

## Intel based Micro-Server for Data centers



### BUSINESS REQUIREMENTS



The objective was to design and develop Intel Xeon and Atom based processor modules for micro server



Requirement involved developing BIOS for each modules and a production test jig.



Bring up and Design Validation Tests (DVT) on test jig.



### OUR SOLUTIONS



Atom and Xeon Server SoC based processor modules built for a 2U chassis with 4 SODIMM slots



PCIe Gen 3 based active backplane and switch fabric interface



BIOS development for Xeon and Atom, Bring-up and Design Validation Tests (DVT)



### TOOLS/ TECHNOLOGIES



OrCAD capture, Cadence Allegro, Concept HDL



Intel Xeon (Broadwell-DE), Intel Atom (Avoton), SSD over M.2, DDR4 SODIMMs, PCIe Gen3 fabric interface, headless design



Stack up : 14 and 16 layer, low cost PCB avoiding the use of HDLs.



### BUSINESS IMPACT



Enabled the customer to create a product for low power , elastic demands and high performance applications.



Complies to Open Networking Platform specs to enable the hardware as base infrastructure for running Virtual Network Functions and hence create market in NFV space.



Unified architecture also allows the product to be positioned for web scale data centers.

### About Us

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable **digital transformation** for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, AI & Cognitive Computing, **Internet of Things**, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as "Born Digital . Born Agile", our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality. Headquartered in Bangalore, India; Happiest Minds has operations in USA, UK, The Netherlands, Australia and Middle East.