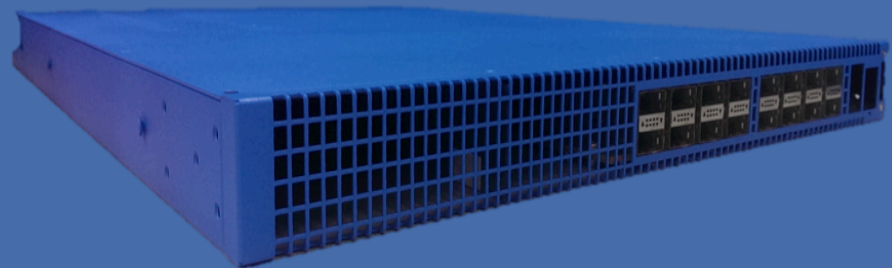


facebook

The Wedge Platform

OCP Contribution

April 2015



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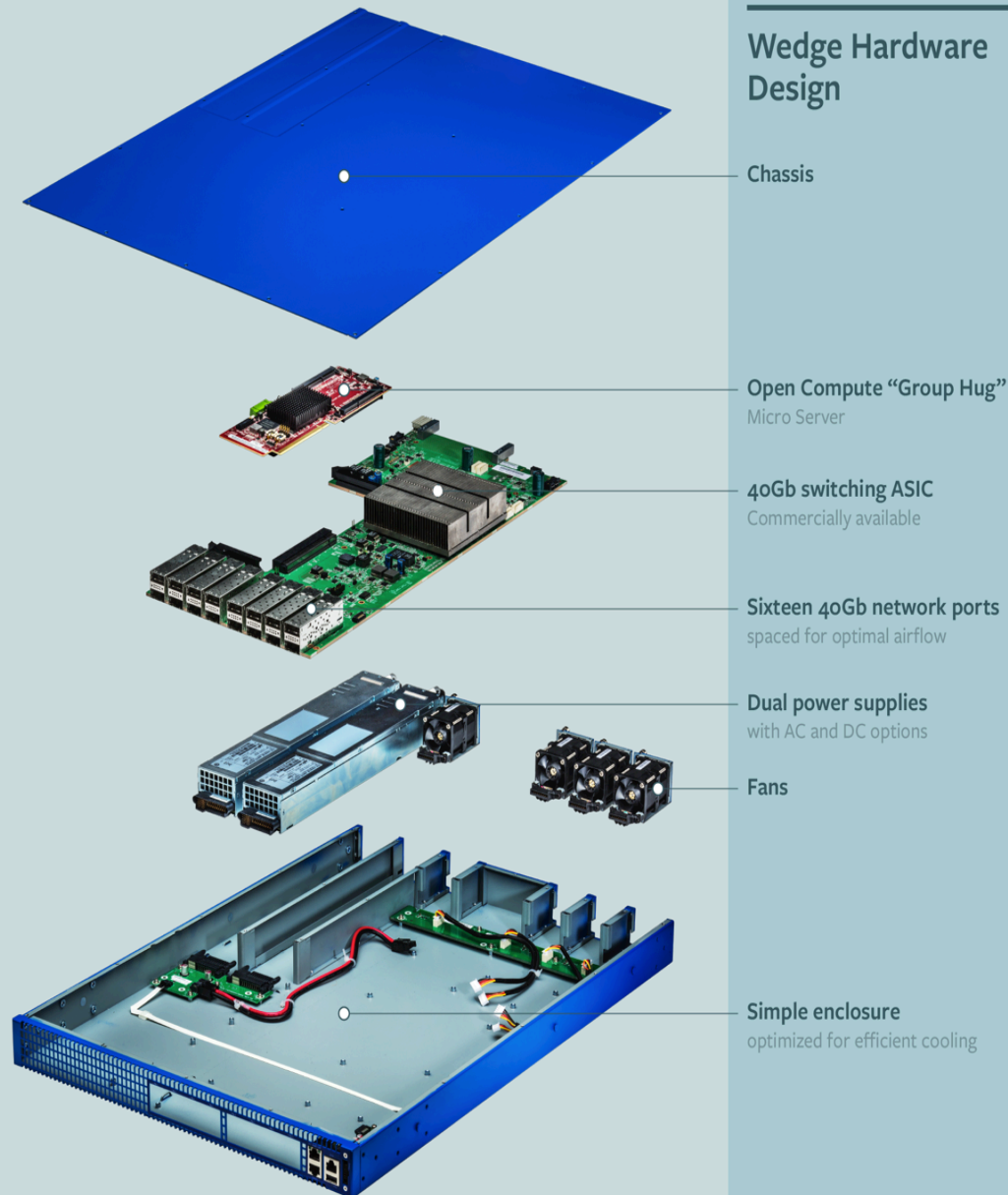
OPEN
Compute Project

What is Wedge ?

