

Diehl Aerospace focus its effort towards all aspects regarding dedicated remote resources (Remote control electronics, intelligent I/O and remote power controller with remote data handling and power switching capabilities) as well as related tool development, development processes and certification aspects for IMA 2nd generation

Remote Control Electronics (RCE)

The RCE is a dual lane IMA component which allows to host high critical (integrity) and high performance (low latency) applications among other aircraft systems applications.

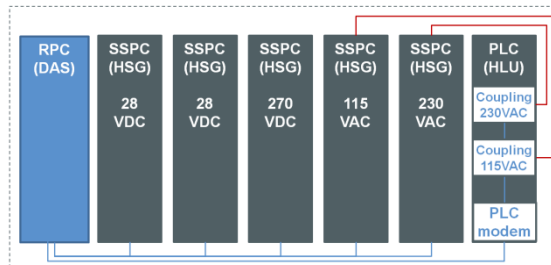
- Dual Lane IMA component (Self-Checking I/O)
- Frame synchronous Duplex Architecture
- Parallel dual lane / single lane mode
- ARINC 653 Operating System (OS) Part 4
- Highly scalable and configurable architecture



Remote Power Controller (RPC)

The RPC is an IMA component which allows to host power management functionalities among other aircraft systems applications

- Remote IMA Power Management component
- Simultaneous hosting of power management functionalities from different applications / functions e.g. ATA24 and other ATA chapters.
- Highly scalable and configurable power distribution architectures
- Power Management of different voltages & current ratings
- Solid State Power Controller (SSPC) are provided by HSG
- Power Line Communication interface in cooperation with HLU



Remote Data Concentrator (RDC)

The RDC is an IMA component which allows to host different aircraft systems configurations and provides logic operators for simple or complex logics.

- Hosting different aircraft systems configurations
- Installed close to actuators/sensors in remote (pressurized) area
- Over 150 I/O interfaces of up to 30 types
- Input/output resources highly configurable



Configuration and Support Tools

The configuration and support tools are part of a fully certifiable seamless tool chain, which allows the configuration and load generation of the different IMA components (i.e. RCE, RPC, RDC).

- Import Tool for data import (*.csv)
- Verification Tool to validate configuration correctness
- Load Generation Tool to generate A615A loads
- Data Loading Tool to load the A615A loads to the component
- Platform Integration Tool for integration support
- RCE Simulator : Early application development

