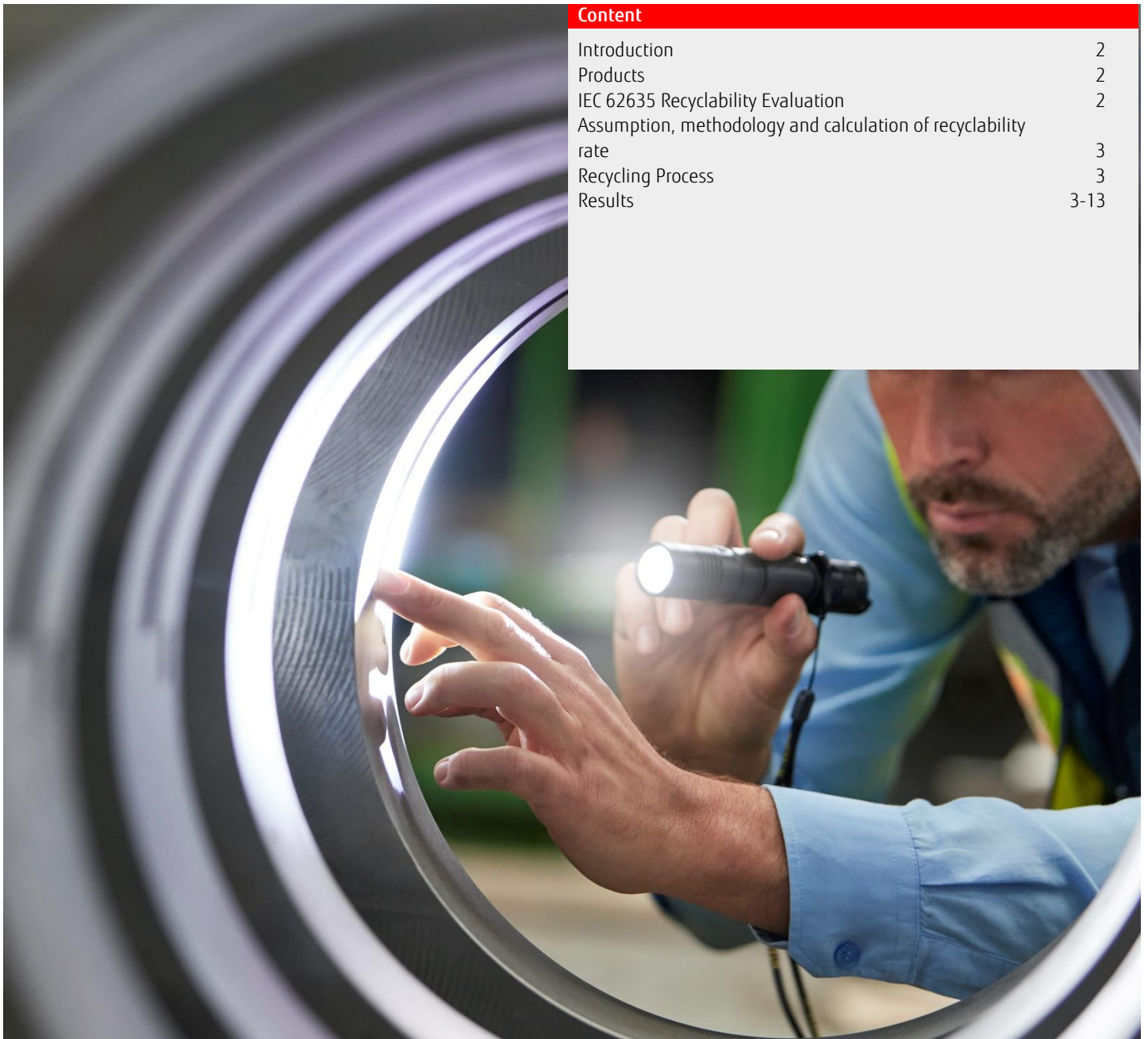# FUJITSU

Whitepaper
FUJITSU Server PRIMERGY Recyclability Assessment

Fujitsu evaluated the recyclability of IA servers "PRIMERGY" using methodology described in IEC 62635 and NSF/ANSI 426-2019. This paper shares assumed recycling methods and calculated product recyclability.

