What is claimed is:

1. A storage device comprising:

an input stage configured to receive a first command with a first format;

a queue manager configured to allocate a first queue entry for the first command;

a pre-processor having a task list and configured to store the first command in the first queue entry and update the task list with the first command;

a core configured to execute the first command in accordance with an order specified in the updated task list and generate a first value according to the execution of the first command,

wherein at least one of the queue manager and the pre-processor is implemented in a customized logic circuit; and

a post-processor configured to generate and output a second command with a second format on the basis of the first value,

wherein the second format of the second command is different from the first format of the first command.

2. The storage device of claim 1,

wherein during a time when the core executes the first command,

the queue manager is configured to allocate a second queue entry for a third command other than the first command, and

the pre-processor is configured to:

store the third command in the second queue entry, and

update the task list with the third command stored in the second queue entry.

3. The storage device of claim 1,

wherein the post-processor is implemented in a customized logic circuit.

4. The storage device of claim 3,

wherein a packet structure of the first value is different from a packet structure of the second command.

5. The storage device of claim 1, further comprising:

a memory configured to store a head task of the updated task list and a tail task thereof,

wherein the core is configured to instruct the pre-processor to delete the head task in the task list in response to starting to perform the head task.

6. The storage device of claim 1,

wherein the pre-processor comprises:

a command parser configured to interpret the first command provided from the input stage and generate an interpreted result of the first command; and

a queue entry requester configured to request an allocation of the first queue entry for the first command in accordance with the interpreted result of the first command,

wherein the queue manager is configured to allocate the first queue entry in response to the request of the allocation from the queue entry requester; and

a data formatter configured to change a format of the first command in the first queue entry allocated by the queue manager.

7. The storage device of claim 6,

wherein the pre-processor further comprises:

a list manager configured to update the task list,

wherein the queue entry requester is configured to request, in response to receipt of a signal indicating that the queue manager allocates the first queue entry, the list manager to update the task list, and

the list manager is configured to update the task list during a time when the data formatter changes and stores the format of the first command.

8. The storage device of claim 7,

wherein the pre-processor further comprises:

a handler configured to output, in response to a signal indicating that the data formatter completes change of a format of the first command and to a signal indicating that the list manager completes the update of the task list, the completion of the change and the completion of the update to the core.

9. The storage device of claim 6, further comprising:

a preset memory including a plurality of queue entry groups, each of the plurality of queue entry groups including a plurality of queue entries, and

wherein the queue manager is configured to:

determine a type of the first command on the basis of the interpreted result of the first command by the command parser,

determine a corresponding queue entry group among the plurality of queue entry groups according to the determined type of the first command, and

allocate a queue entry of a free state among the plurality of queue entries of the corresponding queue entry group as the first queue entry.

10. The storage device of claim 9,

wherein the plurality of queue entry groups include a first queue entry group with a plurality of queue entries each of which has a first size and a second queue entry group with a plurality of queue entries each of which has a second size different from the first size.

11. The storage device of claim 9,

wherein the pre-processor further comprises a list manager which generates and updates a plurality of task lists,

wherein the list manager is configured to:

determine the task list to be updated among the plurality of task lists depending on the corresponding queue entry group determined by the queue manager, and

update the determined task list with the first command.

12. A storage device comprising:

a command parser configured to receive a first command with a first format, interpret the first command and generate an interpreted result of the first command;

a queue entry requester configured to generate, in response to a signal indicating that a first queue entry for the first command is allocated by a queue manager, a change instruction signal and an update instruction signal;

a data formatter configured to receive the change instruction signal, and change a format of the first command stored in the first queue entry from the first format to a second format different from the first format;

a list manager configured to receive the update instruction signal and update a first task list with the first command; and

a handler configured to output, in response to a signal indicating that the data formatter completes change of a format of the first command and a signal indicating that the list manager completes the update of the first task list, the completion of the change and the completion of the update to a core so that the first command is executed by the core in accordance with an order specified in the updated first task list.

13. The storage device of claim 12,

wherein each of the command parser, the queue entry requester, the data formatter, the list manager, and the handler is implemented in a logic circuit.

14. The storage device of claim 12, further comprising:

a preset memory including a plurality of queue entry groups, each of the plurality of queue entry groups including a plurality of queue entries, and

wherein the queue manager is configured to:

determine a type of the first command on the basis of the interpreted result thereof by the command parser,

determine a corresponding queue entry group among the plurality of queue entry groups according to the determined type of the first command, and

allocate a queue entry of a free state among the plurality of queue entries of the corresponding queue entry group as the first queue entry.

15. The storage device of claim 14,

wherein the plurality of queue entry groups include a first queue entry group with a plurality of queue entries each of which has a first size and a second queue entry group with a plurality of queue entries each of which has a second size different from the first size.

16. The storage device of claim 14,

wherein the list manager is configured to:

determine a task list among a plurality of task lists as the first task list depending on the corresponding queue entry group determined by the queue manager, and

update the determined task list with the first command.

17. A storage device comprising:

a first unit processor configured to receive a first command with a first format and output a second command with a second format, wherein the second format of the second command is different from the first format of the first command; and

a second unit processor configured to receive the second command,

wherein the first unit processor includes:

a first input stage configured to receive the first command,

a first queue manager configured to allocate a first queue entry for the first command,

a first pre-processor configured to store the first command in the first queue entry and update a first task list with the first command,

a first core configured to execute the first command in accordance with an order specified in the updated first task list, and output a first result value according to execution of the first command, and

a first post-processor configured to generate and output the second command with the second format on the basis of the first result value, and

wherein at least one of the first queue manager, the first pre-processor, and the first post-processor is implemented in a customized logic circuit.

18. The storage device of claim 17,

wherein during a time when the first core executes the first command, the first queue manager allocates a third queue entry for a third command other than the first command or the first pre-processor stores the third command in the third queue entry and updates the first task list with the third command stored in the third queue entry.

19. The storage device of claim 17, further comprising:

a preset memory including a first memory region used by the first unit processor, and a second memory region used by the second unit processor,

wherein the first memory region and the second memory region are separated from each other.

20. The storage device of claim 19,

wherein the first memory region includes a plurality of queue entry groups, each of the plurality of queue entry groups including a plurality of queue entries, and

the first queue manager is configured to:

determine a type of the first command on the basis of the interpreted result of the first command,

determine a corresponding queue entry group among the plurality of queue entry groups according to the determined type of the first command, and

allocate a queue entry of a free state among the plurality of queue entries of the corresponding queue entry group as the first queue entry.