Flash Memory Summit

The programmable Flash emulation system

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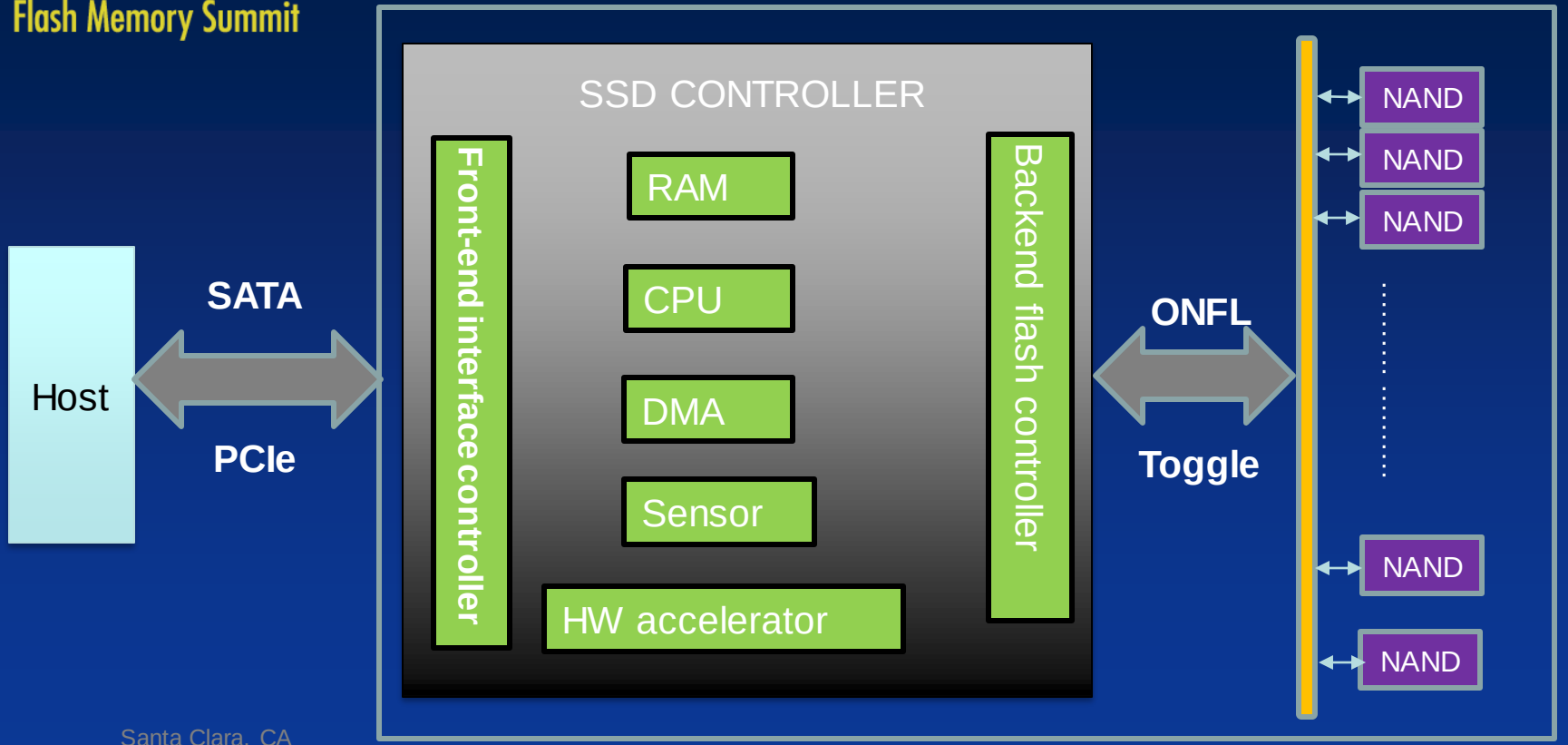
The programmable Flash emulation system

- The Architecture of a typical SSD Controller
- The design target of Flash Controller
- Traditional verification method for Flash Controller
- The programmable Flash emulation system
- The BIT flip generator based on deep learning algorithm