Introduction

From as far back as 1993, Fujitsu has been conducting its own product environmental assessment to offer eco-friendly products to customers. In 1998, Life Cycle Assessment (LCA) has been additionally conducted to our assessment system and applied it to the further development of eco-friendly products. In this document, we share the results of the assessment of recyclability of IA servers "PRIMERGY" based on the IEC 62635 methodology and using the LCA.

Products

The following PRIMERGY products are discussed for recyclability assessments.
- Rack server: PRIMERGY RX4770 M6
- Rack server: PRIMERGY RX2530 M6
- Rack server: PRIMERGY RX2540 M6
- Tower server: PRIMERGY TX1310 M5
- Tower server: PRIMERGY TX1320 M5
- Tower server: PRIMERGY TX1330 M5
- Rack server: PRIMERGY RX1330 M5/ RX1330 M5S
- Multi-node server: PRIMERGY CX2560 M6 with PRIMERGY CX400 M6 Chassis
- Rack Server: PRIMERGY RX2530 M7
- Rack Server: PRIMERGY RX2540 M7
- Tower Server: PRIMERGY TX2550 M7
- Multi-node server: PRIMERGY CX2560 M7 with PRIMERGY CX400 M7 Chassis
- Rack server: PRIMERGY RX4770 M7
- Rack server: PRIMERGY RX1440 M2
- Rack server: PRIMERGY RX2450 M2
- Tower server: PRIMERGY TX1320 M6
- Tower server: PRIMERGY TX1330 M6
- Rack server: PRIMERGY RX1330 M6/ RX1330 M6S

IEC 62635 Recyclability Evaluation

The standard for recyclability assessment addresses the importance of information exchange between manufacturers and recyclers and establishes a method for recyclability rate calculation.

To enable manufacturers to implement effective environmentally conscious design, it aims to provide information to recyclers that enable proper and optimal end-of-life (EOL) treatment process, and to provide sufficient information to understand the characteristics of the activities of the EOL treatment facilities. The recyclability rate is defined as a percentage of the mass of product that can be recycled or reused, excluding energy recovery and residue disposal. See Figure 1.

Treatment			
Recovery			Residue disposal
Recycle		Energy recovery	
Reuse of waste products and waste product parts	Material recovery		

Fig 1. Framework of the main definition covering end-of-life treatment

The recyclability rate of a product is the sum of the recyclable mass of each part divided by the total mass of the product. The rate is as follows:

$$R_{cyc} = \frac{\text{sum of recyclable masses of each parts}}{\text{total product mass}} \times 100\%$$

In IEC/TR 62635, there are four phases of product EOL treatment: pre-treatment, material separation, energy recovery and disposal. Pre-treatment includes dismantling and requires selective treatment. During materials separation, several techniques may be used such as mechanical separation, thermal separation, or chemical separation. Remaining and unsorted materials are normally considered for energy recovery. Residues are then disposed of in landfills.

EOL treatment scenarios are used to calculate the recyclability and recovery of product. There are two key factors affecting the recycling and recovery rates of product in the EOL process include the local infrastructure and design characteristics of the product. Therefore, we engaged with the recycler and the team of environmental experts within Fujitsu and the product development team to show the recyclability rate in this document.

Assumption, methodology and calculation of recyclability rate

Determination of the recyclability rate starts with the acceptance of untreated waste treatment facilities (without any reuse of) and ends when the sorting is completed.

