

# **Product Environmental Report**



## **Z390 AORUS Series**



Non-use of 10 Restricted Substances\*

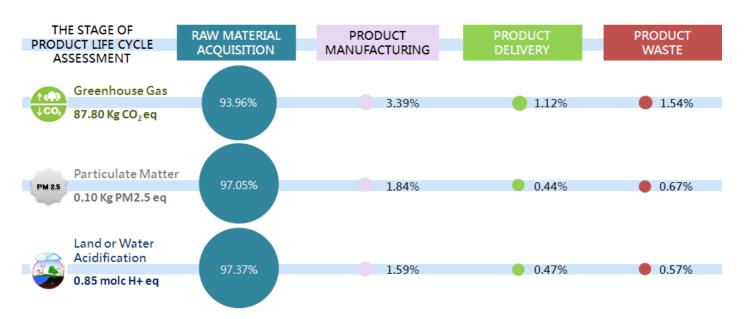
### GIGABYTE & You - 2 Powerful Guardians of the World

GIGABYTE endeavors to provide quality products with excellent performance, and hopes to protect the Earth together with you. All brand products of GIGABYTE adhere to the principle of environmental friendliness, seeking for achieving low-carbon, non-pollutant, and zero-waste. We sincerely expect you to act as a supervisor and practitioner, understanding the environmental characteristics of the product in your hands, and putting responsible recycle into effect.



#### **Product Environmental Characteristics**

Do you know how much environmental impact this product can have from material extraction, manufacturing, usage, to waste disposal? GIGABYTE actively implements product lifecycle assessment to systematically understand the environmental impacts of our products. We are devoted to improving the environmental performance of our products from the design stage in order to reach free of harmful substances, high product recovery rate, less energy and resources consumption, lower emissions of greenhouse gas and atmospheric particulate matter, and a minimized of land or water acidification.



## **GIGABYTE**<sup>™</sup>

## **Recycling Information**

Electronic waste can be reused if recycled appropriately. However, it can also become environmental pollution if is not treated properly after disposal. As a responsible producer, GIGABYTE provides a legal and proper recycling mechanism to consumers. We encourage you to stand by our side, being a responsible consumer and recycling defunct electronic devices and packaging materials through appropriate take-back channels. A small action makes big difference! For more recycling information, please visit official website <a href="https://www.gigabyte.com/CSR/192">https://www.gigabyte.com/CSR/192</a> or scan the QR Code.



### **Definitions**

- EU Directive of RoHS An EU directive restricts the hazardous substances contained in electrical and electronic equipment, including lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr6+), flame retardants (PBBs, PBDEs), and phthalates (DEHP, BBP, DBP, DIBP).
- Greenhouse Gas The gas causes the greenhouse effect in the atmosphere. It includes natural gases such as carbon dioxide ( $CO_2$ ), methane ( $CO_4$ ), nitrous oxide ( $O_2$ ), ozone ( $O_3$ ), and artificial gases such as hydrofluorocarbons (HFCs). The greenhouse gas inventory conducted by the Environmental Protection Administration, Executive Yuan, R.O.C (Taiwan) (EPA) requests to investigate 7 types of greenhouse gases directly and indirectly emitted from organizational activities. The inventory greenhouse gas refers to the following substances: carbon dioxide ( $CO_2$ ), methane ( $CO_4$ ), nitrous oxide ( $O_2$ ), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride ( $O_4$ ), and nitrogen trifluoride ( $O_4$ ).
- **Product Carbon Footprint** A product carbon footprint is defined as the total greenhouse gas emissions a product emits directly and indirectly through its lifetime from raw materials processing, manufacture, distribution, use, and disposal or recycling. As more energy and resources consumed, the greater amount of greenhouse gas emissions, meaning that a larger carbon footprint.
- Particulate Matter Particulate matter means the microscopic solid matter suspends in the atmosphere of Earth. The particle is divided into two categories based on its size. Particles with a diameter between 2.5 and 10 micrometers ( $\mu$ m) called PM<sub>10</sub>, and fine particles with a diameter of 2.5 $\mu$ m or less called PM<sub>2.5</sub>. The air quality standard regulated by the EPA takes the concentration of PM<sub>2.5</sub> as an indicator. The standard is 15 $\mu$ g/m<sup>3</sup> at annual average and 35 $\mu$ g/m<sup>3</sup> in 24 hours.
- Land or Water Acidification The increasing concentration of carbon dioxide (CO₂), nitrogen oxides, and sulfides in the atmosphere can lead to decreasing the pH of soil and water. The situation may cause soil depletion, ecosystem damage, etc.

### A Tree in Your Name Let's Make Earth Green Again

GIGABYTE keeps a faith in providing environmental friendly products, and we also hope to invite you to plant trees with us. Trees not only play a key role in the nature, but also have multi-functions such as carbon fixation, air purification, water circulation, and cooling down temperature. The benefit of a tree is beyond imagination. Scan the QR code and register online with your name and e-mail, then GIGABYTE will plant a tree in your name. You will receive a tree certificate via email from Plant-for-the-Planet Foundation. Every tree is a hope. Let's make earth green again!

