SPiN

Space Products and Innovation

Simplify Space Manufacturing

MA61C hardware version

Modular space systems

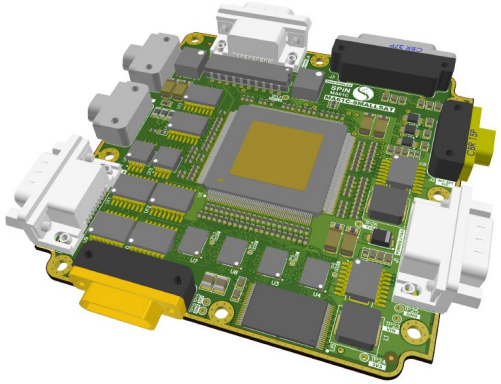
Prototype

- 2 x SpaceWire
- 2 x CAN-bus
- 1 x MIL-STD-1553B
- 1 x RS422 and 1 x RS232
- 1 x I2C Master,
- 20 x GPIO
- 1 x power and USB

Cubesat

- 2 x SpaceWire
- 1x ,RS422 and 2 x RS485
- 1 x I2C Master
- 1 x SPI master
- 6 x PWM
- 9 x GPIO
- 1 x power

SmallSat



- 2 x SpaceWire
- 2 x CAN-bus
- 1 x MIL-STD-1553B (RT/BC/MT)
- 5 x RS422 and 1 x RS485
- 1 x I2C Master, 1 x SPI master
- 9 x GPIO, 16 Analogues
- 1 x power

cPCI serial space

- 6 x SpaceWire
- 2 x CAN-bus
- 1 x RS422
- 1 x I2C Master,
- 20 x GPIO
- 1 x power

MA61C software version

Modular space systems

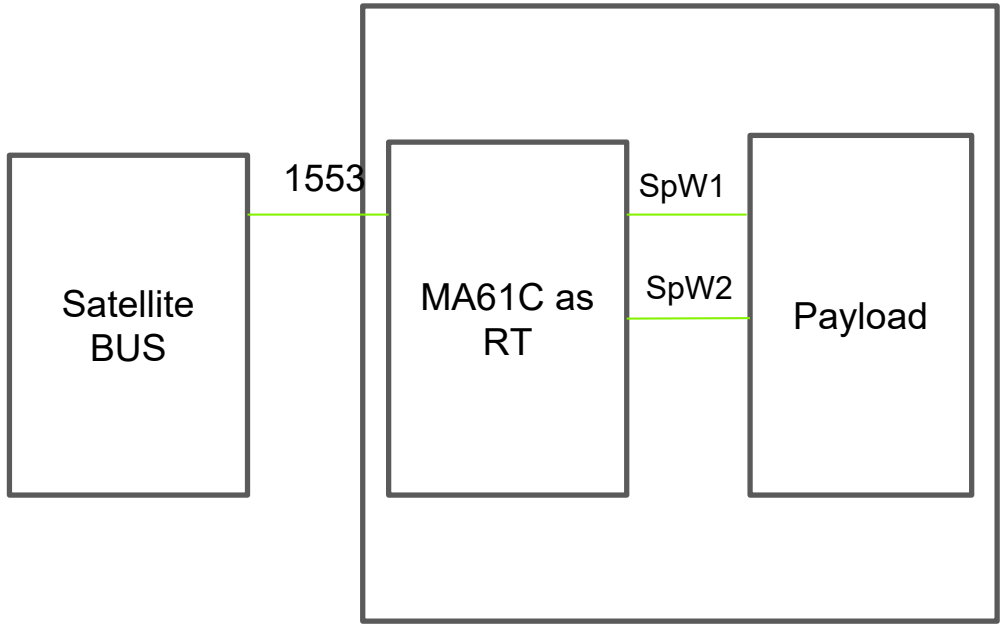
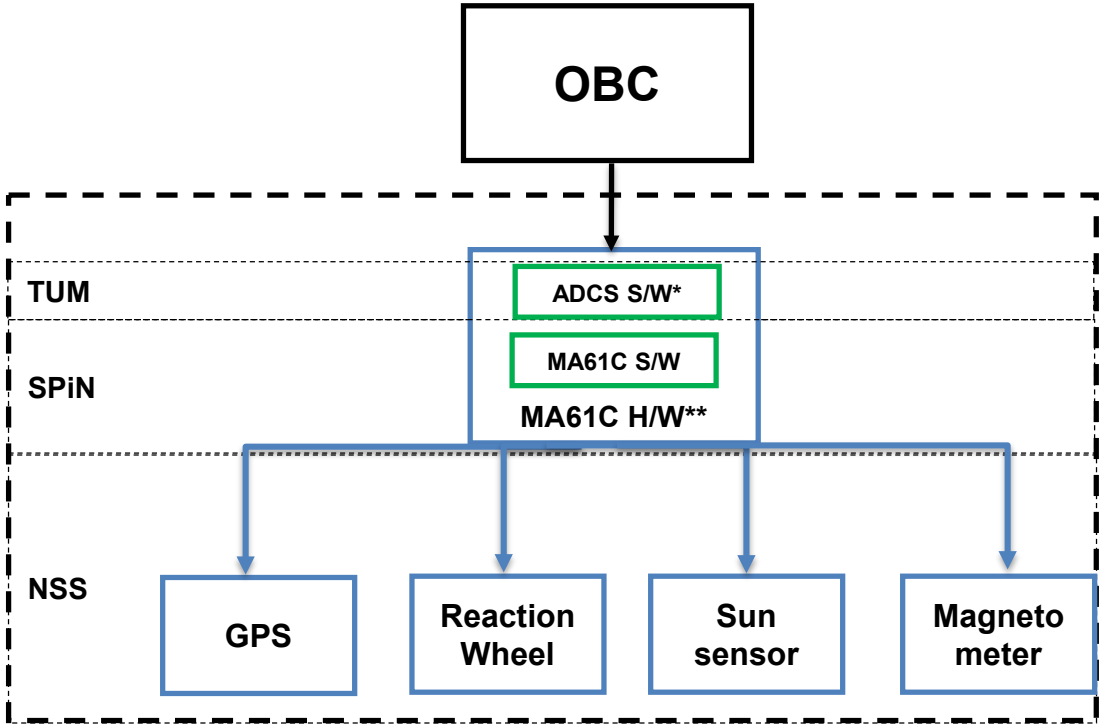
- 3 abstraction layers based on ISO standards for communication
- Fully configurable system
- Databases built on electronic data sheets that can be updated at any time
- Very fast response time < less then 1 millisecond
- Up to 1000 subsystems definitions

Transport layer	Route encoded data
Network layer	Encode and decode data
Data link layer	Manage interface configuration

MA61C Use cases

Modular space systems

Connecting to heritage systems



Modular ADCS