

HARDWARE

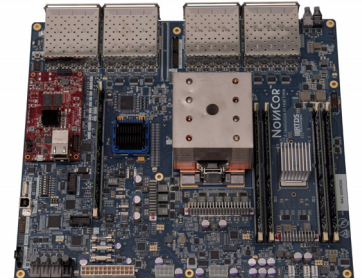
NOVACOR™



CENTRAL PROCESSING HARDWARE FOR THE RTDS® SIMULATOR

NovaCor is the current generation of the RTDS Simulator's main processing hardware. It can be used as a standalone unit (tabletop), placed in an existing rack alongside other hardware, or mounted in a dedicated NovaCor cubicle alongside other chassis and/or RTDS Simulator I/O hardware.

NovaCor features a POWER8® multi-core processor



NOVACOR CHASSIS

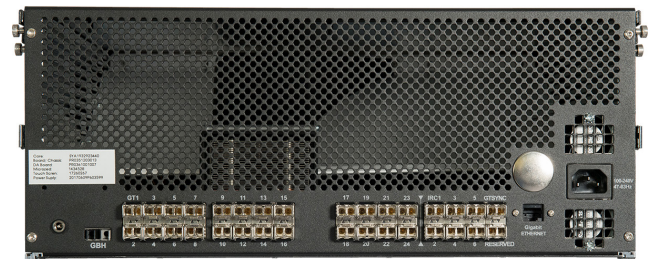
The NovaCor chassis is the base unit of the RTDS Simulator. Each chassis contains a powerful multicore processor that has been custom-integrated for the real-time simulation application in order to operate with unparalleled speed and efficiency.

PROCESSOR	IBM® POWER8® RISC processor 10 cores operating at 3.5 GHz
CONNECTIVITY	20 x fibre ports 6 x IRC ports 1 x GBH port 1 x GTSYNC port 1 x UDP port 4 x Aurora ports (for license) 1 x Ethernet port
SCALABILITY	Up to 10 licensed cores per chassis Up to 144 interconnected chassis
POWER	450 W max., 100-240 V, 50/60 Hz
DIMENSIONS	48.3 x 52.2 x 17.8 cm (W x D x H) ~15 kg (weight)

Front of NovaCor chassis



Rear of NovaCor chassis



SCALABILITY AND COMPATIBILITY

Up to 10 cores can be licensed per NovaCor chassis. A single core system is the smallest possible configuration. Additional licensed cores increase the maximum size and complexity of simulation that can be run on the chassis. Larger networks can be represented by connecting multiple NovaCor chassis via fibre cable, to a maximum of 144 fully interconnected chassis.

NovaCor is compatible with GTWIF-based racks containing PB5 and GPC cards, the GTIO card suite including GTNETx2, RSCAD FX, and RSCAD V5.

NOVACOR CUBICLE

This cubicle, which has a standard rack width of 19", houses NovaCor chassis and GTNETx2 card chassis. It also houses I/O cards on DIN rails in the rear of the cubicle. It can house up to 2 NovaCor chassis and 3 GTNETx2 chassis - or up to 3 NovaCor chassis if no GTNETx2 chassis are installed.

In a standard configuration, this cubicle also houses an Ethernet switch, smoke detector, and front panels for low- and (optional) High-Voltage Digital I/O. It can also house the Global Bus Hub and IRC Switch (optional items which may have their own dedicated cubicle).

