

Mapper&Reducer

Hadoop MapReduce

File System (HDFS/Local FS)

Generic Block Device Driver

Base Device Firmware

Storage Media (NAND Flash)

(a) Legacy Hadoop Architecture

Host



SSD

Reducer

*ISC Hadoop MapReduce*

*Interface layer*

File System (HDFS/Local FS)

*ISC Device Driver*

Mapper

*ISC Device Program*

*ISC Runtime System*

Base Device Firmware

Storage Media (NAND Flash)

(b) ISC Hadoop Architecture