Architecture of SSD Controller



The design target of Flash Controller

Interface compatibility

extension ability

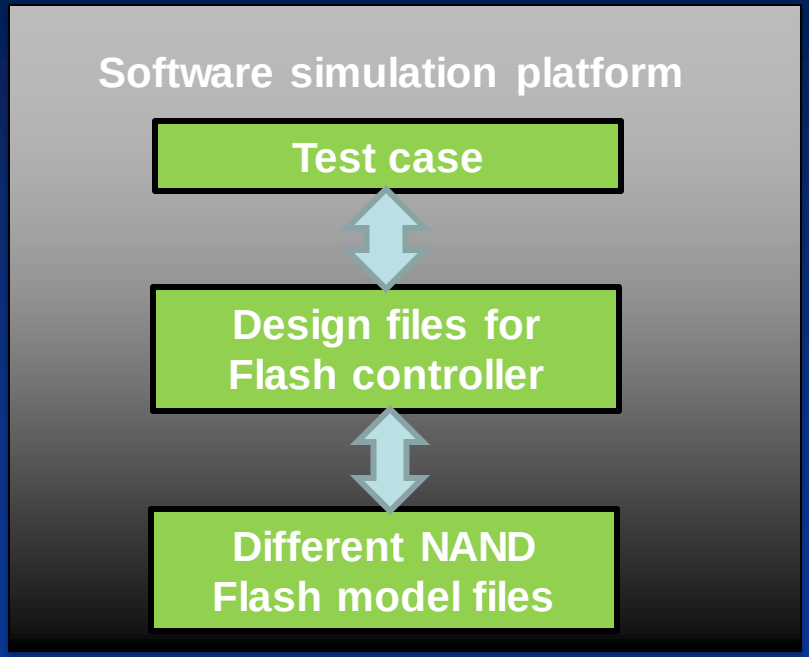
Exception handling capability