The following methods are used to assess recyclability: Manufacturer conducts LCA during product design and before the start of manufacturing mass-production. Manufacturer disassembles product and measures the weight of each equipment and component. The measurement results are then combined with information provided by recycler to evaluate feedback on the re-use, recycle, and disposal treatment. It is important that clear communication exists between recyclers and manufacturers in accordance with the IEC standard. To facilitate the exchange of information during the EOL process, Fujitsu shared disassembly procedures manual with the recyclers, providing WEEE End-of-Life Information for all parts types that require selective processing, a single recyclable material, difficult-to-process parts, and the remaining parts.

Recycling Process

The recycler's process is consistent with the process phases defined in the IEC standard. First, remove it by hand to reuse it as much as possible. Part of the board, CPU, graphic board and memory are removed from the unit and reused. Equipment and parts that cannot be reused are disassembled into a single material, such as plastic or metal, by hand.

This product is divided into four streams for recycling.

■ Precious Metals Processor: RAM, mainboards, expansion cards, other circuit boards, and product processors are sent to the Precious Metals processor. Precious metals extract precious metals such as copper, gold, palladium and platinum. These metals are of great economic value. 100% of printed circuit boards in all products are recovered and recycled at smelters.
■ Metal Smelter: Metal parts from HDDs and fans, screws, metal brackets, metal chassis, and cables. The recycler sends to a smelter where all these metals can be recovered.
■ Plastic processor: Bezel, ABS plastic parts, plastic from cable. Most plastic components can be easily separated manually from the plastic cable insulation.
■ Primary battery: Send to battery recycler.

Results

Fujitsu received feedback from recyclers on the recycling methods used and the recycling rate for the parts and materials separated. We measured the weight of each component of the server product and calculated the recyclability rate.

The EPEAT standard refers to IEC/TR 62635, but the handling of printed circuit boards is different. Therefore, IEC/TR 62635 are used for all calculations except printed circuit boards, and the method described in NSF/ANSI 426 -2019 are used to calculate the recyclability of printed circuit boards.

Rack servers: PRIMERGY RX4770 M6 weighs 41,001 grams, of which 39,887 grams are recyclable, with a recyclability rate of 97.3%. See Figure 2 and Table 1 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate（%）
CPU	520g	1.3%	100.0%
RAM	816g	2.0%	100.0%
MB	4,447g	10.8%	100.0%
PCB	3,134g	7.6%	100.0%
HDD	4,692g	11.4%	98.0%
FAN	1,980g	4.8%	98.0%
Cable	714g	1.7%	47.6%
Plastic	1,127g	2.7%	46.5%
Metal chassis	13,436g	32.8%	100.0%
Steel parts	857g	2.1%	99.7%
Metallic parts	9,275g	22.6%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate（%）
	41,001	39,887.0	97.3%

Fig 2. Rack server: PRIMERGY RX4770 M6

Table 1. Weight and recyclability of PRIMERGY RX4770 M6

Rack servers: PRIMERGY RX2530 M6 weighs 12,559 grams, of which 12,338 grams are recyclable, with a recyclability rate of 98.2%. See Figure 3 and Table 2 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	263g	2.1%	100.0%
RAM	18g	0.1%	100.0%
MB	1,596g	12.7%	100.0%
PCB	269g	2.1%	100.0%
HDD	183g	1.5%	98.0%
FAN	864g	6.9%	98.0%
Cable	193g	1.5%	47.6%
Plastic	137g	1.1%	46.5%
Metal chassis	7,461g	59.4%	99.7%
Steel parts	882g	7.0%	99.7%
Metallic parts	692g	5.5%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	12,559	12,338	98.2%

