

Mechanical Discussion OCP Overview

9/25/2017

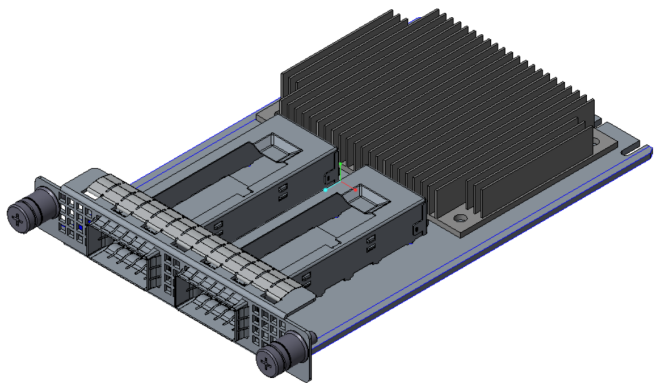
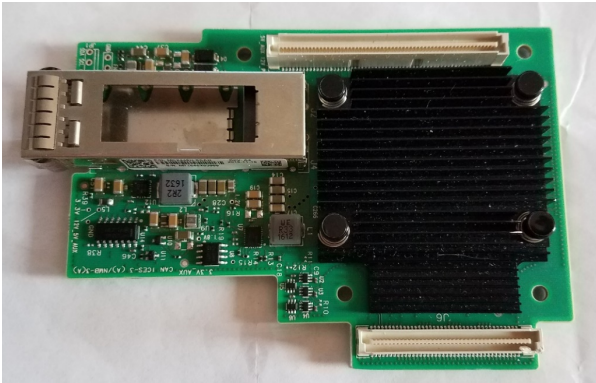
Joshua Held, Mechanical Engineer, Facebook

