

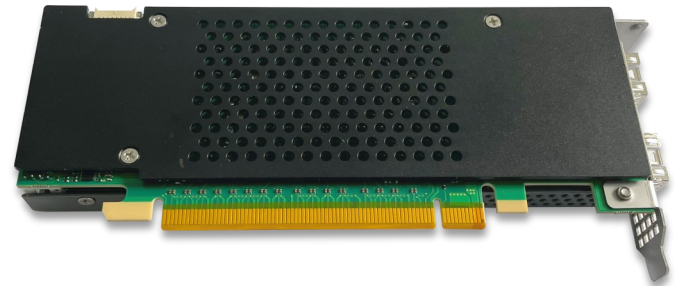
## 5G Fronthaul Accelerator Card

### Introduction

In the ORAN open architecture, the wireless RAN network consists of three parts: DU, HUB and RU, and software and hardware are also decoupled. The operation of software no longer requires dedicated hardware, but can run on a general x86 server.

The 5G Fronthaul Accelerator Card (fronthaul accelerator card) product is a dedicated product for 5G ORAN DU equipment.

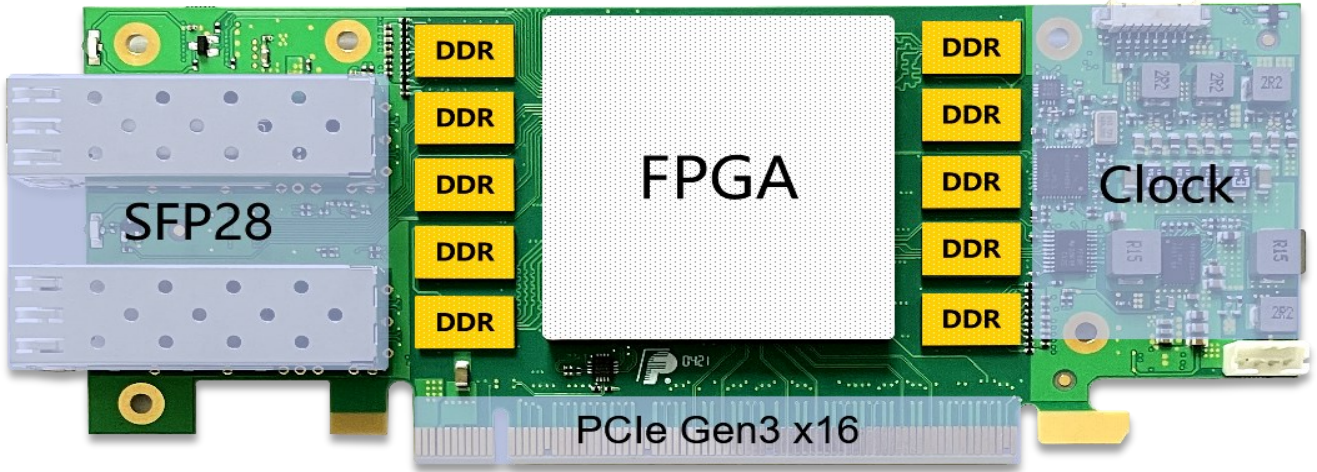
The 5G fronthaul accelerator card is a small single-slot card that can be inserted into a standard x86 or non-x86 server to achieve the instant protocol processing performance required by DU equipment. Enable DU equipment to provide better 5G performance and services, while reducing overall system power consumption and costs.



### SPECIFICATION

Compute Resources	Features
<ul style="list-style-type: none"> <li>- Based on XilinxVU9P high-performance FPGA chip design</li> <li>- Provide 52 GTY Serdes interfaces, the highest rate is 32.75Gbps</li> <li>- Provide 3.7 million logical units</li> <li>- Provide 400Mb on-chip RAM</li> <li>- Collect 6 PCIe cores</li> <li>- Provide 11.9K DSP processing units, each unit can perform 27×18 digit calculation</li> </ul>	<ul style="list-style-type: none"> <li>- Support 10/25GbE Synchronous Ethernet (ITU-T G.8262)</li> <li>- Reserve IEEE 1588 fronthaul clock interface</li> <li>- On-chip high stability TC and clock debounce circuit</li> <li>- Support: free-run, synchronous, holdover three modes</li> <li>- Support fronthaul PTP HW Stamping</li> </ul>
Memory	Size and Power consumption
<ul style="list-style-type: none"> <li>- Support 2×4GB DDR4-2400 64b w/ECC memory by default</li> <li>- Support up to 10 DDR4 memory modules</li> <li>- Support 1Gb Nor Flash</li> </ul>	<ul style="list-style-type: none"> <li>- Based on PCIe half length, half height, single slot design</li> <li>- Size: 174.8mm×70.06mm×22.9mm</li> <li>- Power consumption: &lt;75W (no external power supply required)</li> </ul>
Fronthaul interface	PCIe interface
<ul style="list-style-type: none"> <li>- Provides 2 SPF28 optical fiber interfaces, a single port supports a maximum rate of 25Gbps</li> </ul>	<ul style="list-style-type: none"> <li>- Provide 1 PCIe Gen3 x16 interface</li> </ul>

Accelerator card appearance



Application architecture