Fig 3. Rack server: PRIMERGY RX2530 M6

Table 2. Weight and recyclability of PRIMERGY RX2530 M6

Rack servers: PRIMERGY RX2540 M6 weighs 17,005 grams, of which 16,787 grams are recyclable, with a recyclability rate of 98.7%. See Figure 4 and Table 3 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	263g	1.5%	100.0%
RAM	18g	0.1%	100.0%
MB	2,149g	12.6%	100.0%
PCB	1,105g	6.5%	100.0%
HDD	183g	1.1%	98.0%
FAN	1,585g	9.3%	98.0%
Cable	172g	1.0%	47.6%
Plastic	112g	0.7%	46.5%
Metal chassis	9,948g	58.5%	99.7%
Steel parts	398g	2.3%	99.7%
Metallic parts	1,071g	6.3%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	17,005	16,787	98.7%

Fig 4. Rack server: PRIMERGY RX2540 M6

Table 3. Weight and recyclability of PRIMERGY RX2540 M6

Tower servers: PRIMERGY TX1310 M5 weighs 8,706 grams, of which 8,026 grams are recyclable, with a recyclability rate of 92.2%. See Figure 5 and Table 4 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	28g	0.3%	100.0%
RAM	74g	0.8%	100.0%
MB	507g	5.8%	100.0%
PCB	189g	2.2%	100.0%
HDD	700g	8.0%	98.0%
FAN	60g	0.7%	98.0%
Cable	103g	1.2%	47.6%
Plastic	1,109g	12.7%	46.5%
Metal chassis	4,750g	54.6%	99.7%
Steel parts	723g	8.3%	99.7%
Metallic parts	461g	5.3%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	8,706	8,026	92.2%

Fig 5. Tower server: PRIMERGY TX 1310 M5

Table 4. Weight and recyclability of PRIMERGY TX 1310M5

Tower servers: PRIMERGY TX1320 M5 weighs 7,831 grams, of which 7,383 grams are recyclable, with a recyclability rate of 94.3%. See Figure 6 and Table 5 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	31g	0.4%	100.0%
RAM	17g	0.2%	100.0%
MB	557g	7.1%	100.0%
PCB	225g	2.9%	100.0%
HDD	730g	9.3%	98.0%
FAN	191g	2.4%	98.0%
Cable	210g	2.7%	47.6%
Plastic	568g	7.3%	46.5%
Metal chassis	4,507g	57.6%	99.7%
Steel parts	100g	1.3%	99.7%
Metallic parts	691g	8.8%	100.0%
Cell Battery	3 g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	7,831	7,383	94.3%

Fig 6. Tower server: PRIMERGY TX 1320 M5

Table 5. Weight and recyclability of PRIMERGY TX 1320M5

Tower servers: PRIMERGY TX1330 M5 weighs 20,708 grams, of which 19,959 grams are recyclable, with a recyclability rate of 96.4%. See Figure 4 and Table 3 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%）
CPU	31g	0.1%	100.0%
RAM	17g	0.1%	100.0%
MB	557g	2.7%	100.0%
PCB	294g	1.4%	100.0%
HDD	2,800g	13.5%	98.0%
FAN	305g	1.5%	98.0%
Cable	179g	0.9%	47.6%
Plastic	1,023g	4.9%	46.5%
Metal chassis	8,150g	39.4%	99.7%
Steel parts	6,436g	31.1%	99.7%
Metallic parts	912g	4.4%	100.0%
Cell Battery	3 g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	20,708	19,959	96.4%

Table 6. Weight and recyclability of PRIMERGY TX 1330M5

Fig 7. Tower server: PRIMERGY TX 1330 M5

Rack servers: PRIMERGY RX1330 M5/ RX1330M5S weighs 9,549 grams, of which 9,361 grams are recyclable, with a recyclability rate of 98.0%. See Figure 8 and Table 7 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%）
CPU	28g	0.3%	100.0%
RAM	17g	0.2%	100.0%
MB	567g	5.9%	100.0%
PCB	298g	3.1%	100.0%
HDD	1,461g	15.3%	98.0%
FAN	271g	2.8%	98.0%
Cable	117g	1.2%	47.6%
Plastic	135g	1.4%	46.5%
Metal chassis	5,510g	57.7%	99.7%
Steel parts	629g	6.6%	99.7%
Metallic parts	514g	5.4%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	9,549	9,361	98.0%