Error correction ability

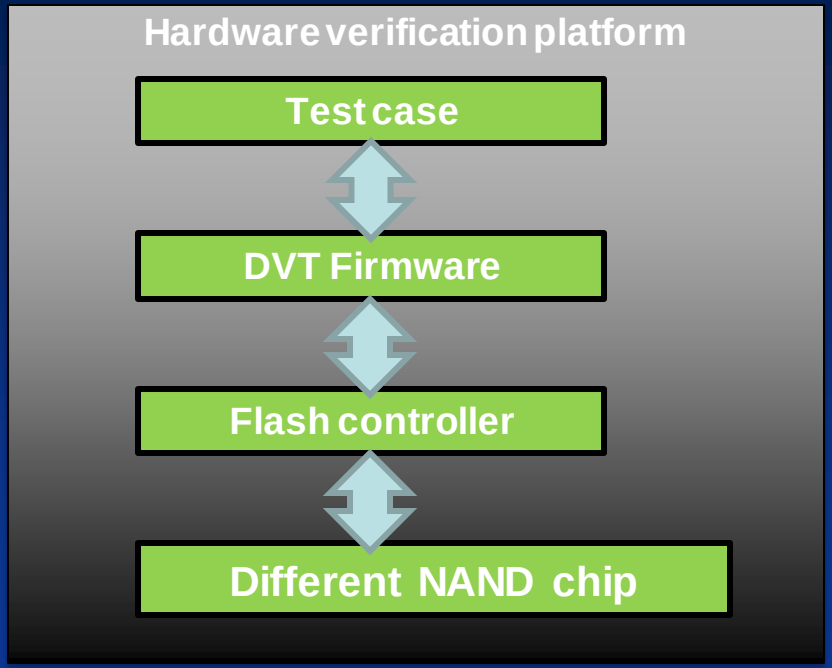
Parallel processing capability

Hardware and software co-design

Traditional verification method of Flash controller

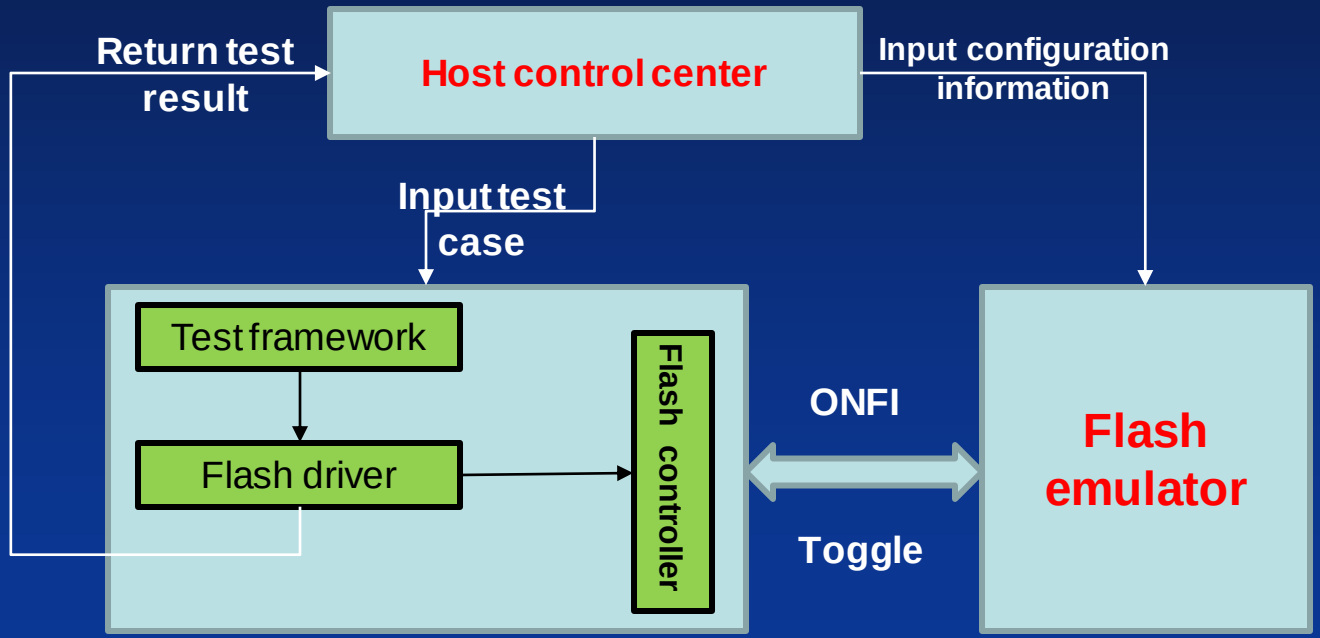