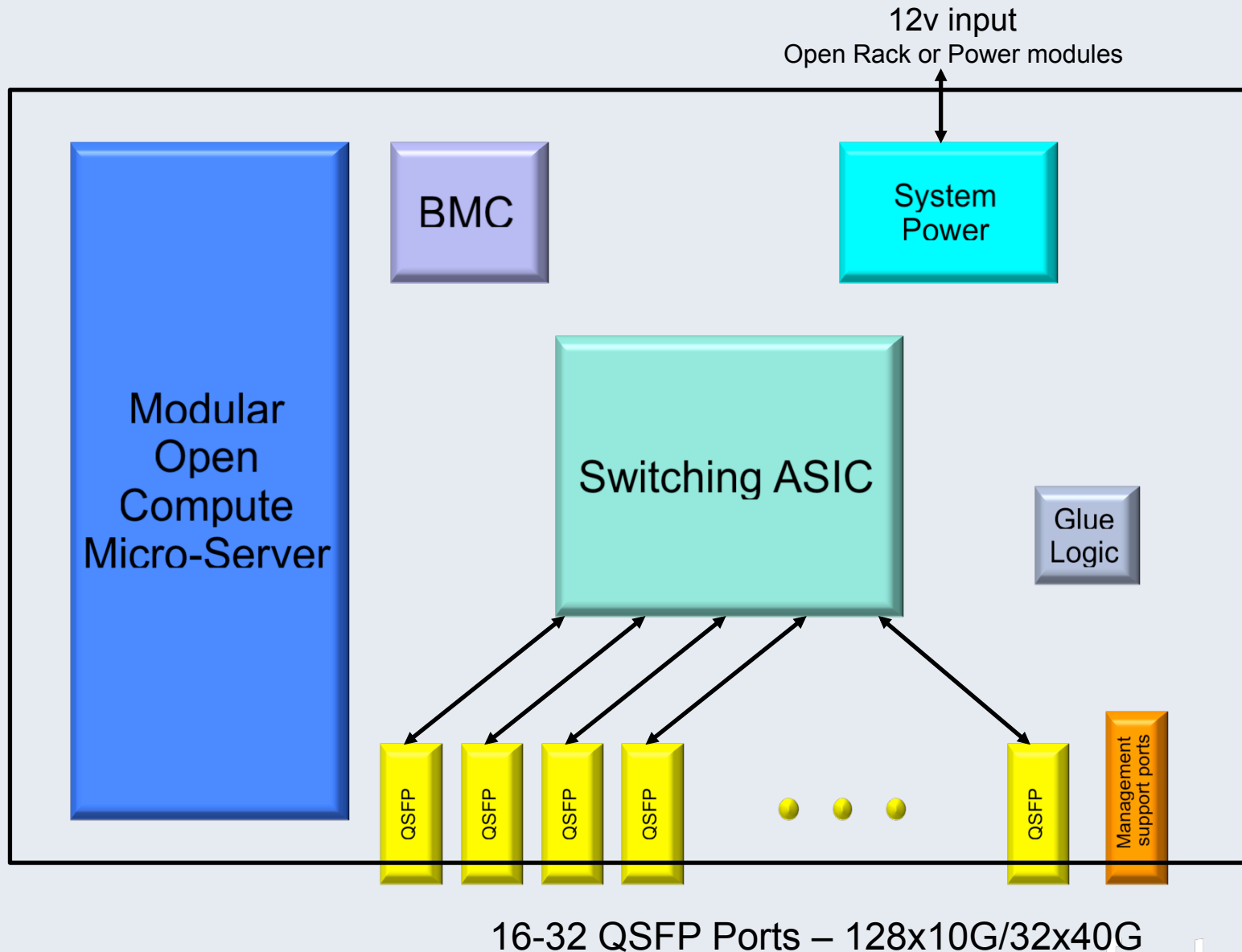
- Top of Rack switch with 16-32(optional) 40GE ports
 - Internal Facebook design
 - Based on BRCM T2 switching technology
 - Group Hug micro server + BMC
 - QSFP based interface
 - Open Rack ready (12v only input)
- First building block for the Facebook disaggregated switching technology
- FBOSS +oBMC based platform
- **Smart** control plane switch

