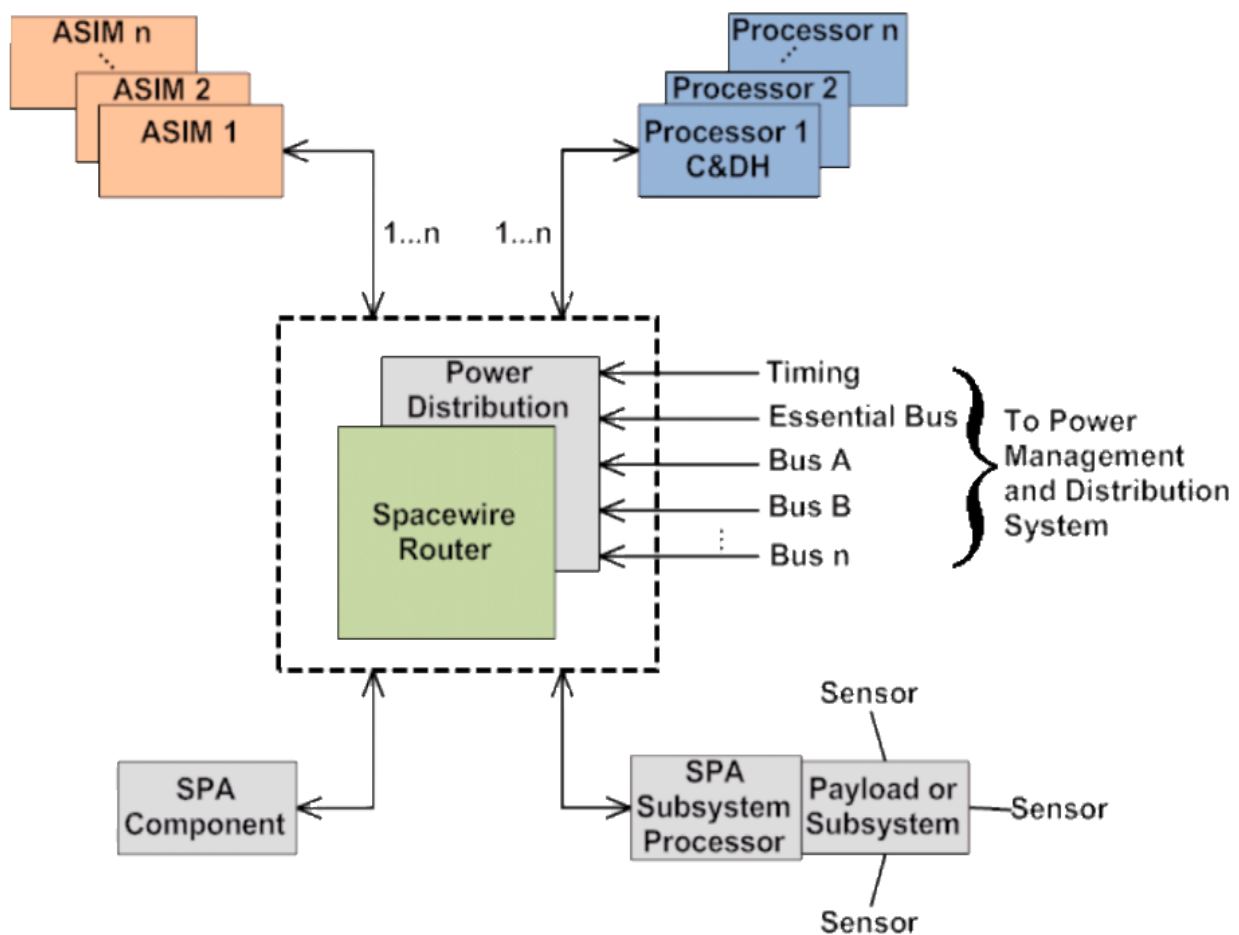# Command & Data Handling System

## Space Plug-and-Play Architecture (SPA) Backbone for Small Satellites



### Data Sheet

Design Net Engineering is providing a complete SPA compliant Spacecraft backbone for the Multi-mission Space Vehicle for ORS. This includes subsystem and or system processors, SPA and SpaceWire compliant routers, adapters for heritage hardware (ASIMs) as well as a SPA compliant power management and distribution system.

Whether in need of a specific SPA network component (either hardware or software) or a complete turn-key system for small satellite operations, Design Net can tailor a solution to the mission needs. SPA enables rapid configuration for lower cost without sacrificing reliability.

Design Net has worked closely with SPA from its inception, helping prove concepts, develop and refine the standards and is now building SPA into a working mission. Our SPA software network services provide all the standard services needed by traditional spacecraft on top of the SSM open source software from Space Dynamics Lab. These services have the advantage of being easily tailored to a mission, are highly extensible and can incorporate a high degree of autonomy. Design Net's Backbone provides all the software and device drivers needed for basic satellite functions. This infrastructure provides a basis on which to build mission specific application modules.