

Executive Summary

Riverbed Technology Steelhead appliance family of products described in Annexure-A meet WEEE (Waste Electrical and Electronic Equipment) directive criteria for Recovery, Recycle and Reuse.

These products are classified under category 3 of WEEE product category and have the following targets for rate of recovery and rate of recycle.

Rate of Recovery = 75%, and Rate of Recycle = 65%

Riverbed Technology Steelhead appliance family of products are analyzed for ease of dismantling, ease of service, ease of selective removal of components and sub-assemblies, design for environment, and regulatory compliance markings such as EN55022, EN55024 and safety compliance markings such as CSA, CE, UL.

WEEE RRR – Analysis (WEEE Recovery, Recycle and Reuse) was performed on SHA 2020 and SHA 3020 provided by Riverbed Technology. No destructive operations and component level disassembly of surface mount PCBs was performed to avoid damage to the product. However, both the products were disassembled to major sub-assemblies to assess the selective removal. Typical Bills of Materials, description and data sheets for Steelhead appliance family of products are placed under Annexure-A and Annexure-B for reference. The material is processed as per standard M-Cubed Traveler. Traveler provides the means of controlling the material flow to various workstations and provides a summary of Covered Electronic Waste (CEW) and Universal Waste Electronic Devices (UWED). Pictures of assemblies before and after dismantling are placed under Annexure-C for reference. Annexure-D provides the details of WEEE RRR - Analysis.

The design of Steelhead appliance family of products is flexible and modular and lends itself for various configurations and options. Standard sub-assemblies are used in multiple systems. This enables volume purchase at competitive prices. Modularity of the system design lends it self for Field Replaceable Unit (FRU) and Customer Replaceable Units (CRUs) concept for servicing the down systems to maintain high uptime and a low Mean Time to Repair (MTTR) resulting in low Total Cost of Ownership (TCO).

Due to modularity of design, backward compatibility and retrofit ability of newer enhancements, it is easy to implement field upgrades for continuous improvements for enhancing reliability, availability, maintainability and product performance, and hence increasing the end of life cycle. Modularity of product design also enhances the end of product cycle RRR. WEEE RRR Analysis shows that Riverbed Technology Steelhead appliance family of products have the potential to meet rate of recovery and rate of recycling targets for WEEE Product Category 3, IT and Telecommunications products, including selective treatment of the material.

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