Software simulation verification

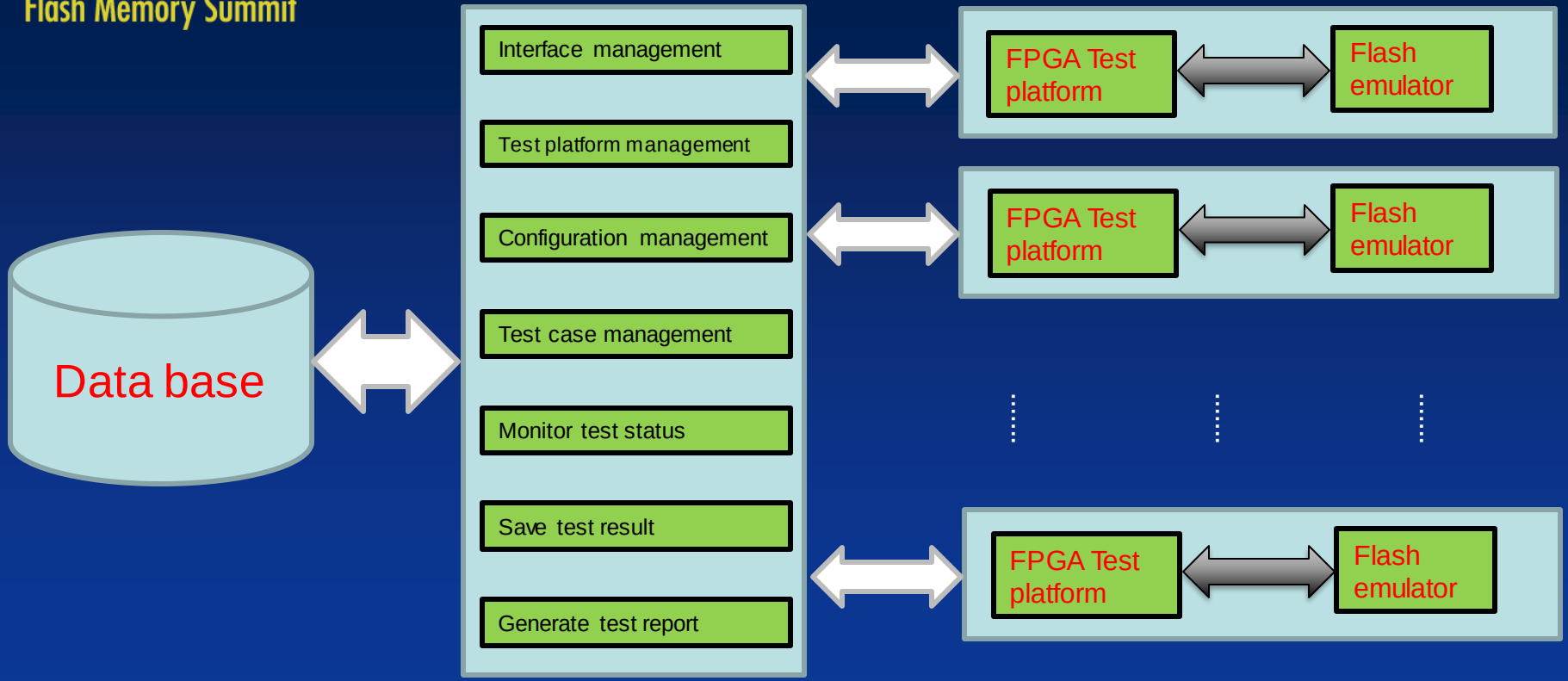


FPGA verification

The programmable Flash emulation system

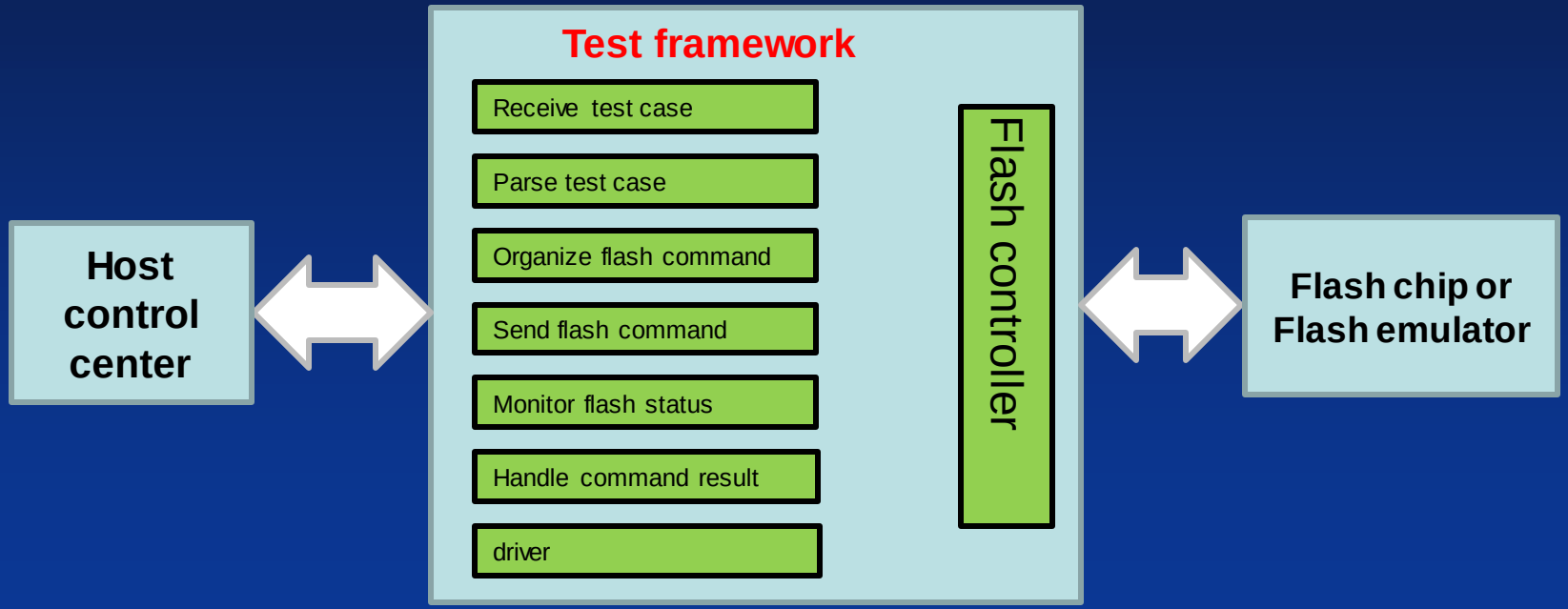


