CyberServe Xeon SP2-1029GQ-TRT GPU Server

Ultra High-Density GPU Computing 1U Supercomputer, 4x Tesla or GTX-Titan GPU Cards - 20,000 CUDA Cores

Dear , If you would like any further information on the CyberServe Xeon SP2-1029GQ-TRT GPU Server, or if you would like to discuss your quote, don't hesitate to call your Broadberry account manager on 020 8997 6000 and quote reference "PDBC56741", or simply reply to this email.

What Now?

1. **Call** 020 8997 6000
2. **Ask For** Bill Carless
3. **Quote Reference** PDBC56741

RRP: £13,539.63

Ex. VAT

£10,831.70

Buy Now

BEST PRICE GUARANTEED

We won't be beaten on price! We're so confident in our fantastic value, we guarantee you won't find the same spec at this price elsewhere!

further information

https://www.broadberry.co.uk/xeon-scalable-processors-rackmount-servers/broadberry-1029gq-trt

System Summary

Supermicro SuperServers	Supermicro SuperServer 1029GQ-TRT | SYS-1029GQ-TRT
Processor	2x Intel Xeon Gold 6226R Processor - 16 Cores, 2.90GHz, 22MB Cache (150Watt)
Memory	12x 32GB 2933MHz DDR4 ECC Registered DIMM Module
Hard Drive	2x 1.9TB Intel SSD S4510 DataCentre SERIES 2.5IN SATA3 TLC
Nvidia Tesla and AMD FirePro GPU Compute Cards	2x NVIDIA Quadro RTX A4000 - 6144 Cuda Cores, 16GB ECC GDDR6
Total Price:	£10,831.70
Lease From:	£229.09 per month over 5 years, or £353.98 over 3 years.

Broadberry™

Your Configured System Specifications

Supermicro SuperServer 1029GQ-TRT | SYS-1029GQ-TRT

BIOS	
BIOS memory size	32 Mbit
BIOS type	AMI

Design	
Fan diameter	4 cm
Form factor	1U
LED indicators	HDD,Heating,Network,Power
Number of fans	9 fan(s)
On/off switch	Y
Product colour	Black
RoHS compliance	Y

Expansion slots	
PCI Express slots version	3.0
PCI Express x16 slots	5
PCI Express x8 slots	1

Graphics	
On-board graphics adapter model	Aspeed AST2500

Memory	
ECC	Y
Maximum internal memory	1500 GB
Maximum RDIMM memory	1500 GB
Number of DIMM slots	12
Supported memory types	DDR4-SDRAM

Supported RDIMM clock speeds	2133,2400,2666 MHz

Networking	
Copper ethernet cabling technology	10GBASE-T,100BASE-TX,1000BASE-T
Ethernet LAN	Y
Ethernet LAN data rates	100,1000,10000 Mbit/s
LAN controller	Intel® X550

Operational conditions	
Operating relative humidity (H-H)	8 - 90%
Operating temperature (T-T)	10 - 35 °C
Storage relative humidity (H-H)	5 - 95%
Storage temperature (T-T)	-40 - 60 °C

Performance	
PC health monitoring	CPU,FAN,Temperature

Ports & interfaces	
Ethernet LAN (RJ-45) ports	2
IPMI LAN (RJ-45) port	Y
Number of SATA III connectors	4
USB 3.0 (3.1 Gen 1) Type-A ports quantity	4
VGA (D-Sub) ports quantity	1

Power	
Number of redundant power supplies installed	2
Power supply	2000 W

Redundant power supply (RPS) support	Y

Processor	
Built-in processor	N
Compatible processor series	Intel® Xeon®
Motherboard chipset	Intel® C621
Number of processors supported	2
Processor socket	LGA 3647
System bus rate	10.4 GT/s

Storage	
Hot-swap HDD bays	Y
Number of storage drives supported	4
RAID levels	0, 1, 5, 10
Storage drive sizes supported	2.5"
Supported storage drive interfaces	Serial ATA III

Technical details	
Number of 2.5" bays	4

Weight & dimensions	
Depth	894 mm
Height	43 mm
Package weight	21.8 kg
Weight	15.9 kg
Width	437 mm

2x Intel Xeon Gold 6226R Processor - 16 Cores, 2.90GHz, 22MB Cache (150Watt)

Features	
Embedded options available	Y
Execute Disable Bit	Y
Harmonized System (HS) code	8542310001
Maximum number of PCI Express lanes	48
PCI Express CEM revision	3.0
PCI Express slots version	3.0
Scalability	2S
Supported instruction sets	SSE4.2,AVX,AVX 2.0,AVX-512

