



# CHARON™ - AXP/3000 for Windows

## SALEM AUTOMATION INCORPORATED

4500 Indiana Ave Suite 40  
Winston-Salem, NC 27106

Phone: 336-661-0890

Fax: 336-661-9575

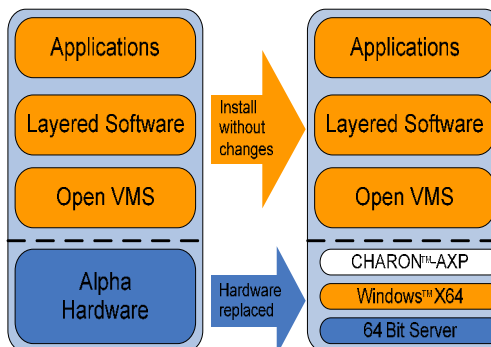
charon\_sales@salemautomation.com

### Functionality

CHARON-AXP/3000 for Windows can be used to replace aging Alpha hardware. Your unmodified application code and the Alpha operating system still 'sees' the Alpha CPU, memory and peripherals recreated in real-time by the HAL software layer.

CHARON-AXP/3000 for Windows can in principle execute any Alpha operating system or binary application that runs on the equivalent hardware Alpha configuration. The version 1.0 is tested with OpenVMS, only. For efficiency reasons, the HAL software functionality does not include diagnostic or maintenance modes or delays to simulate mechanical device behavior.

For a list of emulated components please see the Features Matrix.



**CHARON-AXP/3000 for Windows** is an Alpha hardware abstraction layer (HAL) designed for the complete replacement of Alpha system hardware. When executed on a fast dual CPU Windows XP or 2003 X64 server, CHARON-AXP/3000 for Windows provides the functional equivalent of an DEC3000 model 600 computer system hardware. CHARON-AXP/3000 for Windows is designed to allow the substitution of

the DEC3000/300, DEC3000/400, DEC3000/500, DEC3000/600, DEC3000/700 or DEC3000/800 systems with industry-standard Windows servers. This substitution does not require any changes to either the Alpha Operating System nor the layered software utilities or the binary application code.

### Features

- ◆ Provides the performance of an DEC3000/800 system, or of systems of an equivalent performance, when executed on a 2 GHz dual CPU AMD Opteron or equivalent system.
- ◆ Does not require Alpha application code conversion nor application sources.
- ◆ OpenVMS/Alpha, layered software and applications can be directly installed on CHARON-AXP/3000 for Windows and do not require any modifications. The application binaries, user interface and functionality remain unchanged.
- ◆ OpenVMS/Alpha, layered products and licensed applications running on CHARON-AXP/3000 for Windows require the same licensing mechanism and units as the equivalent Alpha hardware requires.
- ◆ The software installation follows the same steps as on Alpha hardware; the host system's CD/DVD drive acting as a direct replacement for the Alpha input device.
- ◆ CHARON-AXP/3000 for Windows operates as a Windows service, using the Windows event log and/or its own detailed logging mechanism.
- ◆ CHARON-AXP/3000 for Windows provides up to 8 GB of Alpha memory and practically unlimited Alpha disks, represented as physical disks or as disk images (i.e. files in the host system) that are easy to backup.
- ◆ CHARON-AXP/3000 for Windows provides two Ethernet adapters for 10 or 100 Mbps network connections to other systems, terminal servers and X-terminal (emulators), providing support for Ethernet and all higher level protocols.
- ◆ Upgrading to a faster host system provides an immediate performance increase of CHARON-AXP/3000 for Windows up to a hardware AlphaServer 2000 4/275 system's performance.
- ◆ OpenVMS/Alpha running on CHARON-AXP/3000 for Windows can be configured as a LAN cluster with other CHARON-AXP products, CHARON-VAX products, and hardware Alpha or VAX systems.
- ◆ Provides a choice between one year (extendable) or perpetual usage licenses.
- ◆ Two levels of optional software support service are available.



### Host system requirements

A dedicated 64-bit Windows 2003 or XP AMD Server system with a dual CPU of at least 2 GHz, 2 GB main memory, a CD-ROM, minimum one (1) dedicated Ethernet adapter, a USB port for the license key and enough storage space for the Alpha disks.

### Recommended tools

A commercially available X-terminal emulator, in case graphical feature is needed.

### Product contents

- ◆ Distribution CD, containing the product executables and the documentation.
- ◆ License key.

### License key

The CHARON hardware license key is permanently connected to the host system running the emulator. It preserves the customer specific license parameters, allows remote electronic updates and enables rapid change of host systems as the CHARON executable itself can be installed on multiple systems.

The MTBF of the key is more than 100 years. For mission critical applications a backup key containing 720 hours execution time can be ordered to meet any disaster recovery plan that requires replacement hardware.

### Warranty

The three months standard warranty for this product is the readability of the distribution media.

## Typical applications

- ◆ Replacing up to 133 MHz Alpha systems running OpenVMS.
- ◆ Replacing aging Alpha systems by industry standard servers to reduce maintenance, space and operating costs.

## Features Matrix

### DEC3000 model 600

**Emulated Alpha CPU:** 21064/133 (EV4)

**Earliest VMS version supported:** 6.2

**Alpha memory emulated:** 512 MB, 1 GB, 2 GB, 4 GB or 8 GB

**SCSI Subsystem:** Yes

**Emulated Alpha disks:** SCSI Alpha disks. Physical disks or disk images.

**Emulated Alpha tapes:** SCSI Alpha tapes. Tapes can only be used for data exchange. Booting from tape is not possible.

**Ethernet:** One (1) LANCE adapter. Nominal connection speed on the emulated Alpha level is 10 or 100 Mbps\*.

**OpenVMS/Alpha clustering:** NI Clusters or Shared Disk Clustering with simulated MSCP disk controllers.

**Asynchronous serial line emulation:** n/a

**Host memory requirement:** 1 GB

*\*The effective aggregate throughput depends on the host system's performance.*

## Ordering information

### CHARON-AXP/3000 for Windows

- ◆ Unlimited run time license
- ◆ Initial (one year) license
- ◆ License extension for one year
- ◆ Back-up key
- ◆ GOLD Support
- ◆ PLATINUM Support

### Contact:

#### Chuck Graham

Southeast-West  
VP-Sales & Marketing  
Salem Automation Inc.  
4500 Indiana Ave. Suite 40  
Winston-Salem, NC 27106  
336-661-0890 x 106

#### Bob Gyles

Northeast Regional  
Sales Manager  
Boston, MA  
978-425-2582

#### John Mercier

Western Regional  
Sales Manager  
Phoenix, AZ  
480-633-5739

**E-mail: [charon\\_sales@salemautomation.com](mailto:charon_sales@salemautomation.com)**



**Salem Automation**  
System Integration