Yueming Li, Thermal Engineer, Facebook

John Fernandes, Thermal Engineer, Facebook

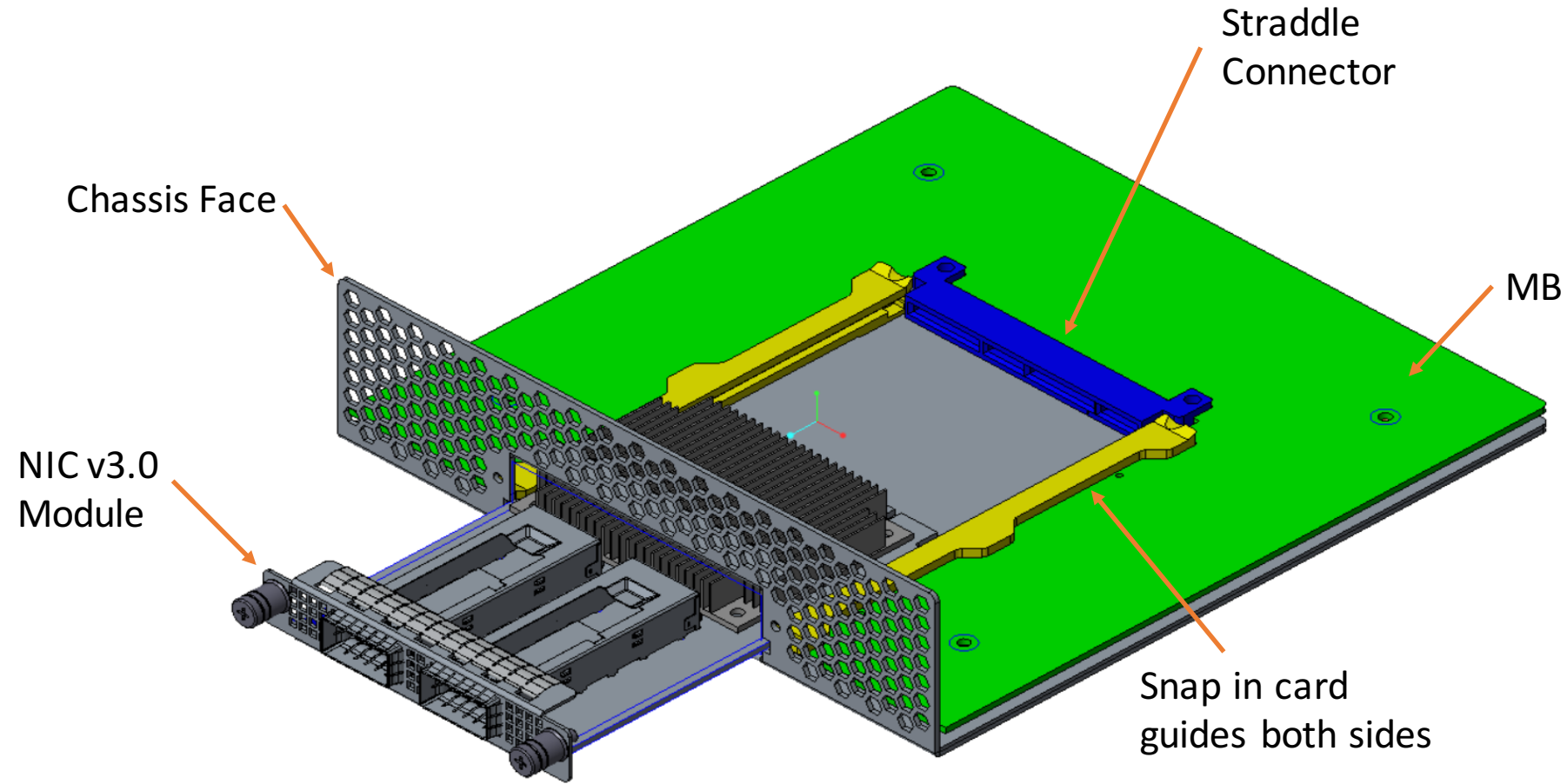
Jia Ning, Hardware Engineer, Facebook

Mezz v2.0 vs NIC v3.0



	Mezz v2.0	NIC v3.0
Small Size	Non-Rectangle	74x115
Small Area	8000	8510
Large Size	NA	118x115
Large Area	NA	13570
Expansion Direction	NA	Side
Connector style	Mezz	Edge (.6mm pitch)
PCB Orientations	Horizontal	Horizontal
Installation	In Chassis	Front/Rear Panel
Installation Action	Parallel to Front/Rear Panel	Perpendicular to Front/Rear Panel
Hot Swap	No	Yes
EMI Containment for Serviceability	High Difficulty	Low Difficulty

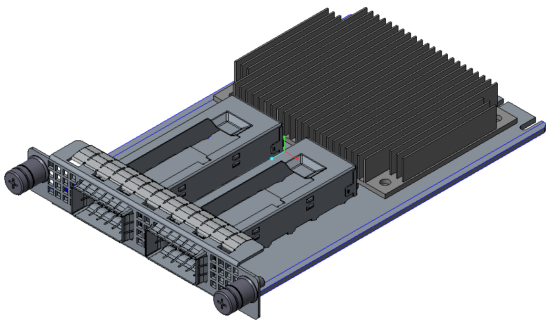
NIC v3.0 Configuration



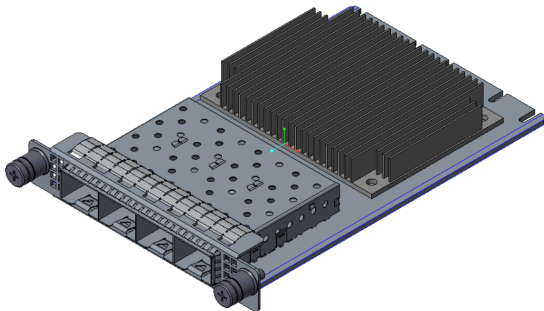
Small NIC with Straddle Mount

Module Versions

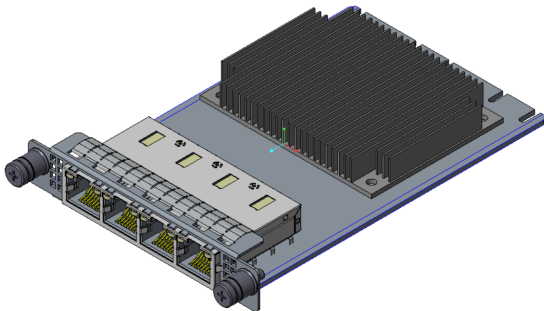
2x QSFP



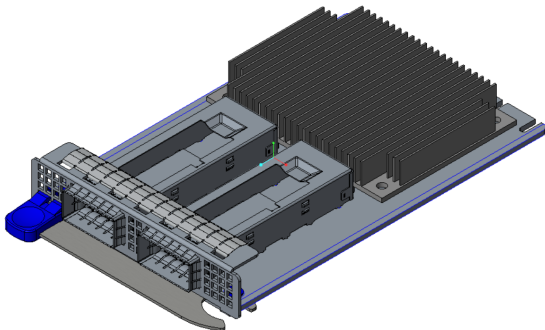
4x SFP



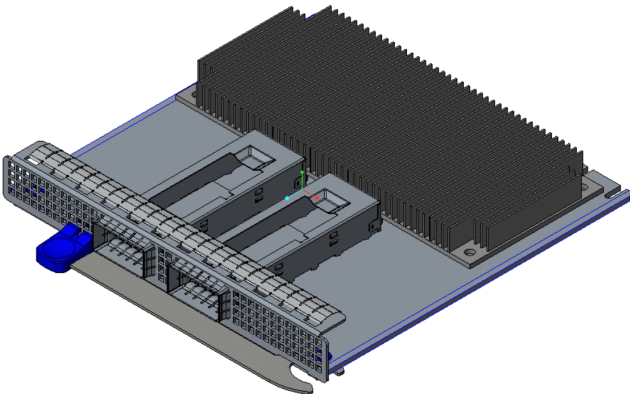
4x RJ45



Small
w/ Latch



Large
w/ Latch



	Connector 1	Connector 2	Mating Force	Unmating Force
Small Size	4C + OCP Bay	NA	64N (6.5kg) (14lbs)	20N (2kg) (4.5lbs)
Large Size	4C + OCP Bay	2C	96N (9.8kg) (21.6lbs)	30N (3kg) (6.7lbs)

Next Steps

- Community mechanical questionnaire – please provide detailed feedback
- Close on – Keep outs, board size, stack up heights, EMI shielding, connector options
- Considering ¼ turn fastener in place of thumb screws

Special Thanks

Quanta Computer – for providing mechanical mock-ups

Facebook Team:

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