Snapshot

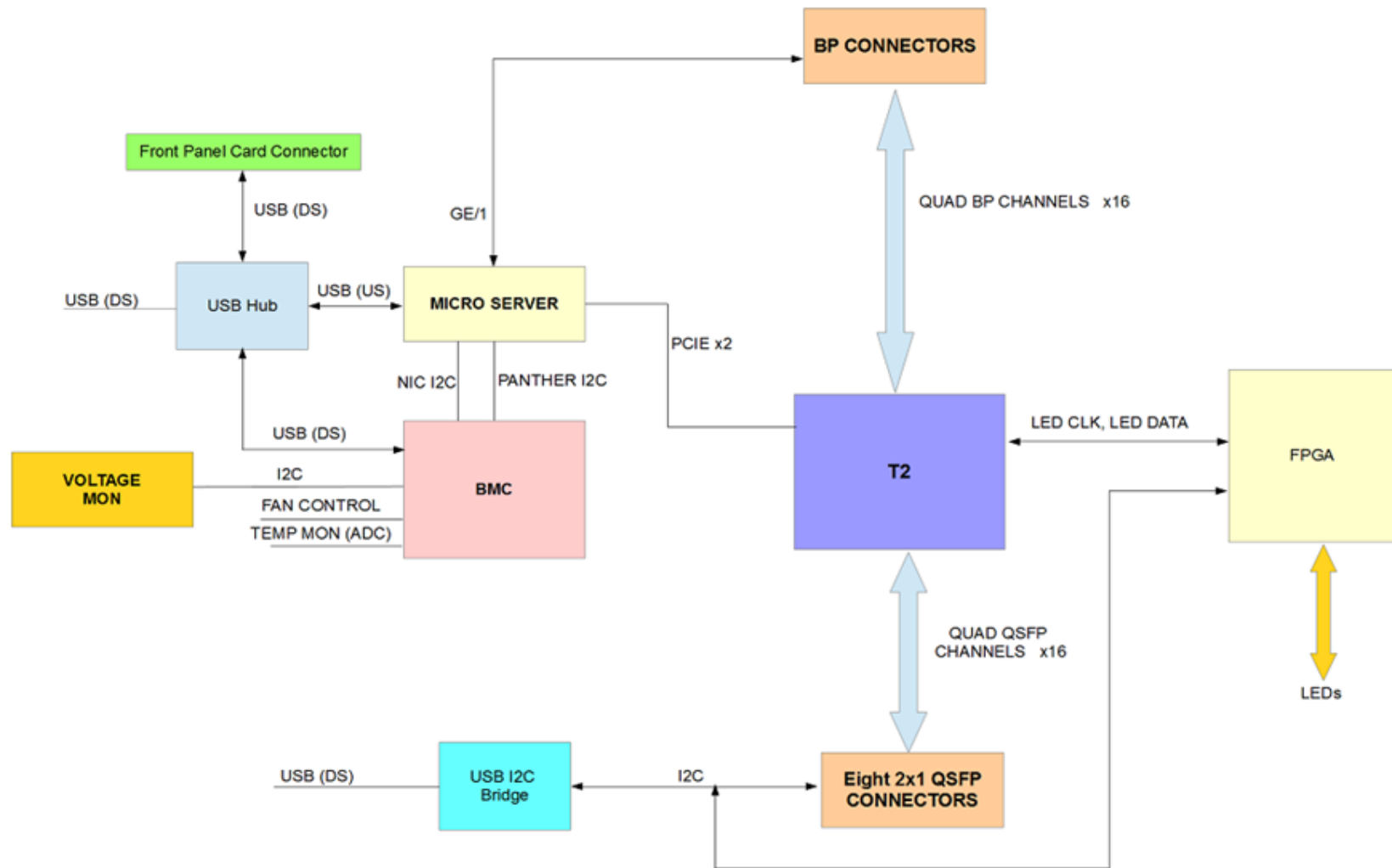
Wedge Hardware Design



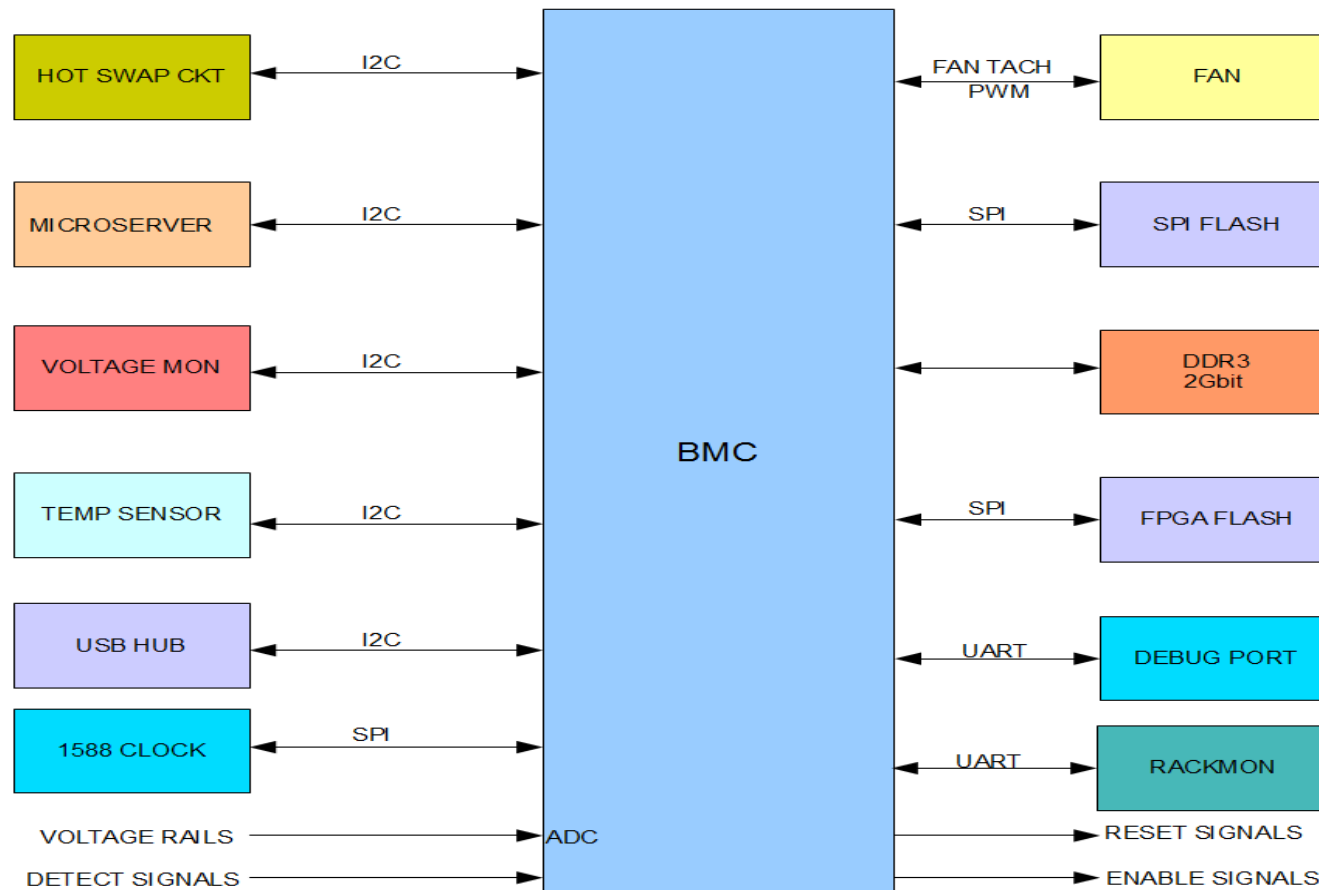
Wedge High level Block Diagram



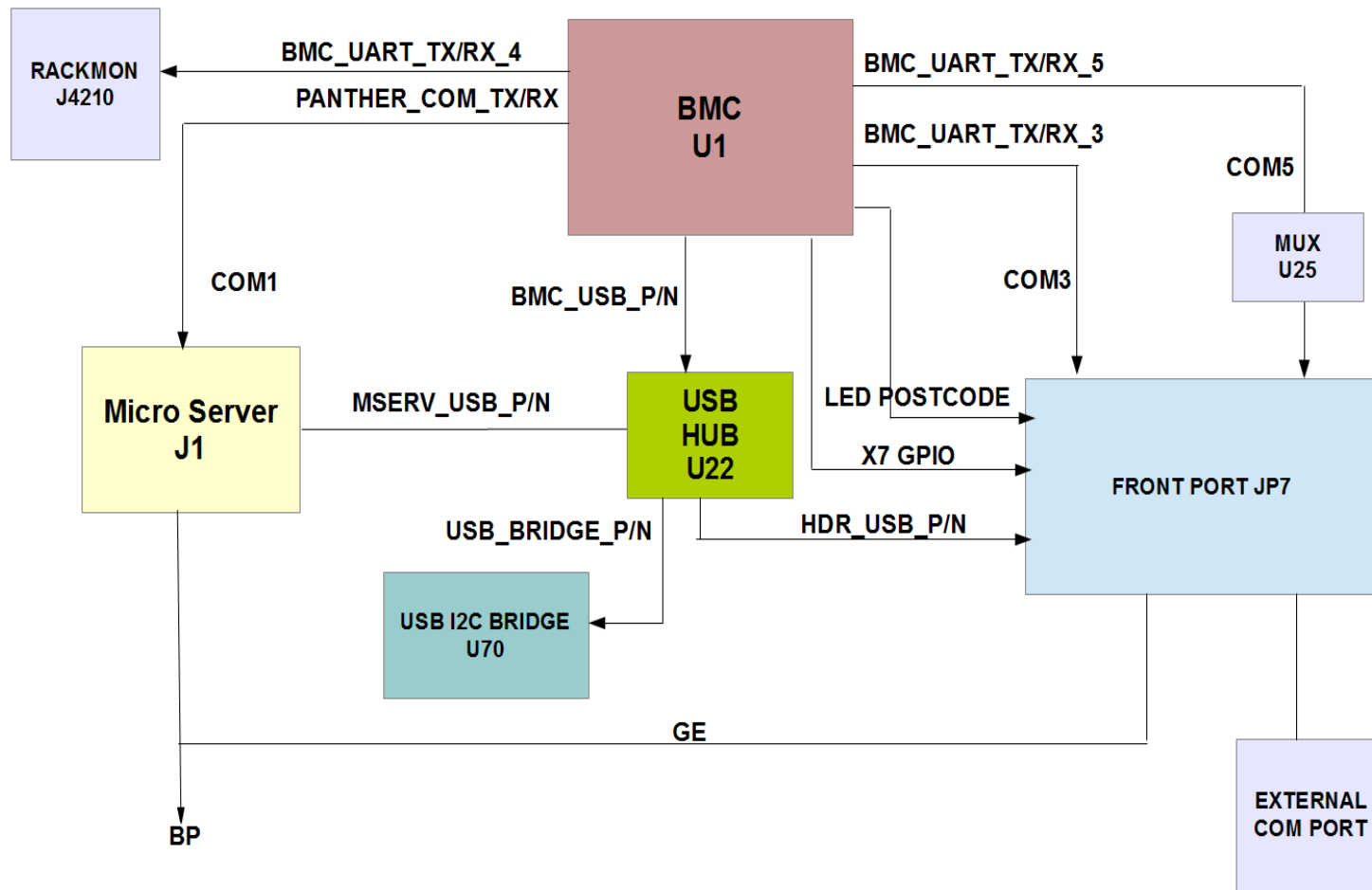
Detailed Block Diagram



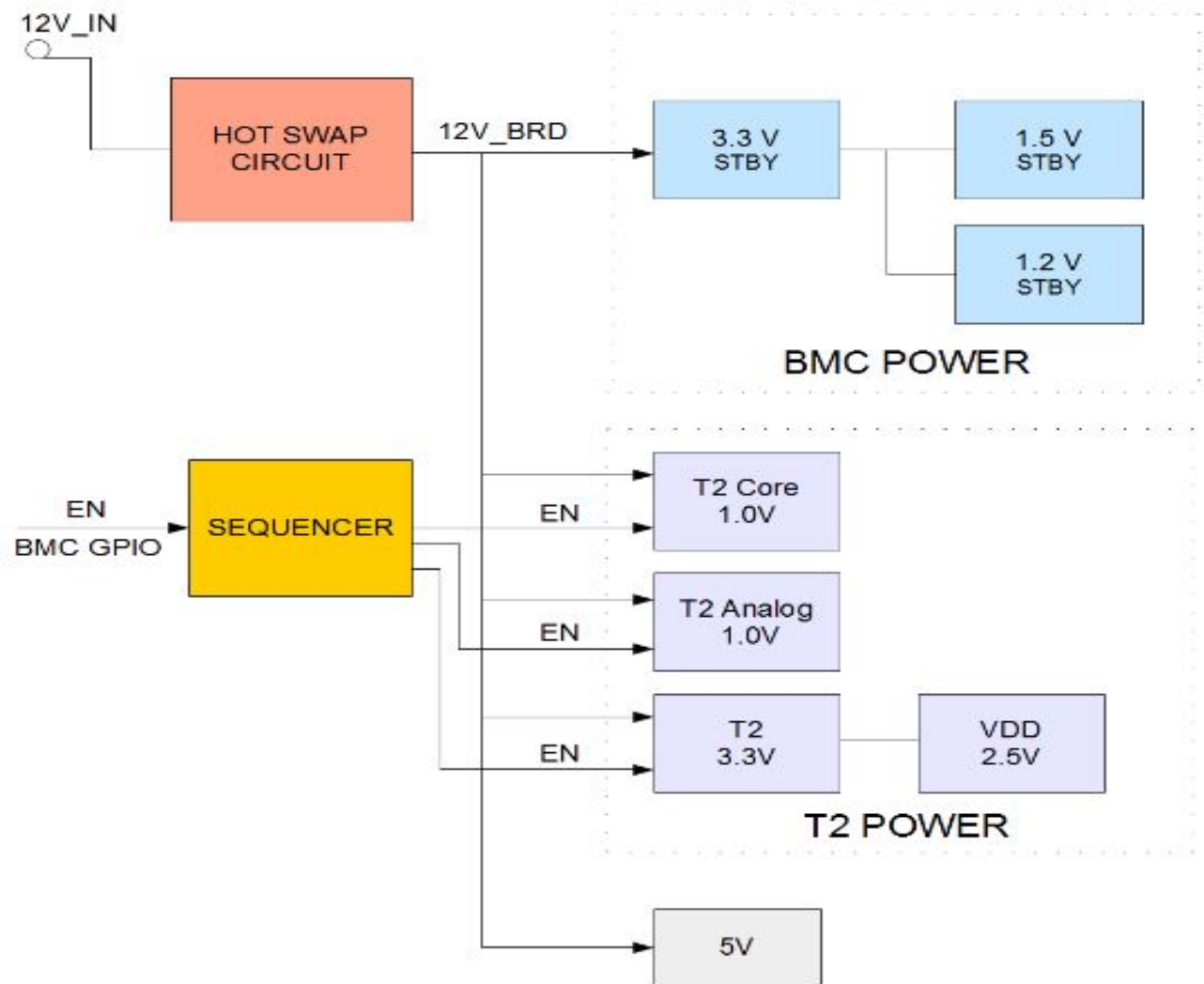
