaf
Type III Environmental Declaration (EPD)
Registration number： JR-BF-23004E-A

Japan EPD Program by SuMPO
Sustainable Management Promotion Organization
14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo Japan
https://ecoleaf-label.jp/

Fsas Technologies Inc.　　PRIMERGY RX4770 M7



Functional unit

Per product

System boundary

■ final products　□intermediate products

Raw material acquisition, Production, Distribution, Use & maintenance, End-of-Life

Main specifications of the product

Product: PYR4777RBT

Rack-mounted Server

CPU: Quad Socket

Intel® Xeon® Scalable Processors

Dimensions: 435 × 800 × 129.4（3U）mm

(Dimensions without protrusions)

Use period: 5 years

Company Information

Fsas Technologies Inc.

https://eu.fsastech.com/eu/about-us/contact/

Registration#	JR-BF-23004E-A
PCR number	PA-520000-BF-04
PCR name	IT equipments
Publication date	2023/09/27
Verification date	2023/09/05
Verification method	Product-by-product
Verification#	JV-BF-23004
Expiration date	2028/09/04

PCR review was conducted by:

Approval date	2023/08/15
PCR review panel chair	Ken Yamagishi (SuMPO)

Third party verifier*

Hiroyuki Uchida

Independent verification of data & declaration in accordance with ISO14025

□internal　■external

*Auditor's name is stated if system certification has been performed.

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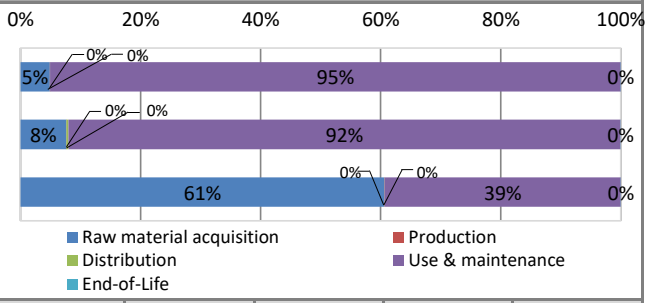
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1. Results of life cycle impact assessment (LCIA)

Global warming IPCC2013 GWP100a	15000	kg-CO2eq
Acidification	5.6	kg-SO2eq
Resources consumption	0.15	kg-Sbeq



Parameter \ stage	Unit	Total	Raw material acquisition	Production	Distribution	Use & maintenance	End-of-Life
Global warming IPCC2013 GWP100a	kg-CO_2eq	1.5E+04	7.4E+02	5.9E+00	5.6E+00	1.4E+04	2.7E+00
Ozone layer destruction	kg-CFC-11eq	6.7E-05	6.7E-05	2.6E-11	4.6E-11	6.3E-08	1.6E-09
Acidification	kg-SO_2eq	5.6E+00	4.3E-01	2.1E-03	1.8E-02	5.1E+00	3.2E-03
Urban area air pollution	kg-SO_2eq	2.4E+00	2.5E-01	8.9E-04	6.9E-03	2.2E+00	1.8E-03
Photochemical ozone	kg-C_2H_4eq	3.4E-01	9.0E-03	1.4E-04	3.4E-05	3.3E-01	3.2E-05
Toxic chemicals(cancer)	kg-C_6H_6eq	2.7E-01	1.9E-01	3.3E-05	1.8E-09	8.0E-02	4.7E-06
Toxic chemicals(chronic disease)	kg-C_6H_6eq	1.3E-02	8.6E-04	4.8E-06	2.7E-10	1.2E-02	6.9E-07
Aquatic toxicity	kg-C_6H_6eq	1.9E+01	1.1E+00	7.4E-03	4.1E-07	1.8E+01	1.1E-03
Biological toxity	kg-C_6H_6eq	4.8E+02	4.0E+01	1.8E-01	9.9E-06	4.4E+02	2.6E-02
Eutrophication	kg-PO_4^{3-}eq	1.8E-04	9.3E-05	3.9E-14	3.9E-14	9.5E-11	8.3E-05
Land use(Occupation)	m^2/year	3.3E+01	8.4E+00	1.0E-02	4.7E-01	2.4E+01	4.9E-02
Land use(Transformation)	m^2	6.7E-01	1.7E-01	2.0E-04	9.4E-03	4.9E-01	9.9E-04
Resources consumption	kg-Sbeq	1.5E-01	9.2E-02	2.5E-05	2.3E-05	6.0E-02	1.1E-05

2. Life cycle inventory analysis (LCI)

Parameter		Unit
Non-renewable material resources	3.9E+01	kg
Non-renewable energy resources	5.9E+03	kg
Non-renewable energy resources	2.5E+05	MJ
Renewable material resources	8.5E+01	kg
Renewable primary energy	8.4E+03	MJ
Consumption of freshwater	2.5E+00	m^3
Emissions, carbon dioxide (fossil), air, unspecified	1.5E+04	kg
Resources, crude oil, 44.7MJ/kg, ground, Non-renewable energy resources	9.5E+02	kg
Emissions, volatile organic compound, air, unspecified	1.2E-03	kg

3. Material composition

Material		Unit
Steel sheet	44	%
Aluminum	2	%
Copper	8	%
ABS	1	%
PC	4	%
PPE	5	%
Printed circuit board	23	%
Cardboard	8	%
Others	6	%

5. Additional explanation

- Scenario Product Type: Computer Server (excluding the blade system)
- Product Name: PRIMERGY RX4770 M7 Model Name: PYR4777RBT
- Mesurement conditions: Power consumption during use is measured by the measurement method specified by PCR (PA-520000-BF-04)
- Use period: 5 years
- Take-back rate: Calculated assuming 100%
- Use Location: Japan
- Product Configuration:

CPU: Intel® Xeon® Gold 6434H x4
(Adjusted Peak Performance(APP): 0.284160WT,Gigaflops: 947.2 GFLOPS)
DIMM : 16GB DDR5 x32
HDD : 2.5inch 900GB x2

6-1. Supplementary environmental information

Compliant with the International Energy Star Program Ver3.0. It also complies with the European RoHS Directive.

7. Assumptions of secondary data used

IDEA v2.1.3 and SuMPO Enviromental Label Program Registration Data Ver 1.13 are used.

8. Remarks

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- For data quantification, please refer to PCR and Rules on quantification and declaration.
- Comparative assertion is permitted only when Rules on quantification and declaration are satisfied.
(Reference URL : https://ecoleaf-label.jp/regulation/)