Graphics	
Discrete graphics adapter	N
Discrete graphics adapter model	Not available
On-board graphics adapter	N
On-board graphics adapter model	Not available

Memory	
ECC	Y
Maximum internal memory supported by processor	1024 GB
Memory channels	Hexa
Memory clock speeds supported by processor	2933 MHz
Memory types supported by processor	DDR4-SDRAM

Operational conditions	
Tcase	85 °C

Power	
Thermal Design Power (TDP)	150 W

Processor	
Box	Y
Cooler included	N
Intel Volume Management Device (VMD)	Y
Processor boost frequency	3.9 GHz
Processor cache	22 MB
Processor codename	Cascade Lake
Processor cores	16
Processor family	Intel® Xeon® Gold
Processor frequency	2.9 GHz
Processor lithography	14 nm
Processor model	6226R
Processor operating modes	64-bit
Processor socket	LGA 3647
Processor threads	32

Processor special features	
AVX-512 Fused Multiply-Add (FMA) units	2
Enhanced Intel SpeedStep Technology	Y
Intel 64	Y
Intel Speed Select Technology (SST)	N
Intel Trusted Execution Technology	Y
Intel Turbo Boost Max Technology 3.0	N
Intel Virtualization Technology (VT-x)	Y

Intel Virtualization Technology for Directed I/O (VT-d)	Y
Intel VT-x with Extended Page Tables (EPT)	Y
Intel® AES New Instructions (Intel® AES-NI)	Y
Intel® Deep Learning Boost	Y
Intel® Deep Learning Boost (Intel® DL Boost)	Y
Intel® Hyper Threading Technology (Intel® HT Technology)	Y
Intel® Optane? DC Persistent Memory Supported	Y
Intel® Optane? DC Persistent Memory technology	Y
Intel® Resource Director Technology (Intel® RDT)	Y
Intel® Run Sure Technology	Y
Intel® Speed Select technology - Base Frequency	N
Intel® Speed Select Technology - Base Frequency (Intel® SST-BF)	N
Intel® Speed Select technology - Performance Profile	N
Intel® Speed Shift Technology	Y
Intel® Turbo Boost Technology	2.0
Intel® Volume Management Device (VMD)	Y
Intel® vPro? Platform Eligibility	Y
Mode-based Execute Control (MBE)	Y

Technical details	
Memory speed (max)	2933 MHz
Number of UPI links	2

12x 32GB 2933MHz DDR4 ECC Registered DIMM Module

Features

Buffered memory type	Registered (buffered)
CAS latency	21
ECC	Y
Internal memory	32 GB
Internal memory type	DDR4
JEDEC standard	Y
Lead plating	Gold

Memory clock speed	2933 MHz
Memory form factor	288-pin DIMM
Memory voltage	1.2 V
Programming power voltage (VPP)	2.5 V
Refresh row cycle time	350 ns
RoHS compliance	Y
Row active time	32 ns

Row cycle time	45.75 ns

Operational conditions

Operating temperature (T-T)	0 - 85 °C
Storage temperature (T-T)	-55 - 100 °C

Weight & dimensions

Height	31.2 mm
Width	133.3 mm

2x 1.9TB Intel SSD S4510 DataCentre SERIES 2.5IN SATA3 TLC

Brand-specific features

Intel High Endurance Technology (HET)	N

Design

Product codename	Youngsville Refresh
Product family	Data center SSD
Product series	Intel® SSD D3-S4510 Series

Performance

Enhanced Power Loss Data Protection technology	Y
Latency (read)	36 µs
Latency (write)	37 µs
Random read (100% span)	97000 IOPS

Random write (100% span)	35500 IOPS
SSD temperature monitoring	Y
Uncorrectable Bit Error Rate (UBER)	1 sector per 10^17 bits read

2x NVIDIA Quadro RTX A4000 - 6144 Cuda Cores, 16GB ECC GDDR6

Processor

Graphics processor family	NVIDIA
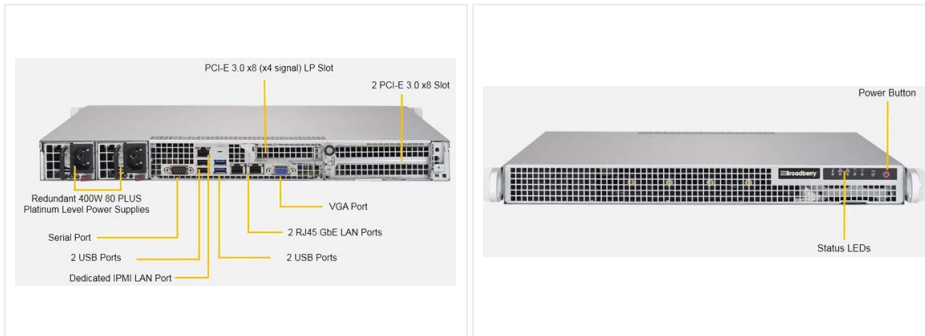
Bank Details:

