



CyberServe Atom Servers

Release Date:
Q1 2019

Suitable For:
Storage Appliance, Network Appliance

Tags:
CyberServe, Intel Atom

Introduction:

Perfect appliance servers, the CyberServe range of Intel Atom based rack servers are designed for light processing tasks.

Designed and built for the appliance server market with its low power consumption of less than 10W and its enterprise grade reliability, CyberServe Atom servers are made to thrive in environments where 100% server up-time is of the utmost importance. This range is configurable with up to 64GB DDR4 RAM and 16 processing cores.

Configurable with no moving parts, our Atom range of servers are virtually silent and extremely cool.





Silent Intel Atom® Appliance Servers

The CyberServe Atom® range of appliance servers deliver best-in-class performance and meet the essential computing demands of our customers. These ultra-low powered servers are small in size, virtually silent, and can be configured with no moving parts for the ultimate in server reliability.

Designed for applications that don't require much processing power or the ability to store vast amounts of data, the CyberServe Atom® range excels as a mail server, spam server, network appliance or any other application that benefits from its maintenance free and ultra-low power nature. Our rack servers powered by Atom processor technology draw incredibly low idle power, scaling performance from 1.7GHz to 2.4GHz whilst drawing 6-20W.

Virtually silent and requiring extremely low-power consumption, the Broadberry CyberServe range of Intel Atom® based servers are ideal for these applications.

- Storage Appliance
- Network Appliance
- Print Server
- File Server

Environmentally Friendly

Broadberry is an environmentally friendly company which aims to deliver elite systems which are simultaneously powerful and efficient. Cost-effective and with low power consumption, our range of storage servers are perfect for the environmentally conscious business. Our clients can expect to experience low TCO (total cost of ownership) through our high density, power-efficient designs.





Maximise Efficiency for Lightweight Scale-Out Workloads

As technological advancements continue to progress, new methods are found to optimise infrastructure to deliver not only more services but improved services at a much lower total cost.

The Broadberry CyberServe Atom range is laser focused on delivering platform solutions that can aid you in optimising your infrastructure using a flexible, adaptable, software compatible server platform based on Intel Atom processors.

Processor	Power (TDP)	Frequency (Boost10)	Cores	Memory Channels	Memory Type	Max. Memory Capacity	Max. PCIe Lanes	Ports
Intel Atom [®] C3955	32W	2.1 GHz (2.4 GHz)	16	2	DDR4/2400	256 GB	16	4x10/2.5/1 GbE, 8 x USB, 16 x SATA
Intel Atom [®] C3858	25W	2.0 GHz (2.0 GHz)	12	2	DDR4/2400	256 GB	16	4x10/2.5/1 GbE, 8 x USB, 16 x SATA
Intel Atom [®] C3758	25W	2.2 GHz (2.2 GHz)	8	2	DDR4/2400	256 GB	16	4x10/2.5/1 GbE, 8 x USB, 16 x SATA
Intel Atom [®] C3558	16W	2.2 GHz (2.2 GHz)	4	2	DDR4: 2133	256 GB	12	2x10/2.5/1 GbE + 2x2.5/1GbE, 8 x USB, 12 x SATA
Intel Atom [®] C3338	9W	1.5 GHz (2.2 GHz)	2	1	DDR4: 1866	128 GB	10	4x2.5/1 GbE, 8 x USB, 10 x SATA





Maximise Efficiency for Your Lightweight Scale-Out Workloads

Extreme Density and Energy-Efficiency for Low-End, Scale-Out Workloads

Cloud providers are constantly seeking more efficient methods of dealing with the demands on their infrastructure. Such as having to quickly deliver new services, dealing with huge data growth and maintaining manageable costs.

Broadberry CyberServe servers based on Intel® Atom® processors combine the performance per watt with the flexibility to handle a wide range of workloads and peak demands.

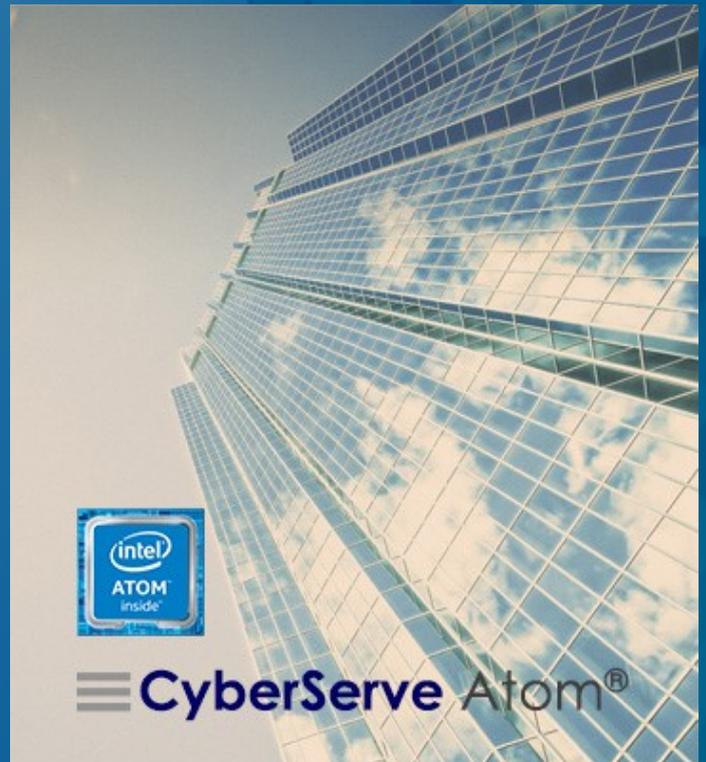
Certain lightweight, scale out workloads can occasionally be better hosted on a larger number of smaller servers that have been designed for maximum power efficiency. Examples of these types of workloads include simple content delivery, basic dedicated hosting and low-end static web serving. To address this need, Broadberry developed a variety of extreme low-power systems to support an emerging server category micro servers. With up to 1,000 nodes 1 per rack and shared power, cooling, and networking resources, micro servers can help you improve data centre efficiency by right-sizing infrastructure for relatively light processing requirements.

