

## DUAL SATA HDD/SSD SHUTTLE AND RAID CONTROLLER

- Mass storage drive shuttle
- Two 2.5" SATA drive slots
- RAID 0, 1 and JBOD in hardware
- 2 ms HDD power hold-up time
- -40 °C to +85 °C
- Compliant with EN 50155 (railways)
- PICMG CPCI-S.0 CompactPCI Serial peripheral card (limited mechanical compliance)



### 2.5" HDD OR SSD

The G503 is a CompactPCI Serial drive carrier board for use in a system environment with an x86 processor. It is designed to carry two 2.5" SATA mass storage drives.

### SATA RAID CONTROLLER

The HDD or SSD are controlled by an on-board SATA RAID Controller supporting RAID modes 0, 1 and JBOD as well as hot plug capability. The RAID level can be set using a hex switch on the board.

The G503 can be used to supplement the RAID functionality provided by the CPU board in order to implement data storage systems with high reliability and capacity.

### FRONT PANEL STATUS LEDS

The unit's front panel features six LEDs signaling board status (Power, Locate, Activity, Hot-Plug/Error and Eject).

### FOR MISSION CRITICAL TASKS AND HARSH ENVIRONMENTS

The board supports a 2 ms HDD power hold-up time for protecting the stored data in case of a power failure, which makes it applicable also for mission-critical tasks.

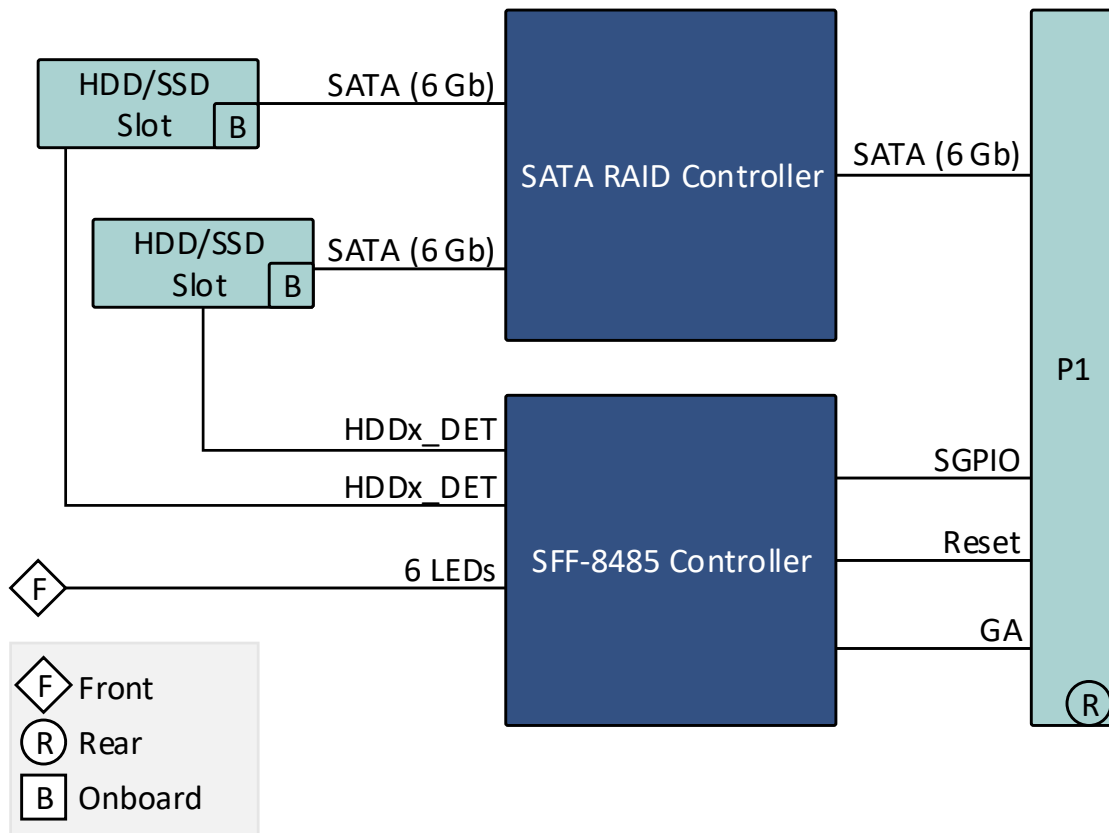
In addition to industrial applications, its compliance with the EN 50155 standard makes the board also suitable for railways applications.