Table 7. Weight and recyclability of PRIMERGY RX1330 M5/ RX1330 M5S

Fig 8. Rack server: PRIMERGY RX1330 M5/ RX1330 M5S

Note: The RX1330 M5 is offered with different depth. The RX1330 M5 with short depth is named RX1330 M5S

Multi-node server: PRIMERGY CX2560 M6 with PRIMERGY CX400 M6 Chassis.
CX2560 M6 weighs 5,148 grams, of which 5,082 grams are recyclable, with a recyclability rate of 98.7%. See Figure 9 and Table 8 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	280g	5.4%	100.0%
RAM	320g	6.2%	100.0%
MB	1,809g	35.1%	100.0%
PCB	900g	17.5%	100.0%
Plastic	116g	2.3%	46.5%
Metal chassis	848g	16.5%	99.7%
Steel parts	262g	5.1%	99.7%
Metallic parts	610g	11.8%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	5,148	5,082	98.7%

Fig 9. Multi-node server: CX2560 M6

Table 8. Weight and recyclability of PRIMERGY CX2560 M6

CX400 M6 Chassis weighs 17,221 grams, of which
16,967 grams are recyclable, with a recyclability rate of 98.5%. See
Figure 10 and Table 9 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
PCB	2,054g	11.9%	100.0%
FAN	1,190g	6.9%	98.0%
Cable	19g	0.1%	47.6%
Plastic	339g	2.0%	46.5%
Metal chassis	9,700g	56.3%	99.7%
Steel parts	3,164g	18.4%	99.7%
Metallic parts	755g	4.4%	100.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	17,221	16,967	98.5%

Fig 10. PRIMERGY CX400 M6 Chassis

Table 9. Weight and recyclability of PRIMERGY CX400 M6 Chassis

Rack servers: PRIMERGY RX2530 M7 weighs 13,507 grams, of which 13,273 grams are recyclable, with a recyclability rate of 98.3%. See Figure 11 and Table 10 below for details on the assessment.

Product/Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	260g	1.9%	100.0%
RAM	30g	0.2%	100.0%
MB	2,185g	16.2%	100.0%
PCB	357g	2.6%	100.0%
HDD	615g	4.6%	98.0%
FAN	704g	5.2%	98.0%
Cable	19g	0.1%	47.6%
Plastic	318g	2.4%	46.5%
Metal chassis	7,732g	57.2%	99.7%
Steel parts	984g	7.3%	99.7%
Metallic parts	301g	2.2%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	13,507	13,273	98.3%

Fig 11. Rack server: PRIMERGY RX2530 M7

Table 10. Weight and recyclability of PRIMERGY RX2530 M7

Rack servers: PRIMERGY RX2540 M7 weighs 17,485 grams, of which 16,871 grams are recyclable, with a recyclability rate of 96.5%. See Figure 12 and Table 11 below for details on the assessment..

Product/Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	260g	1.5%	100.0%
RAM	30g	0.2%	100.0%
MB	2,580g	14.8%	100.0%
PCB	484g	2.8%	100.0%
HDD	615g	3.5%	98.0%
FAN	1,488g	8.5%	98.0%
Cable	468g	2.7%	47.6%
Plastic	553g	3.2%	46.5%
Metal chassis	8,998g	51.5%	99.7%
Steel parts	868g	5.0%	99.7%
Metallic parts	1,139g	6.5%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	17,485	16,871	96.5%

Fig 12. Rack server: PRIMERGY RX2540 M7

Table 11. Weight and recyclability of PRIMERGY RX2540 M7

Tower servers: PRIMERGY TX2550 M7 weighs 35,113 grams, of which 34,205 grams are recyclable, with a recyclability rate of 97.4%. See Figure 13 and Table 12 below for details on the assessment

