ABSTRACT

Provided are storage devices, methods of operating a storage controller, and universal flash storage (UFS) systems. The storage device includes a memory group configured to store unique device secret (UDS) data including a UDS, and pre-installed device secret (PDS) data including a PDS, and a processor configured to receive a first endorsement generated based on the PDS and a first firmware image, perform a first integrity check for the first firmware image based on the PDS of the PDS data, the first firmware image, and the first endorsement, and generate a second endorsement based on the UDS and the first firmware image in response to a pass result of the first integrity check.

FIG. 1