

OPEN

Compute Project

QCT Rackgo X OCP AVA-4

Brief Specification

<Revision:1.0>

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Revision History

Revision	Date	Change Summary
1.0	2018/04/23	Product specification revision 1.0 release

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1. Overview

The brief product specification describes “QCT Rackgo X OCP AVA-4” is PCIe Full Height Half Length (FHHL) Form Factor Card that comprises 4 high density M.2 form factor solid-state drivers (SSDs), the card shall support 110mm (Type 22110) or 80mm (Type 22080) dual sided M.2 modules, it can be used directly on the available PCIe slots of the compute node to expand the storage use with economizes expenditure.

2. High Level System Features

Description	
Description	QCT Rackgo X OCP AVA-4
Form Factor	
Form Factor	Full Height Half Length (FHHL) Form Factor
Interface	
Interface	PCIe 3.0 x16
SSD Support Type	
SSD Support Type	Up to 4x110mm (Type 22110) or 80mm (Type 22080) dual sided M.2 modules
Environmental Requirements	
Environmental Requirements	<ul style="list-style-type: none"> • Gaseous contamination: Severity Level G1 per ANSI/ISA 71.04-1985 • Ambient operating temperature range: -5°C to +45°C • Storage temperature range: -40°C to +70°C (long-term storage) • Transportation temperature range: -55°C to +85°C (short-term storage) • Operating and storage relative humidity: 10% to 90% (non-condensing) • Operating altitude with no de-rating to 2,000m (6,600 feet)

Table 1 High Level System Features

3. QCT Rackgo X OCP AVA-4 Block Diagram

The block diagram describes the high level functional block diagram of QCT Rackgo X OCP AVA-4

