

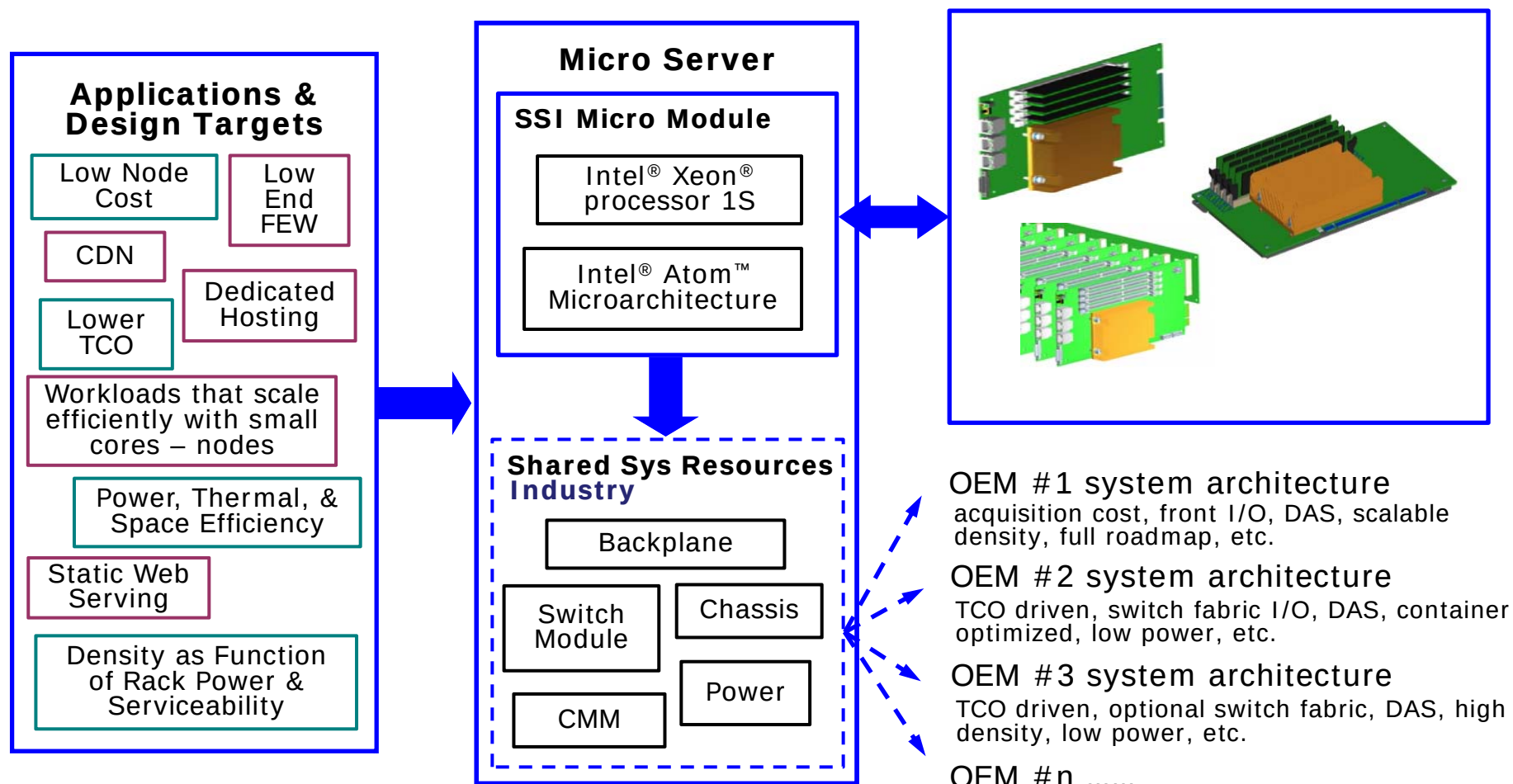
SSI Micro Module Opportunity



Flexible & modular node building block that:

- Efficiently scales across applications & design targets
- Converges industry on a common form factor
- Reduces R&D & accelerates TTM by maximizing leverage
- Enables a wide range of product differentiation

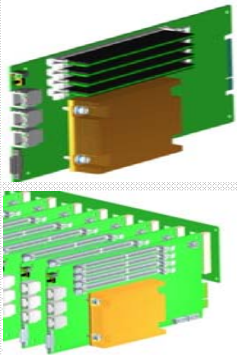
Micro Module SSI Definition Framework



Versatile node building block!

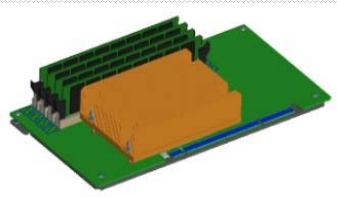
Micro Module SSI Overview

Front Access



- Blade-like service, interface choice made in chassis
- 3U module, ~4.7" x ~10", pitch not specified
- Two main configuration options:
 - I/O from rear, fabric on backplane
 - I/O from front of individual modules

Top Access

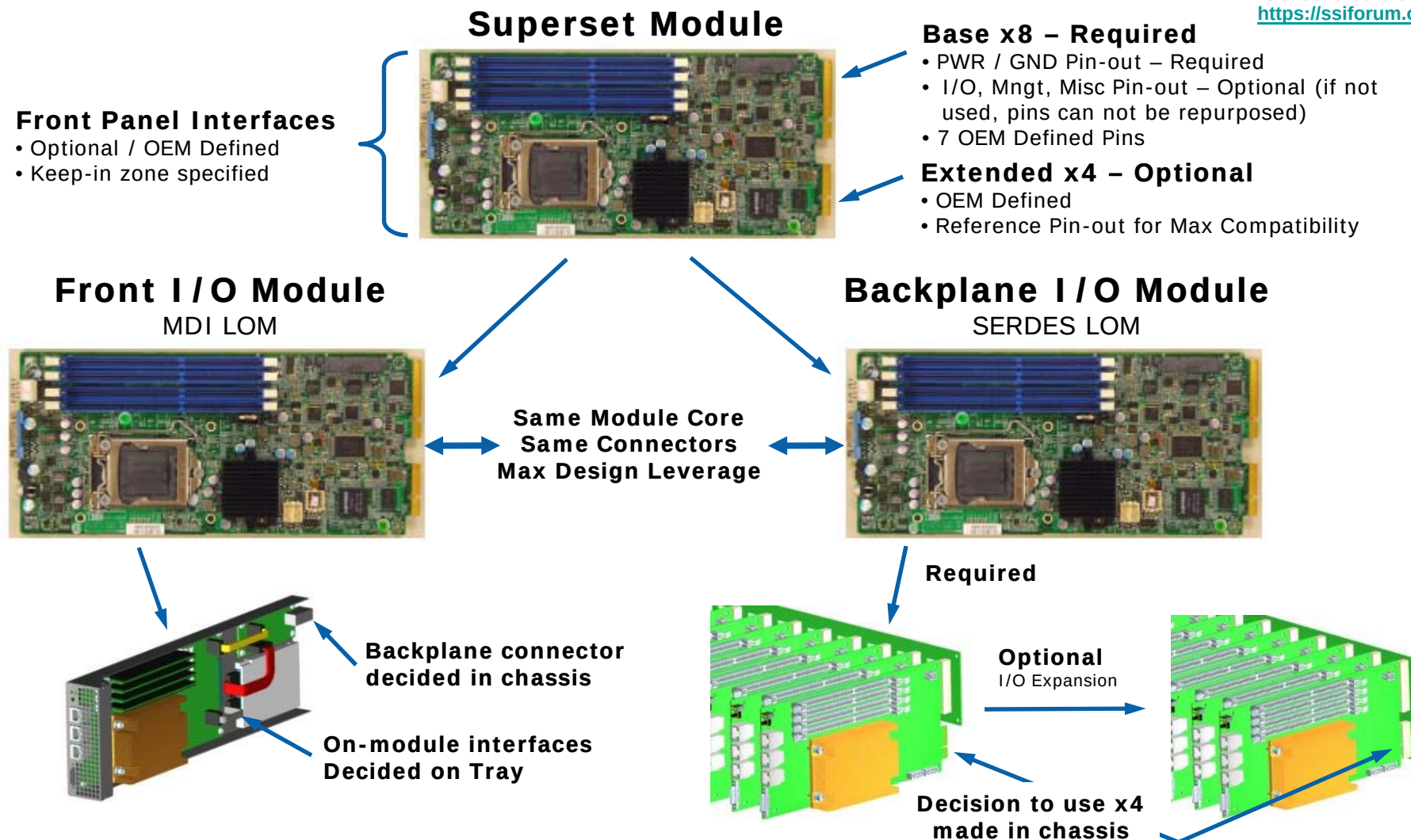


- Enables up to 2x front access micro module density
- 3U, ~4.7" x ~10", pitch not specified
- Modular architecture
 - Fabric on baseboard, I/O from rear or front, etc.
 - System I/O and storage through baseboard

- ✓ Compliance requirements maximize reuse & minimize module SKUs
- ✓ Choice & flexibility enables solution scale across segment requirements

SSI Specification announced January 10, 2011

Front Access Micro Module SSI



“Recommended” Options Enable Path to Elec / Mech Compatibility
“OEM defined” Options Enable Differentiation w / Low Investment

Top Access Micro Module SSI



Base x16 – Required

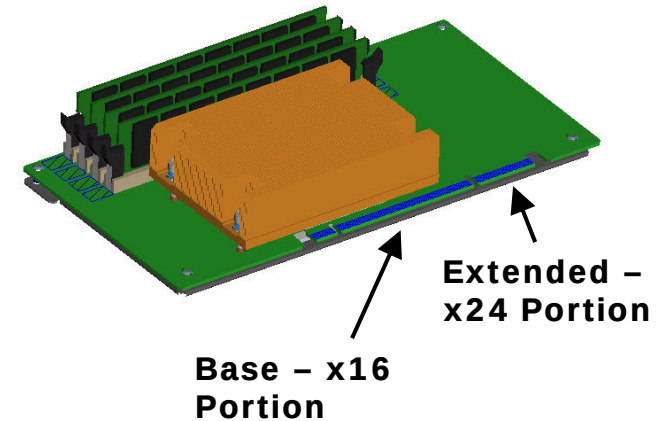
- PWR / GND Pin-out – Required
- I/O, Mngt, Misc Pin-out – Optional (if not used, pins can not be repurposed)
- 4 OEM Defined Pins

Integrated I/O & Management

- GbE switches
- DAS and shared storage possible
- System level management (rKVM, etc.)

Extended x24 Pins – Optional

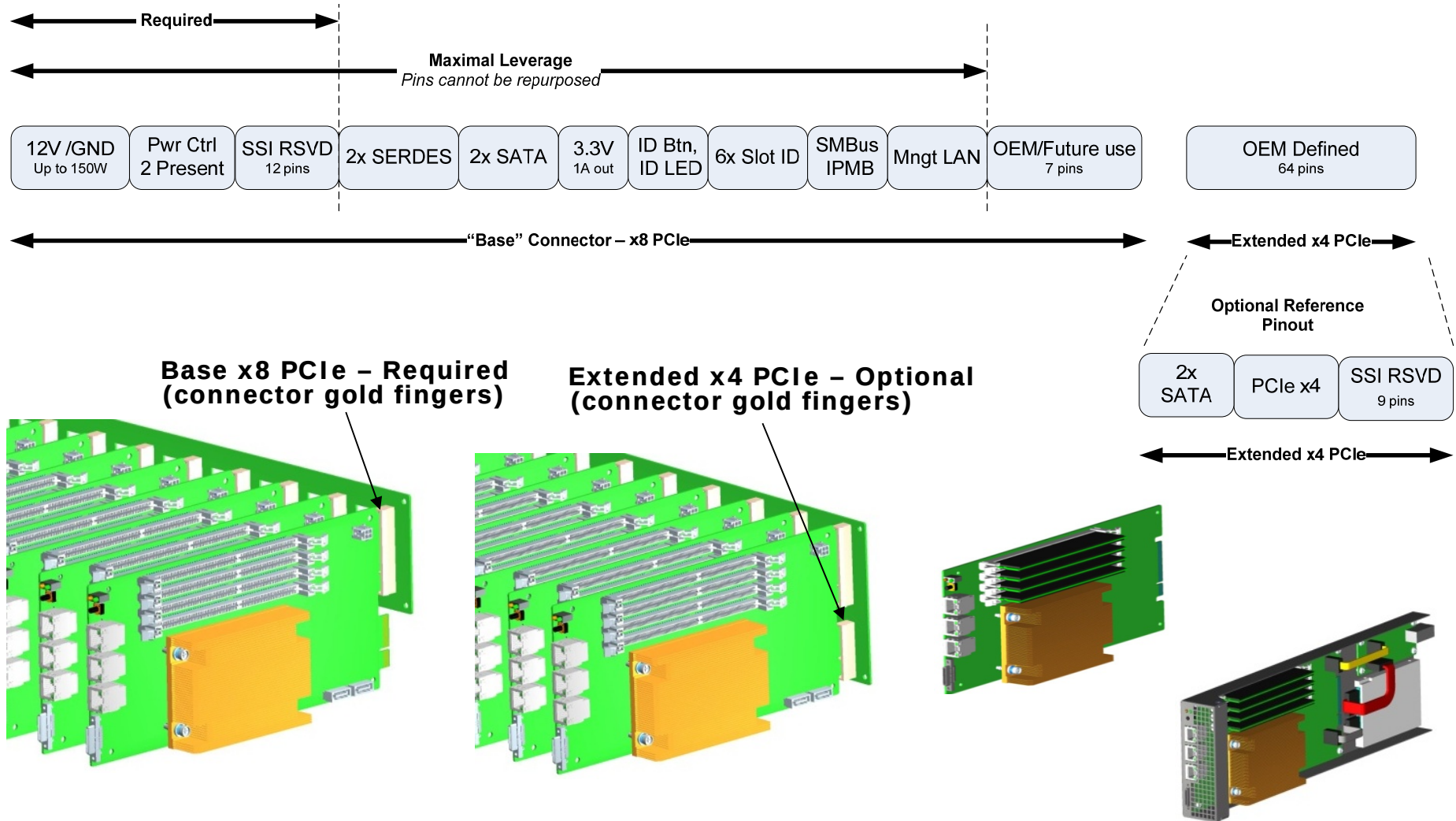
- OEM Defined
- Reference Pin-out for Max Compatibility



***Enables Optional Path to Elec/Mech Compatibility
OEM defined functions enable low investment differentiation***

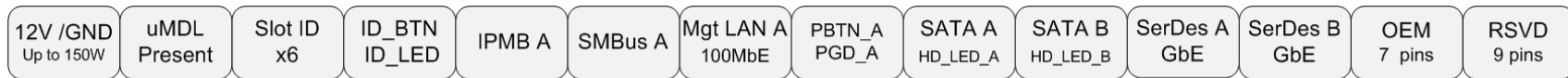
SSI Front Access Micro Module

Rev. 1.0: single node optimized

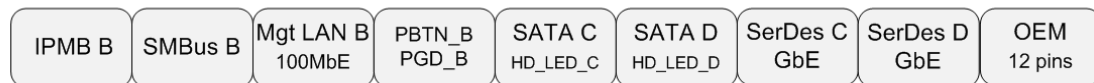


SSI Front Access Micro Module

Rev. 1.1: multi-node optimized

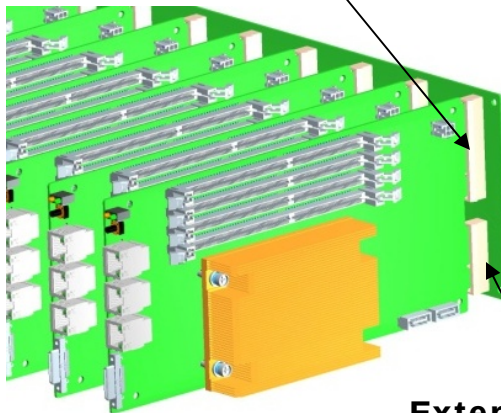


← Base Connector – x8 PCIe →

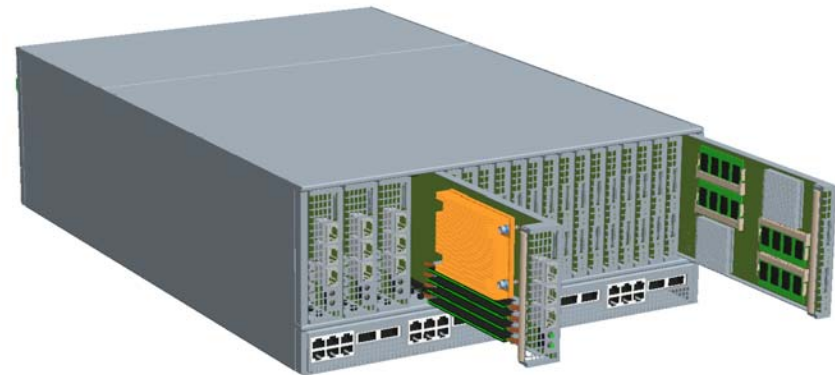


← Extended Connector - x4 PCIe →

**Base x8 PCIe – Signals
stay compatible with
Rev 1.0**



**Extended x4 PCIe –
More I/O for
additional node(s).**



**Single-node SSI 1.0 and multi-node SSI 1.1
co-exist in the same chassis.**

**Module pitch flexible to accommodate
different processor/memory packaging and
thermal solutions (full-width, half-width).**

SSI Top Access Micro Module Connector Definition

