

OCP NIC 3.0 Design Specification

**Version 0.01**

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# Overview

## License

As of April 7, 2011, the following persons or entities have made this Specification available under the Open Web Foundation Final Specification Agreement (OWFa 1.0), which is available at <http://www.openwebfoundation.org/legal/the-owf-1-0-agreements/owfa-1-0>:

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## Background

## Acknowledgement

## Overview

### Form factor overview

### Electrical overview

## References

# Card form factor

## Overview

## Form factor options

## I/O bracket

## Port and LED

## Labeling

## Insulation requirement

## NIC Implementation examples

## Non-NIC Use cases

“PCIe interface with extra management sideband”

### PCIe Retimer card

### Accelerator card

### Storage HBA / RAID card

# (high pri) Card edge – Baseboard connector Interface

## (high pri) Golden Finger Requirement (with reference to SFF-TA-1002)

## (high pri) Baseboard Connector Requirement (with reference to SFF-TA-1002)

## (high pri) Pin definition

## (high pri) Power capacity and power delivery

## Signal description

## (high pri) Timing / sequence of power rails and signals

## PCIe Bifurcation mechanism

# Management

## I2C Side band interface

## NC-SI Side band interface

### NC-SI addressing and Arb#

## MAC address requirement

## FRU EEPROM

### Addressing(TBD)

## FW requirement(TBD)

## Thermal reporting interface

# Data Network Requirement

## Network Booting (collect view from OEMs and hyperscale )

Mezzanine NIC shall support network booting in uEFI system environment. Mezzanine NIC shall support both IPv4 and IPv6 network booting.

# Thermal and Environmental

## Environmental Requirements

The specific environment requirement is removed to allow the adoption of OCP Mezzanine NIC in systems with very different thermal requirement and boundary condition.

This Mezzanine card shall meet the same environmental requirements specified in the OCP systems that the Mezzanine card is in. The OCP system that uses OCP Mezzanine card shall define air flow direction, inlet air temperature, air flow (or speed) to the local area where Mezzanine card is at, and simulation boundary.

### Thermal Simulation Boundary Example

**Placeholder for Thermal Simulation Method. Using Facebook Intel® Motherboard V3.0 as example. Not covered by this update.**

## Shock & Vibration

This Mezzanine card shall meet the same shock & vibration requirements specified in updated Facebook OCP Intel® Motherboard V2.0 and V3.0 Design Specification.

## Regulation

This Mezzanine card shall meet CE, CB, FCC Class A, WEEE, ROHS requirements.

# Revision History

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| Author | Description | Revision | Date |
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