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	520g	1.5%	100.0%
RAM	30g	0.1%	100.0%
MB	1,521g	4.3%	100.0%
PCB	709g	2.0%	100.0%
HDD	615g	1.8%	98.0%
FAN	7328g	20.9%	98.0%
Cable	588g	1.7%	47.6%
Plastic	746g	2.1%	46.5%
Metal chassis	14,979g	42.6%	99.7%
Steel parts	5,110g	14.5%	99.7%
Metallic parts	2,984g	8.5%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	35,133	34,205	97.4%

Fig 13. Tower Server: PRIMERGY TX2550 M7

Table 12. Weight and recyclability of PRIMERGY TX2550 M7

Multi-node server: PRIMERGY CX2560 M7 with PRIMERGY CX400 M7 Chassis.
CX2560 M7 weighs 4,713 grams, of which 4,646 grams are recyclable, with a recyclability rate of 98.6%. See Figure 14 and Table 13 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%）
CPU	280g	5.9%	100.0%
RAM	480g	10.2%	100.0%
MB	1,812g	38.4%	100.0%
PCB	300g	6.4%	100.0%
Plastic	116g	2.5%	46.5%
Metal chassis	848g	18.0%	99.7%
Steel parts	264g	5.6%	99.7%
Metallic parts	610g	12.9%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	4,713	4,646	98.6%

Fig 14. Multi-node server: CX2560 M7

Table 13. Weight and recyclability of PRIMERGY CX2560 M7

CX400 M7 Chassis weighs 20,380 grams, of which 20,091 grams are recyclable, with a recyclability rate of 98.6%. See Figure 15 and Table 14 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%）
PCB	4,899g	24.0%	100.0%
FAN	1,190g	5.8%	98.0%
Cable	19g	0.1%	47.6%
Plastic	407g	2.0%	46.5%
Metal chassis	9,700g	47.6%	99.7%
Steel parts	2,907g	14.3%	99.7%
Metallic parts	1,258g	6.2%	100.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	20,380	20,091	98.6%

Fig 15. PRIMERGY CX400 M7 Chassis

Table 14. Weight and recyclability of PRIMERGY CX400 M7 Chassis

Rack servers: PRIMERGY RX4770 M7 weighs 38,677 grams, of which 37,486 grams are recyclable, with a recyclability rate of 96.9%. See Figure 16 and Table 15 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	524g	1.4%	100.0%
RAM	1,152g	3.0%	100.0%
MB	4,469g	11.6%	100.0%
PCB	4,271g	11.0%	100.0%
HDD	5,966g	15.4%	98.0%
FAN	2,280g	5.9%	98.0%
Cable	645g	1.7%	47.6%
Plastic	1,198g	3.1%	46.5%
Metal chassis	9,276g	24.0%	99.7%
Steel parts	6,063g	15.7%	99.7%
Metallic parts	2,830g	7.3%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	38,677	37,486	96.9%

Fig 16. Rack server: PRIMERGY RX4770 M7

Table 15. Weight and recyclability of PRIMERGY RX4770 M7

Rack servers: PRIMERGY RX1440 M2 weighs 19,434 grams, of which 18,935 grams are recyclable, with a recyclability rate of 97.4%. See Figure 17 and Table 16 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	138g	0.7%	100.0%
RAM	576g	3.0%	100.0%
MB	2,600g	13.4%	100.0%
PCB	1,747g	9.0%	100.0%
HDD	1,960g	10.1%	98.0%
FAN	816g	4.2%	98.0%
Cable	313g	1.6%	47.6%
Plastic	466g	2.4%	46.5%
Metal chassis	9,000g	46.3%	99.7%
Steel parts	613g	3.2%	99.7%
Metallic parts	1,203g	6.2%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	19,434	18,935	97.4%