Host control center



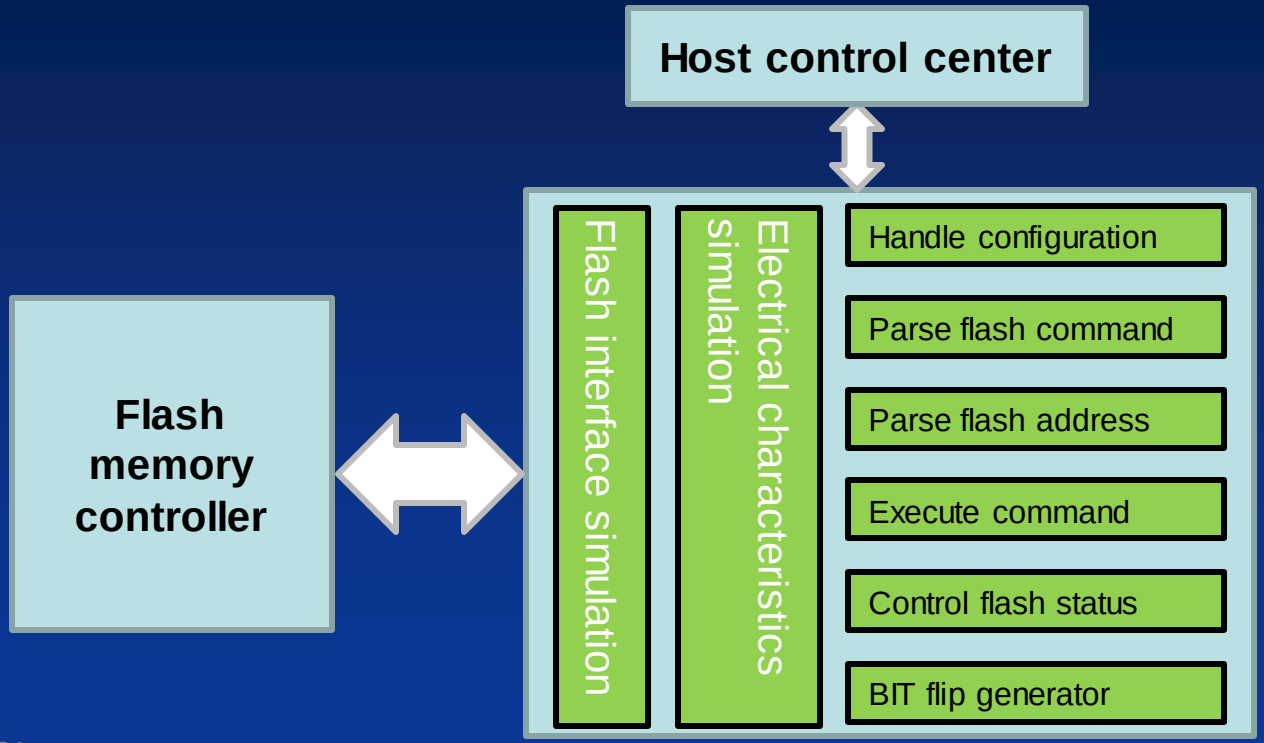
Host control center

FPGA verification platform

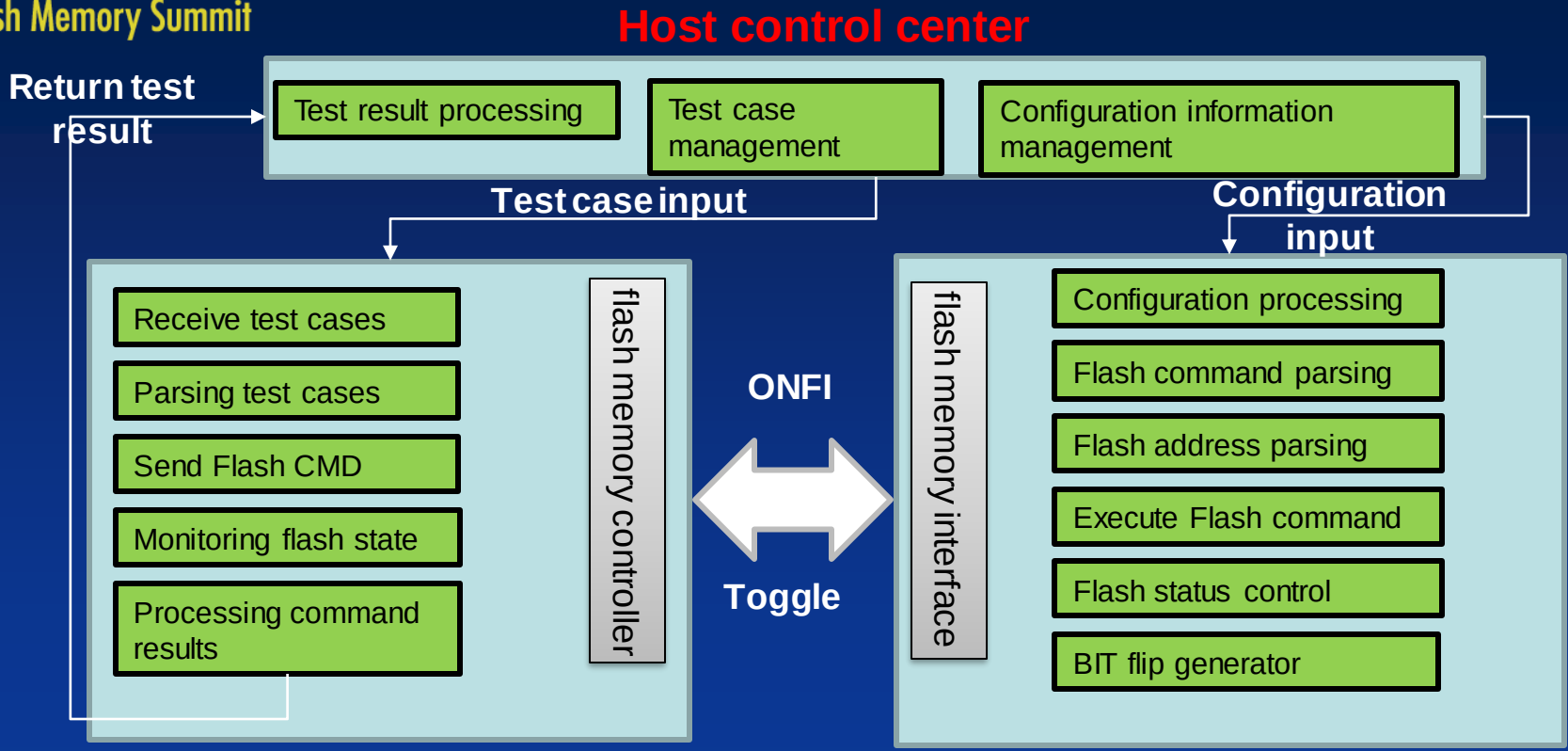


FPGA verification platform

