

G503

Dual SATA HDD/SSD Shuttle & RAID Controller 3U CompactPCI Serial

- » *Hard disk drive or solid state drive shuttle*
- » *Two 2.5" SATA HDD/SSD slots*
- » *SATA revision 3.x support*
- » *RAID 0, 1 and JBOD in hardware*
- » *2 ms HDD power hold-up time*
- » *-40°C to +85°C with qualified components*
- » *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 hard disk drive carrier board for use in a system environment with an x86 processor. It is designed to carry two 2.5" SATA hard disk or solid state drives.

SATA RAID Controller

The HDD or SSD are controlled by an on-board SATA RAID Controller supporting RAID 0, 1 and JBOD and hot plug. 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.

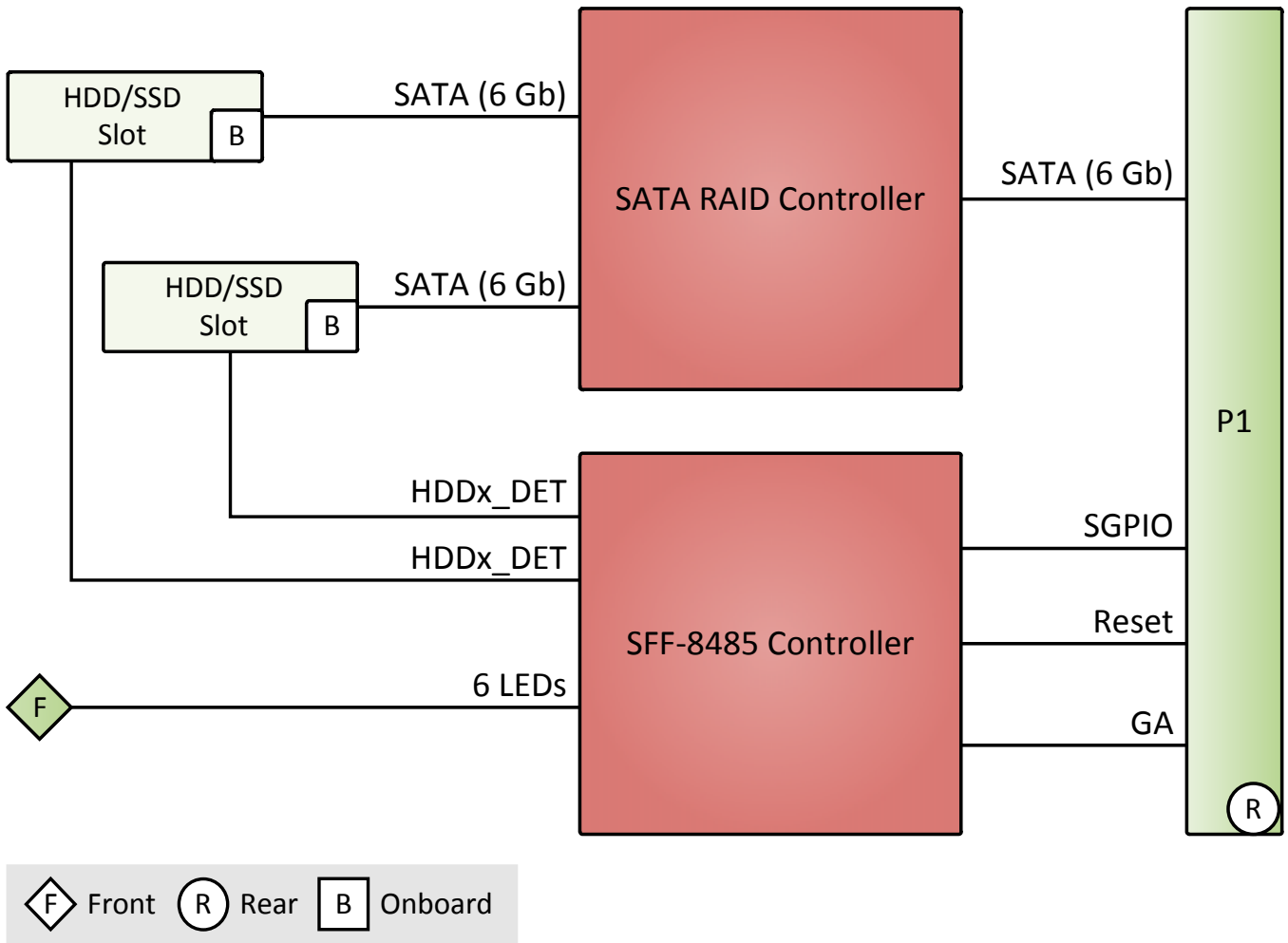


Front Panel Status LEDs

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.



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
 - +12V (9 to 16 V), or
 - +12V (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 MEN 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..150 Hz
- Conformal coating

Reliability

- MTBF: 2.353.984 h @ 40°C according to IEC/TR 62380 (RDF 2000)

Safety

- Flammability (PCBs)
 - UL 94 V-0

Germany

MEN Mikro Elektronik GmbH

Neuwieder Straße 3-7
90411 Nuremberg
Phone +49-911-99 33 5-0

sales@men.de
www.men.de

USA

MEN Micro Inc.

860 Penllyn Blue Bell Pike
Blue Bell, PA 19422
Phone 215-542-9575

sales@menmicro.com
www.menmicro.com

France

MEN Mikro Elektronik SAS

18, rue René Cassin
ZA de la Châtelaine
74240 Gaillard
Phone +33-450-955-312

sales@men-france.fr
www.men-france.fr

China

MEN Mikro Elektronik (Shanghai) Co., Ltd.

Room 808-809, Jiaxing Mansion, No. 877 Dongfang Road
200122 Shanghai
Phone +86-21-5058-0961

sales@men-china.cn
www.men-china.cn

Up-to-date information, documentation and ordering information:

www.men.de/products/g503/

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