

OCP – ODSA Project

Commercialization Use Case



Chiplet Platform for Data Center SmartNIC's/DPU's/IPU's

Steve Majors

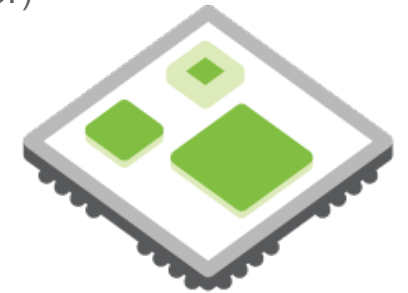
Why ODSA at DreamBig

Motivation to use ODSA

- We support chiplet die-to-die (D2D) solutions that meet these criteria
 - Standards based
 - High bandwidth with low latency (16Gb+/lane @ <10ns including link layer)
 - Low cost packaging (RDL fan-out and/or organic substrate)

ODSA BoW meets all of the above and can be productized today

- How has DreamBig been involved with ODSA?
 - Member for over a year
 - Indirect contributors through collaboration with industry leading members Alphawave and Blue Cheetah
 - Evangelists promoting ODSA and helping foster a growing ecosystem of 10+ partners/customers actively developing interoperable chiplet technologies, chiplets, and products in data center markets



ODSA Use Case at DreamBig

Product intersection with ODSA spec

1. Using BoW for D2D links between server class chiplets
2. Multiple interfaces, each with multiple slices (16 lanes @ 16Gb)
 - Tb's of bandwidth for standard AXI, AXI-S, CXS, CHI, etc. transactions
3. Developing DPU, CPU, Accelerator solutions with partners
4. Will show leading Ethernet+SPECint+TOPS performance/\$/W
5. Silicon tape outs in progress with samples early 2023

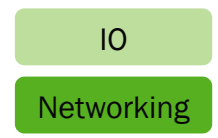


What is Next for ODSA at DreamBig

- Productize a leading edge open DPU platform including a rich ecosystem of BoW compliant chiplets in low cost packaging
- Make DPU chiplets that are retargetable to CPU, Accelerator, Edge, etc. markets with similar IO and/or networking requirements
- Ease adoption of ODSA BoW standard by providing complete reference solutions that include chiplet, package, board, FW, SW, etc. collaterals for customers that wish to build their own silicon



DreamBig Chiplets



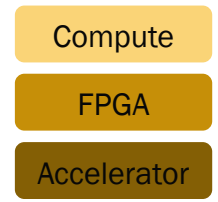
DreamBig Composed Product Examples



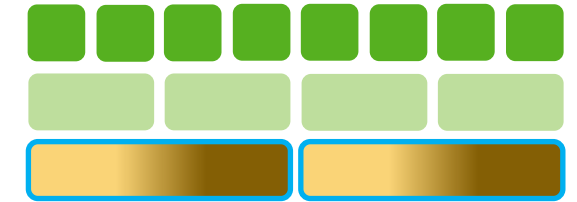
Customer Composed Product Examples



Ecosystem Partner Chiplets



Ecosystem Partner Composed Product Examples





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Questions