SQBM+" is an optimization solution based on the Simulated Bifurcation Machine (SBM), which is a combinatorial optimization solver utilizing the Simulated Bifurcation Algorithm developed by Toshiba Corporation. It offers optimization solvers tailored for various applications. Adopting a new SB algorithm that significantly improves speed, accuracy, and scalability, it enhances performance in combinatorial optimization.

Application in software modules:

a). Cloud environments

SQBM+ for AWS(Amazon Web Services) is provided as an Amazon Machine Image (AMI). Providing SQBM+ as a software module will allow customers to incorporate SQBM+ into their business applications and systems.

An AMI is a template containing a software configuration that is used to launch an instance—a copy of the AMI running as a virtual server in the AWS Cloud. And the SQBM+ instance is dedicated to the user and quickly processes all requests.

b). On-premise environments

The SB algorithm is also implemented in a dedicated high-speed processing circuit that operates on an FPGA (Field Programmable Gate Array). The dedicated high-speed processing circuit in the system can be accessed directly without a network connection. Real-time systems with SQBM+ can be built on various devices equipped with FPGA boards.

Toshiba also offers three applications that showcase the features of the on-premises Simulated Bifurcation Machine™, including its real-time response, interactive response and high speed and accuracy in dealing with large-scale streaming data. These applications also work as sample applications for users who want to develop their own applications.