[www.duagon.com/products/g503/](http://www.duagon.com/products/g503/)

## DATA SHEET

## G503 | DIAGRAM



## G503 | TECHNICAL DATA

## MASS STORAGE

- Serial ATA (SATA)
  - Two ports for two onboard 2.5" hard disk drives or solid state drives
  - SATA revision 3.x
  - Onboard SATA RAID controller supporting RAID 0, 1 and JBOD
- Hot-swap support (depending on CPU board)

## FRONT INTERFACES

- Power LED
- Locate LED
- Two activity LEDs
- Hot-plug/Error LED

- Eject LED
- Hot-swap switch (eject button)

## ONBOARD INTERFACES

- Hex switch for selection of the RAID level

## BACKPLANE STANDARD

- Compliance with CompactPCI Serial PICMG CPCI-S.0 Specification
- Peripheral slot
- Host connection:
  - One SATA revision 3.x uplink
  - One SGPIO

## ELECTRICAL SPECIFICATIONS

- Supply voltage
  - +12 V (9 to 16 V), or
  - +12 V (5 to 16 V) (on request)
- Power consumption
  - Depending on HDD/SSD

## MECHANICAL SPECIFICATIONS

- Dimensions:
  - Wide single Eurocard, 111.7 mm x 160 mm
- HDD/SSD height: 9 mm max.
- Weight:
  - 125 g (without HDD/SSD)

## ENVIRONMENTAL SPECIFICATIONS

- Temperature range (operation):
  - -40 °C to +85 °C (depending on HDD or SSD; please refer to the HDD/SSD specifications for possible limits)
  - Airflow: min. 1.5 m/s
- Temperature range (storage): -40 °C to +85 °C
- Cooling concept
  - Air-cooled, or
  - Conduction-cooled in duagon CCA frame
- Relative humidity (operation): max. 95% non-condensing
- Relative humidity (storage): max. 95% non-condensing
- Altitude: -300 m to + 3000 m
- Shock: 15 g/11 ms
- Bump: 10 g/16 ms
- Vibration (sinusoidal): 2 g/10 Hz to 150 Hz

## RELIABILITY

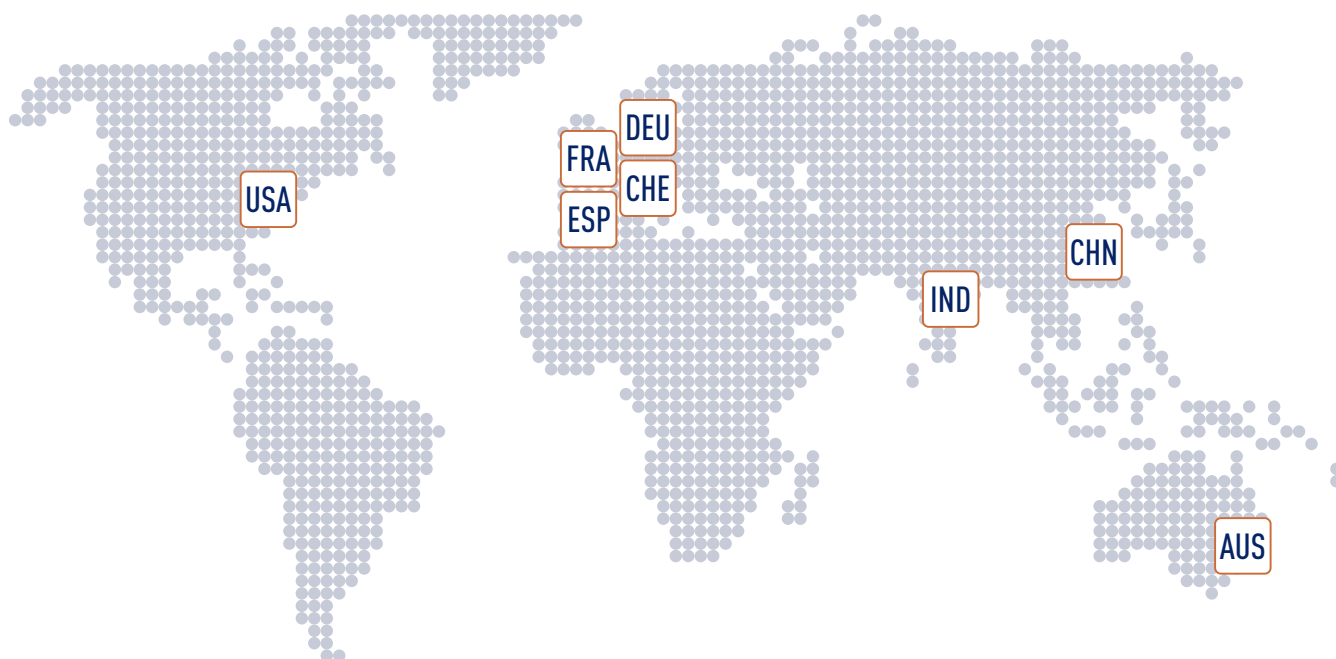
- MTBF: 2 353 984 h @ 40 °C according to IEC/TR 62380 (RDF 2000)

## SAFETY

- Flammability (PCBs)
  - UL 94 V-0



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