I2C Connectivity



Support ports connectivity



Power Architecture



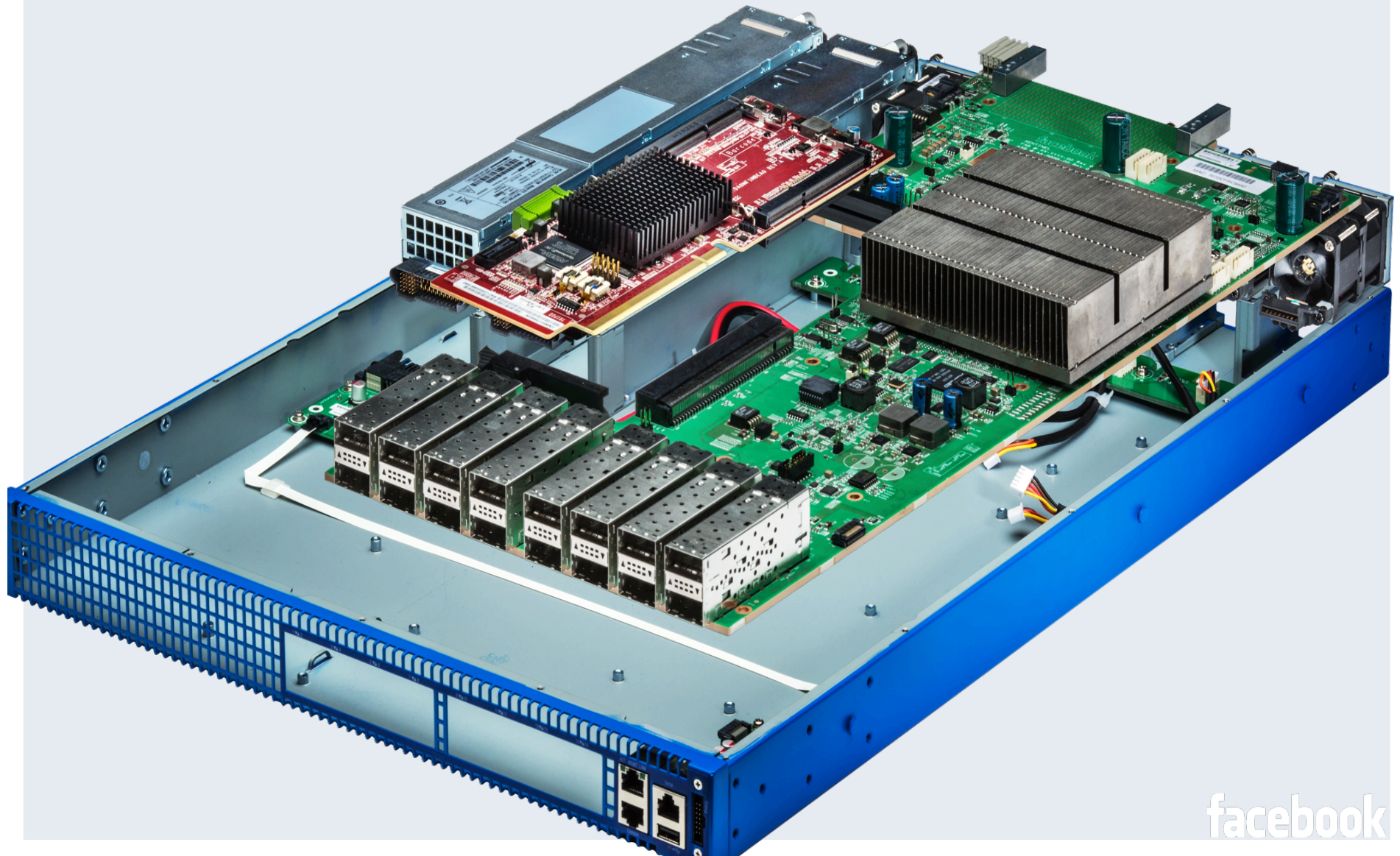
What are we contributing

- Full manufacturing and design packages
 - Detailed specification
 - Schematics – PDF and Orcad source