Fig 17. Rack server: PRIMERGY RX1440 M2

Table 16. Weight and recyclability of PRIMERGY RX1440 M2

Rack servers: PRIMERGY RX2450 M2 weighs 31,876 grams, of which 30,895 grams are recyclable, with a recyclability rate of 96.9%. See Figure 18 and Table 17 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%）
CPU	276g	0.9%	100.0%
RAM	576g	1.8%	100.0%
MB	2,600g	8.2%	100.0%
PCB	2,773g	8.7%	100.0%
HDD	5,880g	18.4%	98.0%
FAN	1,224g	3.8%	98.0%
Cable	353g	1.1%	47.6%
Plastic	1,139g	3.6%	46.5%
Metal chassis	13,300g	41.7%	99.7%
Steel parts	1,220g	3.8%	99.7%
Metallic parts	2,532g	7.9%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	31,876	30,895	96.9%

Fig 18. Rack server: PRIMERGY RX2450 M2

Table 17. Weight and recyclability of PRIMERGY RX2450 M2

Tower servers: PRIMERGY TX1320 M6 weighs 10,546 grams, of which 9,912 grams are recyclable, with a recyclability rate of 94.0%. See Figure 19 and Table 18 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%）
CPU	36g	0.3%	100.0%
RAM	70g	0.7%	100.0%
MB	580g	5.5%	100.0%
PCB	973g	9.2%	100.0%
HDD	1,970g	18.7%	98.0%
FAN	263g	2.5%	98.0%
Cable	288g	2.7%	47.6%
Plastic	790g	7.5%	46.5%
Metal chassis	4,519g	42.8%	99.7%
Steel parts	412g	3.9%	99.7%
Metallic parts	644g	6.1%	100.0%
Cell Battery	3 g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	10,546	9,912	94.0%

Fig 19. Tower server: PRIMERGY TX1320 M6

Table 18. Weight and recyclability of PRIMERGY TX1320 M6

Tower servers: PRIMERGY TX1330 M6 weighs 28,405 grams, of which 27,147 grams are recyclable, with a recyclability rate of 95.6%. See Figure 20 and Table 19 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	36g	0.1%	100.0%
RAM	70g	0.2%	100.0%
MB	580g	2.0%	100.0%
PCB	1,305g	4.6%	100.0%
HDD	8,626g	30.4%	98.0%
FAN	613g	2.2%	98.0%
Cable	552g	1.9%	47.6%
Plastic	1,384g	4.9%	46.5%
Metal chassis	10,757g	37.9%	99.7%
Steel parts	3,516g	12.4%	99.7%
Metallic parts	964g	3.4%	100.0%
Cell Battery	3 g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	28,405	27,147	95.6%

Fig 20. Tower server: PRIMERGY TX1330 M6

Table 19. Weight and recyclability of PRIMERGY TX1330 M6

Rack servers: PRIMERGY RX1330 M6/ RX1330 M6S weighs 13,155 grams, of which 12,741 grams are recyclable, with a recyclability rate of 96.9%. See Figure 21 and Table 20 below for details on the assessment.

Product/ Component	Weight (g)	Weight (%)	Recyclability rate （%)
CPU	36g	0.3%	100.0%
RAM	70g	0.5%	100.0%
MB	616g	4.7%	100.0%
PCB	986g	7.5%	100.0%
HDD	2,962g	22.5%	98.0%
FAN	506g	3.8%	98.0%
Cable	224g	1.7%	47.6%
Plastic	384g	2.9%	46.5%
Metal chassis	5,341g	40.6%	99.7%
Steel parts	1,329g	10.1%	99.7%
Metallic parts	699g	5.3%	100.0%
Cell Battery	3g	<0.1%	50.0%
	Total Weight (g)	Recyclable Weight (g)	Recyclability rate (%)
	13,155	12,741	96.9%

Fig 21. Rack server: PRIMERGY RX1330 M6/ RX1330 M6S

Table 20. Weight and recyclability of PRIMERGY RX1330 M6/ RX1330 M6S

Note: The RX1330 M6 is offered with different depth.
    The RX1330 M6 with short depth is named RX1330 M6S