The Intel® Atom processor C3000 product family delivers a major leap forward for micro server performance and efficiency. Vastly improving performance and efficiency levels, this second-generation 64-bit SoC provides seven times the performance of previous Intel Atom processor generations while improving performance per watt by up to 4x.

Not only does it offer more cores, more memory capacity and more I/O resources but its power envelope is as low as 5 watts. It also provides an increased platform flexibility as it

features integrated Gigabit Ethernet (GbE), SATA and USB ports.

The Intel Atom processor C3000 product family joins the Intel® Xeon® processor E3 v6 product family to power the next generation of micro- servers across a range of lightweight web-scale workload requirements. Intel Atom processor C3000 series provide datacentre class features including support for 64-bit computing, 4 Intel® Virtualisation Technology, 5 and Error Correcting Code (ECC) memory. They also support the industry-standard x86 instruction set, delivering complete software compatibility with mainstream servers. This gives you the flexibility to right-size your infrastructure without any limiting software mobility as your applications continue to evolve.





Optimised Platform Support

Enjoy complete micro server platform solutions that will greatly simplify implementation, advance the overall efficiency and allow for high node density. Some of these new innovations include:

ONP Optimised SDN Chassis-Level Switch

Enjoy better workload traffic control, bandwidth, Quality of Service, higher node density and low latency necessary for more efficient micro server implementations via Software Defined Networking benefits provided by the Intel® FM5224 Ethernet Switch. You are able to consolidate network links from multiple nodes to this top-of-rack switch in order to reduce power consumption and the overall cost. This switch supports flexible and adaptable bandwidth allocation dense, network-intensive computing environments with 1 GbE, 2.5 GbE, 10 GbE, and 40 GbE interfaces.

Simplified Manageability

Featuring a new Intel enabled companion chip, its now possible to manage four micro server nodes with a solitary Management Module Controller. Reducing chip counts and platform power while boosting density. The power can be monitored and controlled at various levels (node, platform rack and data centre) via the Core Running Power Limiting (RAPL) capability.

Improved Memory Density

A new compact connector allows for memory DIMMs to be stacked on top of each other. This is to save space on the board and deliver even higher density.

Compatible With All Leading Operating Systems



And More...



Performance Improvements

Broadberry CyberServe Atom servers, powered by the Intel's latest generation of x7 Atom processors deliver a number of improvements over the previous generation.

These improvements include jumps in burst frequency, clock speed, turbo clock speed and processor base frequency. The Atom x7 range of processors deliver blazing fast performance, allowing us to bring you our most impressive CyberServe Atom range yet.

	Atom x5	Latest Range Atom x7
Cores	4	4
Threads	4	4
Processor Base Frequency	1.44 GHz	1.6 GHz
Clock Speed	1.44 GHz	1.6 GHz
Turbo Clock Speed	2.24 GHz	2.4 GHz
Burst Frequency	1.92 GHz	2.4 GHz

Intel's Industry Leading 22nm Silicon Technology

Delivering tight-knit integration while enhancing energy efficiency by up to 6 times in comparison to Intel Atom processor S1200 product family.

Complete Platform Solutions

Ranging from integrated management functionality to the Intel® FM5224 Microserver Switch, there is a complete support for all platform solutions.

Rigorous Testing

Broadberry CyberServe Atom Servers go through the most intensive testing and burn-in conditions to ensure the highest quality standards that they will thrive in extreme operating conditions as is vital to meet application needs.

All Broadberry systems go through rigorous testing to ensure the utmost quality.

Feature-Rich SoC

The built-in GbE, SATA and USB ports streamline the design of workload-optimised micro servers and aid in improving performance, energy efficiency and density.

NOW FASTER THAN EVER

2x

FASTER
PERFORMANCE

15%

FASTER
CLOCK SPEED

2x

FASTER
MULTI-TASKING

20%

FASTER
BURST FREQUENCY



Atom Servers

Perfect Appliance Servers the CyberServe range of Intel Atom based rack servers are designed for light processing tasks.



Xeon E Servers

Superb Business Class Servers, an ideal fit for companies looking for an affordable and efficient system.



AMD EPYC Servers

Perfect for data centre servers the revolutionary CyberServe EPYC range of high-performance servers are built for flexibility, performance and security.



Xeon SP Servers

Perfect Enterprise-Class Servers delivering significant benefits in performance, power efficiency, virtualisation, and security. Servers are configurable with up to 3TB DDR4 RAM and 56 processing cores.



Storage Servers

Configure From £1,078

Multi award-winning, enterprise-grade storage solutions used by the world's top organisations.

As-well as thousands of SMBs for everything from backup and replication to high-availability storage.



Rackmount Servers

Configure From £434

Year-after-year voted the best servers available by the most influential IT brand in the UK.

Our CyberServe range of servers are used by all of the UK's top universities and thousands of SMBs.



Workstations

Configure From £234

Ultra high performance workstations built for the most demanding applications.

Our CyberStation range boasts everything from silent workstations to GPU supercomputers.

Trusted by the Worlds Biggest Brands

We have established ourselves as one of the biggest storage providers in the UK, and since 1989 supplied our server and storage solutions to the world's biggest brands. Our customers include:

