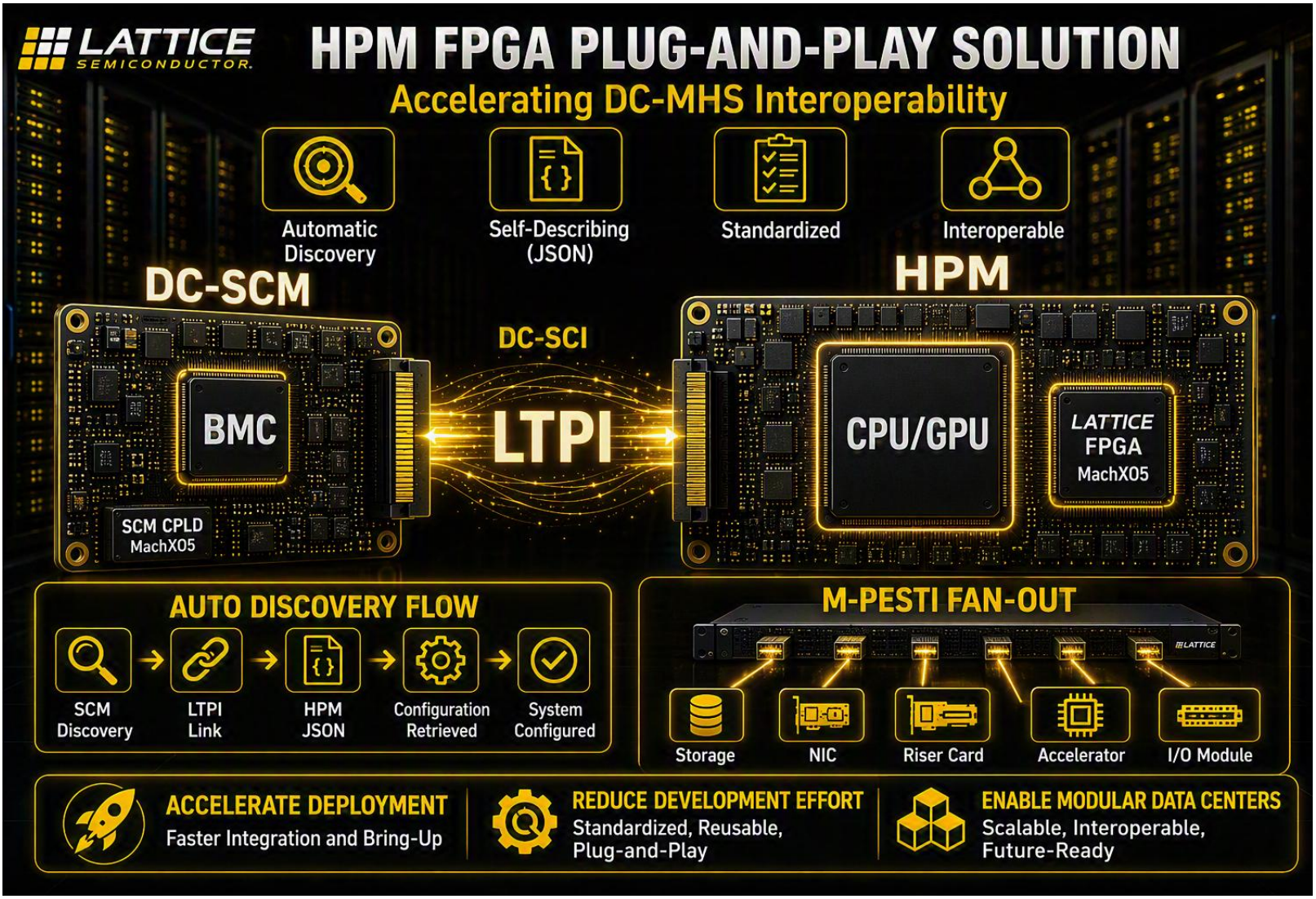


Problem:

As data center and edge systems become more complex, interconnect bottlenecks from non-unified interfaces, latency, and inefficient link management drive the need for an open framework using LTPI and MPESTI to enable scalable, efficient connectivity.

Solution:

This demo showcases a DC-MHS total M-PNP solution that standardizes BMC PnP firmware and FPGA-based capabilities to automatically discover and integrate HPM platforms via HPM FPGA-JSON. By leveraging LTPI, it enables seamless connectivity to MPESTI, I2C, and I3C target devices—streamlining integration and reducing configuration complexity. Dual-node LTPI support provides independent connectivity to two HPM platforms or CPUs, enabling greater system flexibility. Furthermore, an FPGA-based MPESTI fan-out controller enhances scalability by allowing multiple endpoints to be supported over a single MPESTI interface.