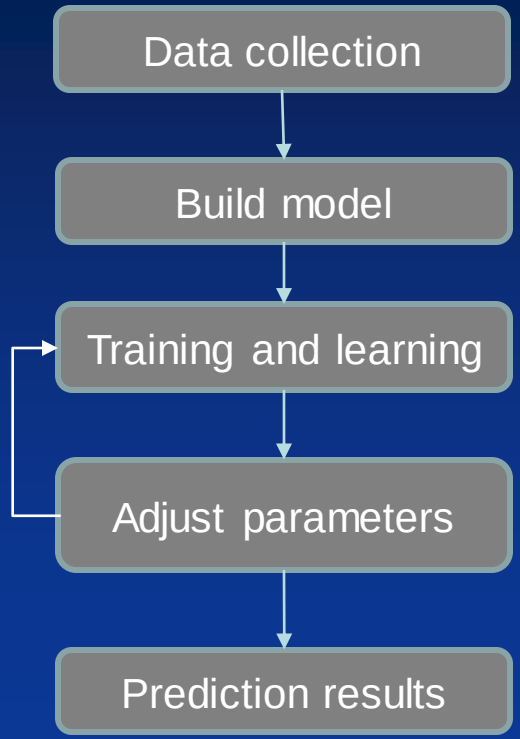
Flash emulator



The programmable simulation system



The BIT flip generator based on Deep learning algorithm



Thanks

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