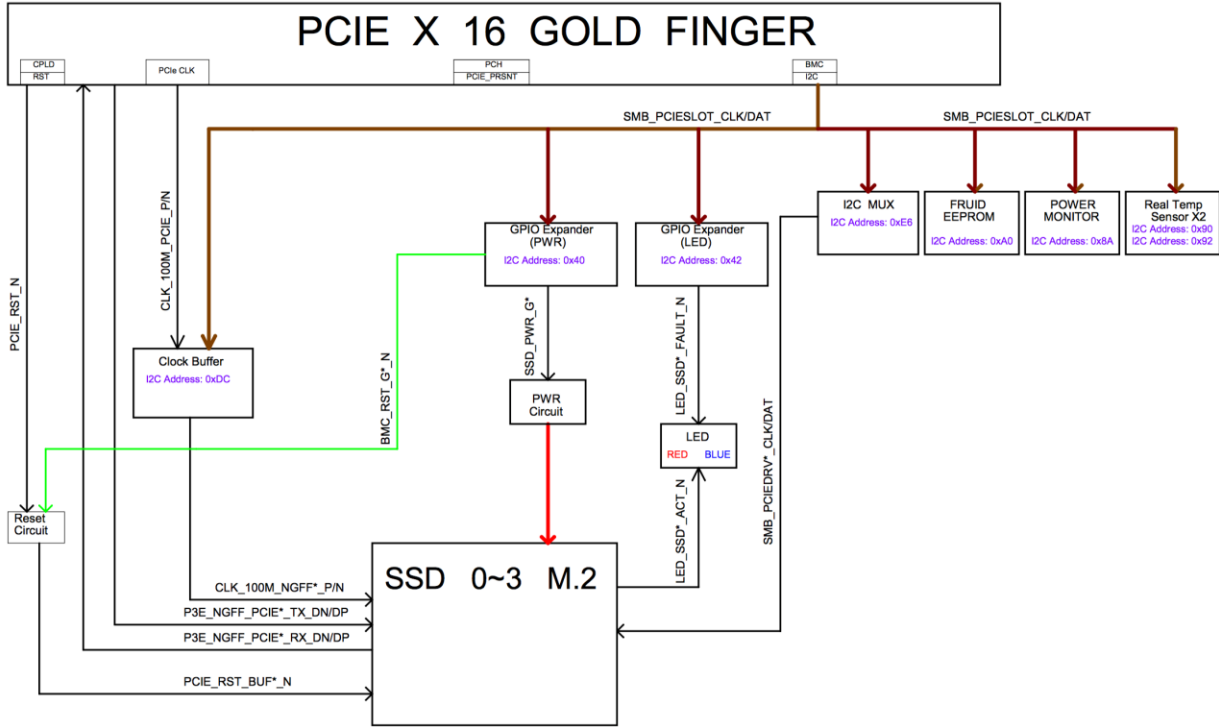


Figure 1 QCT Rckgo X OCP AVA-4 Block Diagram

4. Mechanical View and Dimension

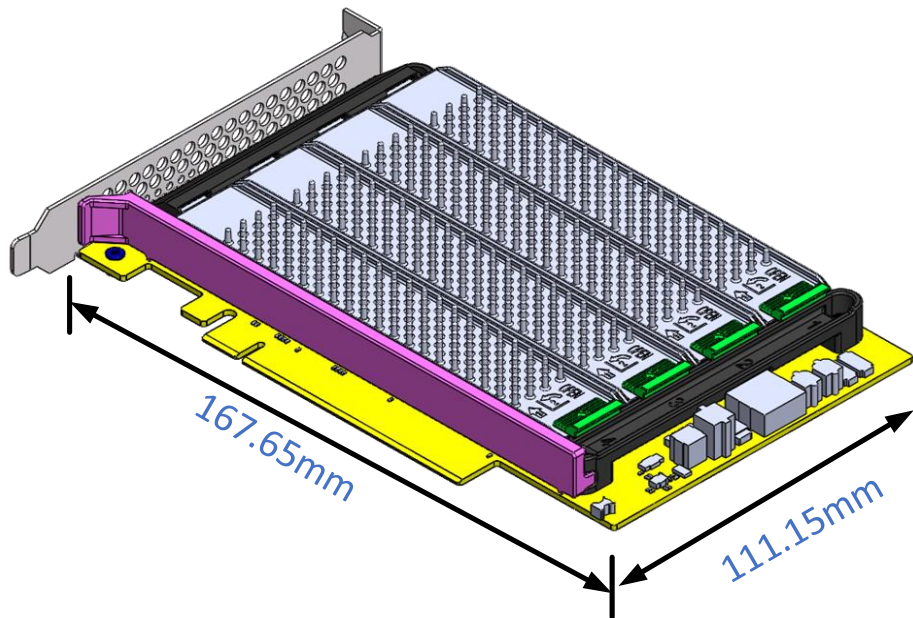


Figure 2 Mechanical Dimension

5. Component Placement

The key part placement of QCT Rackgo X OCP AVA-4 is shown as below:

Top side:

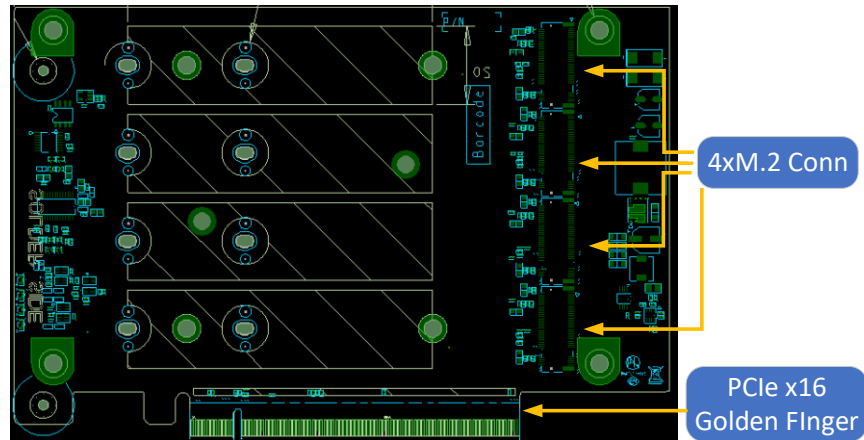


Figure 3 Key Part Placement

6. OCP Tenets/Principle

- **Efficiency**
 - Up to scalable 4x 22110 M.2 devices with removable heatsink for M.2 to be used in the environment-friendly data center and cut the TCO(Total Cost of Ownership)
- **Scalability**
 - Comply with PCIe Gen3 standard of PCI SIG to be easily adapted for deployment on compute system with standard FH PCIe slot support
- **Openness**
 - Comply with PCIe Gen3 standard of PCI SIG, no need to extra propriety design on the baseboard
- **Impact**
 - To be easier to expand the storage pool without designing new baseboard
 - Reduce the design effort and reserve more space for baseboard design

7. Reference

- Facebook M.2 Carrier card v1.0 spec