Broadberry Data Systems Ltd, NATWEST West Ealing, 162 Uxbridge Road, London, W13 8JL
Account No: 40248933, Branch Sort-Code: 60-23-13, IBAN: GB10 NWBK 6023 1340 2489 33

CyberServe Xeon SP2-1029GQ-TRT GPU Server features

3 Years Warranty as Standard

Buy with confidence knowing all Broadberry CyberServe rack servers are backed up by our 3 year warranty, with further warranty upgrade options available.

Trusted CyberServe Server Platform

The Broadberry range of CyberServe® rackmount are trusted as the server of choice for thousands of companies from SMBs to enterprise's across the globe.

Configure with up to 1.5TB RAM

Ready for the most demanding enterprise applications, the Broadberry CyberServe Xeon SP2-1029GQ-TRT GPU Server can be configured with up to 12 DDR4 ECC Registered memory modules.

Extra Expansion Slots

The CyberServe Xeon SP2-1029GQ-TRT GPU Server has 2 PCI-Express expansion slots allowing for plenty of future expandibility

Optional Hot-Swap Power Supply

The CyberServe Xeon SP2-1029GQ-TRT GPU Server is configurable with a hot-swap redundant power supply, meaning minimal down-time for mission critical applications.

Based on Tesla GPU

GPU SuperComputing servers offer massive processing power and HPC performance, considerably accelerating applications.

Supports SATA Drives

This system can be configured with SATA drives for cost-effective 12gb/s storage.

Small Form Factor Storage

The CyberServe Xeon SP2-1029GQ-TRT GPU Server boasts high density storage and ultimate energy efficiency, catering for up to 2x High-Performance 2.5" SSD or Hard Drives

Dual Intel Xeon SP Processors

Designed for the most demanding tasks, the dual socket range of CyberServe Xeon SP® servers support the latest Intel Xeon® processor Scalable series

Performance Breakthroughs

Powered by the revolutionary Intel Xeon SP processor range, CyberServe Xeon SP servers deliver massive improvements in every metric over the previous generation of Xeon E7 and E5 processors.

Designed for Cloud Computing

The Broadberry CyberServe Xeon SP® range has been built from the ground up for private / hybrid cloud environments, clustering, virtualised infrastructure and database management.

Completely Redesigned QPI

The Broadberry CyberServe Xeon SP® range has a completely redesigned QPI system, producing up to 21% improvement in data efficiency as well as a 50% reduction in idle power.

With IPMI Remote Management

All Broadberry CyberServe Xeon SP® rack servers are compatible with iPMI functionality, enabling complete control and management of your server through IP.

Reduce I/0 Network Latency

Boasting Intel Integrated I/0 on the processor, Broadberry CyberServe Xeon SP® servers accelerate data availability to the processing cores, reducing latency by up to 30%.

Intel® AVX-512 Boosts Speed

Intel Advanced Vector Extensions 512, the latest x86 vector instruction set with up to two fused-multiply add units and other optimisations, accelerates performance for the most demanding computational tasks.

Intel® QuickAssist Technology

Improving performance across applications and platforms, Intel QAT enhances security and compression performance in cloud, networking, big data, and storage applications.

More Advanced Omni-Path

The CyberServe Xeon SP® range replaces InfiniBand technology with a newer, more advanced interconnect called Omni-Path, allowing for 100Gbps bandwidth with no loss of PCIe lanes.

Dedicated Account Manager
You'll get your own dedicated account manager who's available to you at all times.
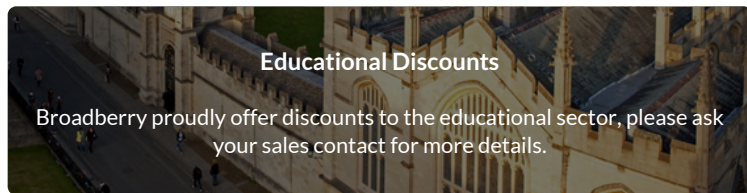
3 Year Warranty
We take customer service very seriously, that's why we offer 3 years warranty as standard.

Industry Leading Support
Should you need any help, our technical support department are always here to help.

Best Price Guarantee
We're so confident in our great value server and storage solutions, we offer a guarantee!

Educational Discounts
Broadberry proudly offer discounts to the educational sector, please ask your sales contact for more details.

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