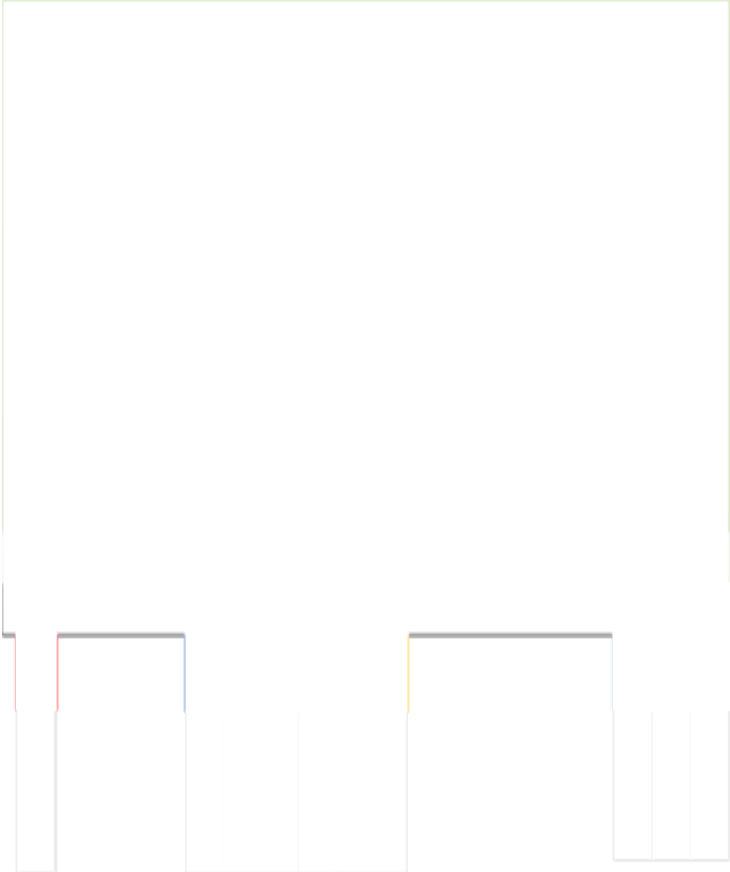


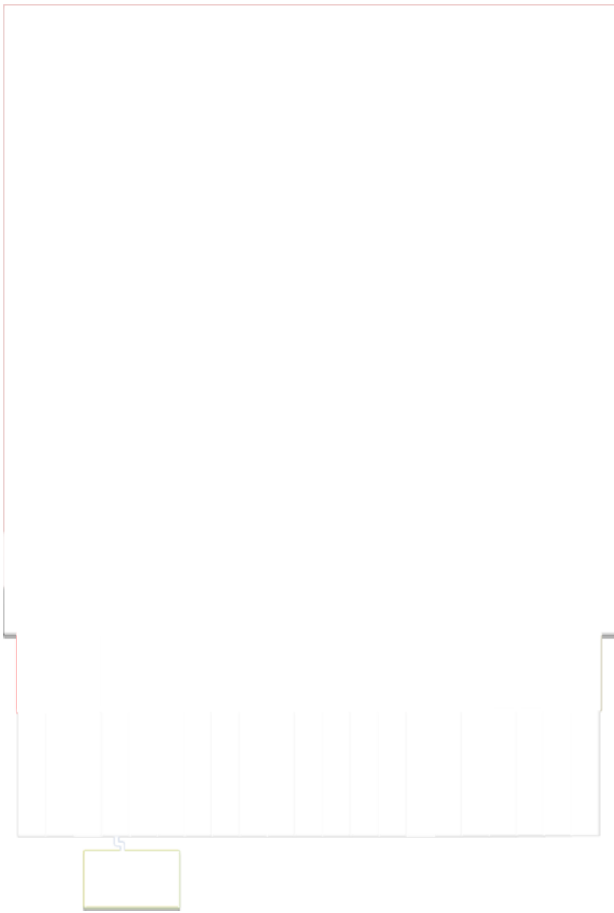
# MCU Board - Architecture

All keywords are as per [rfc2119](#)

Complete system interconnections diagram is as follows:



Application Processor module connector is:



## Scope

### General Architecture

MCU Software SHALL be written in plain "C" and relies on a basic RTK for all multitasking activities.

RTK chosen is Renesas implementation of the uTRON Specification.

All accesses to the RTK SHOULD be through a [RTK Abstraction Layer](#) and use only basic capabilities to ease adaption to different RTK (e.g.: AutoSAR).

All Tasks SHOULD share an identical structure which is detailed in [Task Template](#).

Exception to above rule MAY be [Software Watchdog](#) task.

List of needed tasks include:

1. [Power State Machine](#)
2. [Software Watchdog](#)
3. [Diagnosis Interface](#)
4. [Switch Handling](#)
5. [NAD Handling](#)
6. [RPC Server](#)
7. [Software Update](#)

**Files**

MCU-SW_structure.png	55.5 KB	2017-10-17	Mauro Condarelli
Interconnections.png	55.1 KB	2017-10-19	Mauro Condarelli
MCU-Module.png	44 KB	2017-10-19	Mauro Condarelli
MCU-SW_structure.png	55.5 KB	2017-10-19	Mauro Condarelli