 - Layout - Allegro source
 - Gerber Set
 - BOM
 - All Manufacturing associated files
 - FPGA- programing and source files
- Software – Separate contribution oBMC, FBOSS, Diagnostics (limited)

Detailed contribution

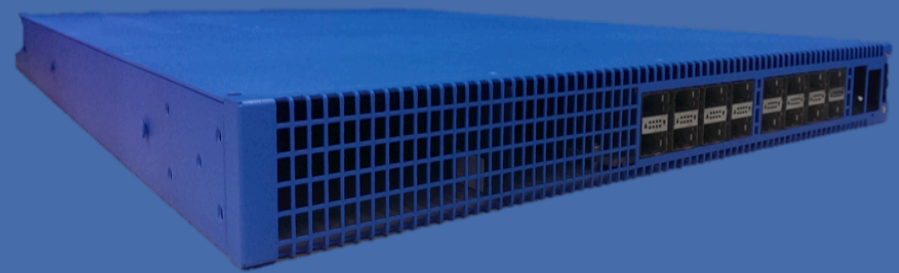
- Electrical – Full system spec plus:
 - 5 different boards:
 - Main switch
 - Power board
 - Fan Board
 - Front support card
 - Rear support card
 - For each card we will have:
 - BOM
 - Full schematics files (PDF and source)
 - Layout files - Allegro
 - Gerbers and MFG support files
- Mechanical
 - Chassis design files
 - Fan module design files
 - Mechanical BOM
 - Manufacturing drawings for the chassis and fan modules

Building Blocks



facebook

Thank you !



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