

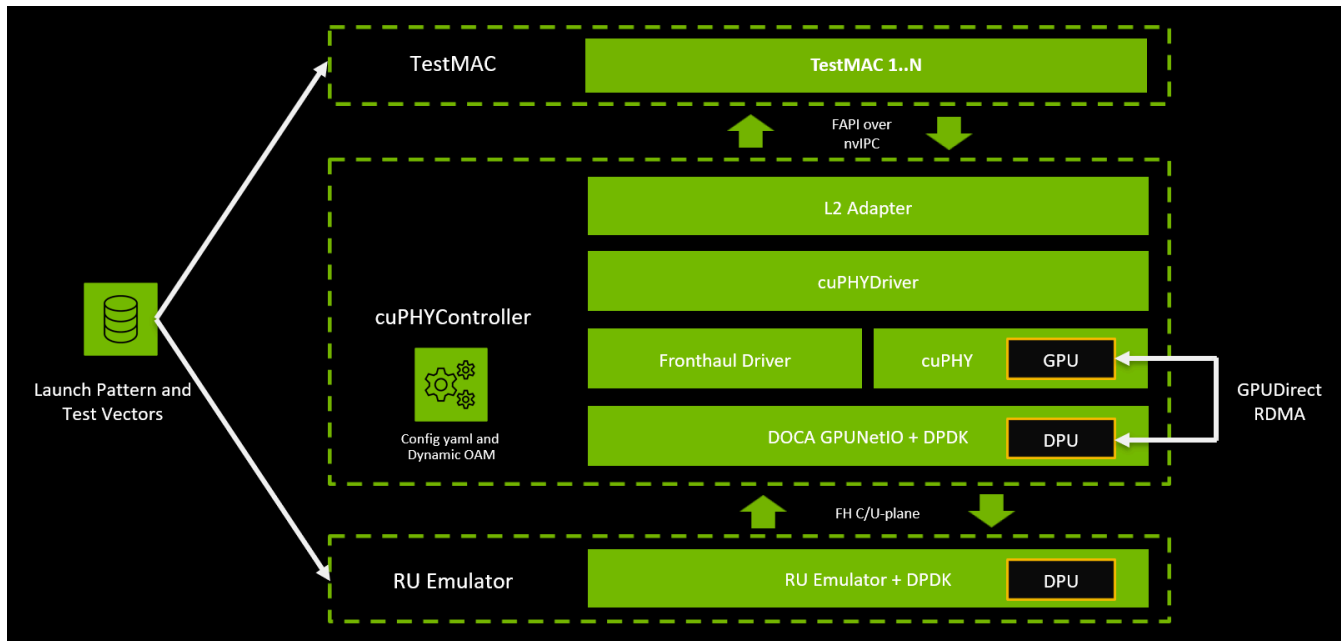


cuBB Quickstart Overview

The diagrams below show the Aerial cuBB software and hardware components.

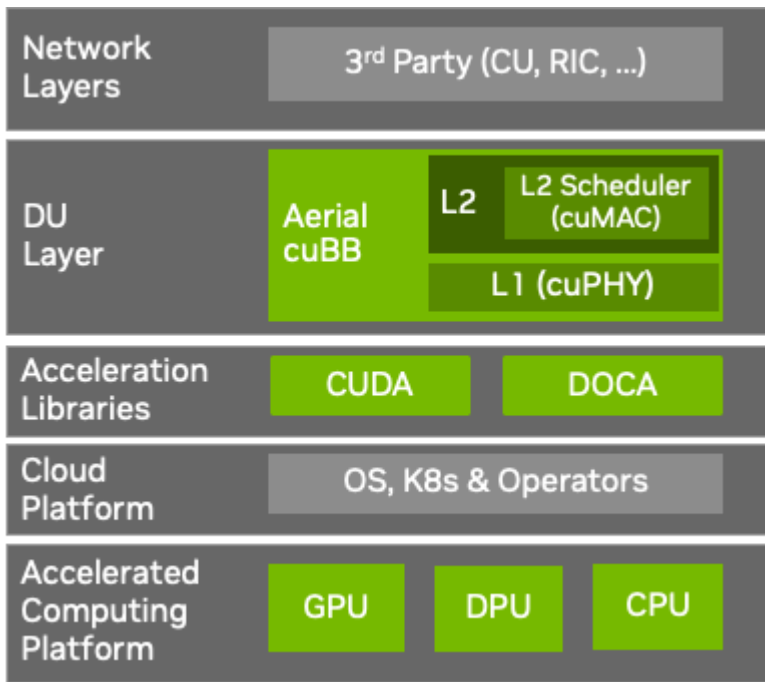
- **cuPHY** is the GPU-Accelerated 5G PHY layer software library and examples. It provides GPU-offloaded 5G signal processing.
- **DPDK** is the software library that provides network data transfer acceleration. The public version of DPDK now contains features like eCPRI flow steering and accurate TX scheduling, which Aerial uses.
- **cuPHY-CP** is the cuPHY Control-Plane software that provides the control plane interface between the layer 1 cuPHY and the upper layer stack.

Shown below is the block diagram of the cuPHY-CP. It supports multi-cell. Included with cuPHY-CP are the built-in test MAC and RU emulator modules.



The Aerial cuBB makes use of the DPDK for the network interface. It provides efficient high-speed network data connectivity to GPU processing of network data.

The diagram below shows the overall Aerial cuBB software and hardware stack layers:



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