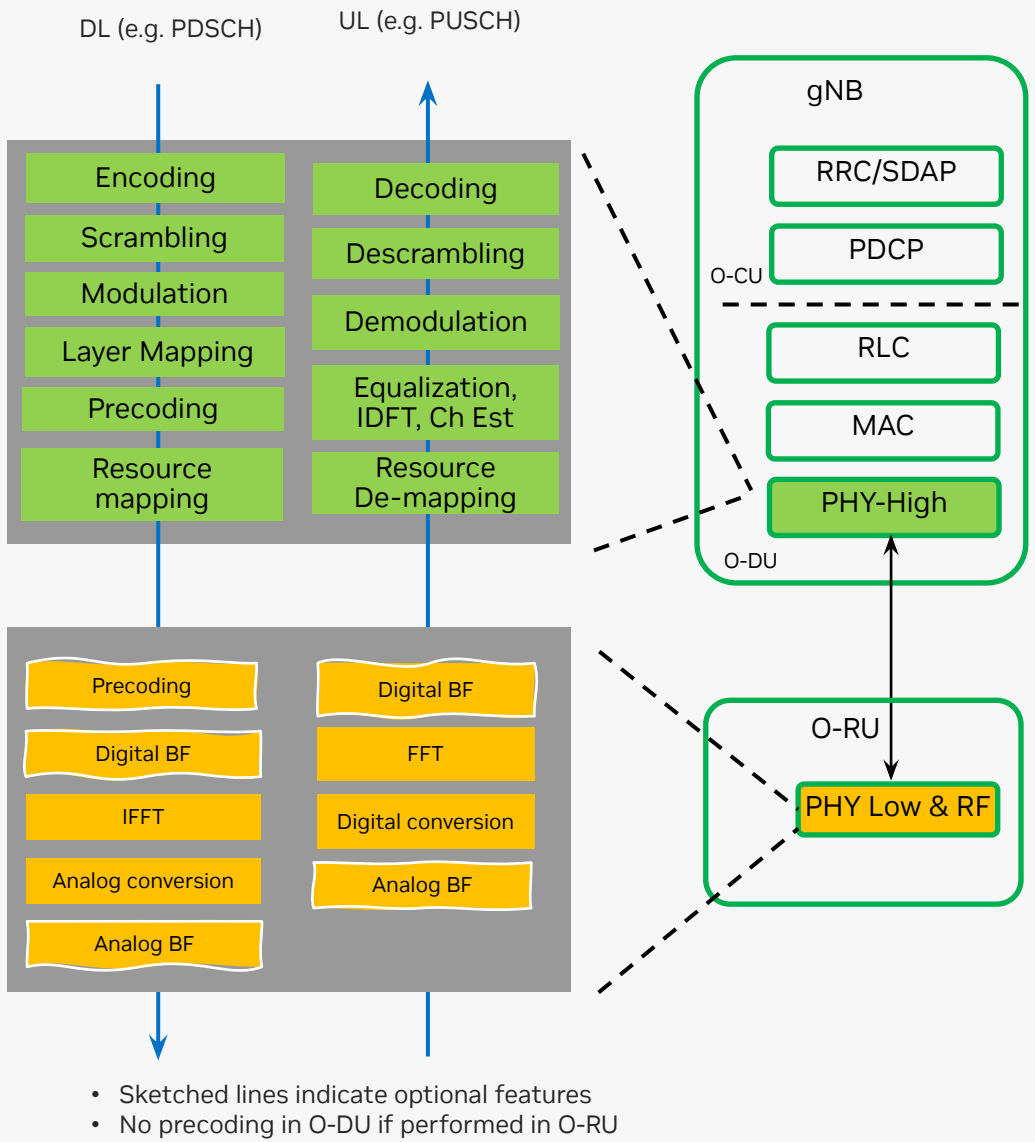
Aerial RAN CoLab – OTA O-RAN Aligned 7.2 Split Blueprint

NVIDIA GPU inline accelerate high PHY



- Sketched lines indicate optional features
- No precoding in O-DU if performed in O-RU

O-RAN's split-RAN concept disaggregates the RAN into multiple functional components. These components can be deployed on different hardware and software platforms and can be interconnected using open interfaces

ARC-OTA leverages the 7.2x split, which divides the protocol stack into :

- O-RU (O-Radio Unit): The O-RU is responsible for the physical layer (PHY) processing, including RF signal processing and analog-to-digital conversion.
- O-DU (O-Distributed Unit): The O-DU is responsible for the higher-layer processing, including MAC, RLC, and PDCP
- O-RAN alliance specified fronthaul interface between the O-DU and O-RU based on the 7.2x split. This interface supports control, user, synchronization (CUS), and management(M) planes