



Channel Training: SAP S/4HANA Solutions

SAP EMEA Team

Abdel Boukachabine

Chi Man Wong

4 November 2021

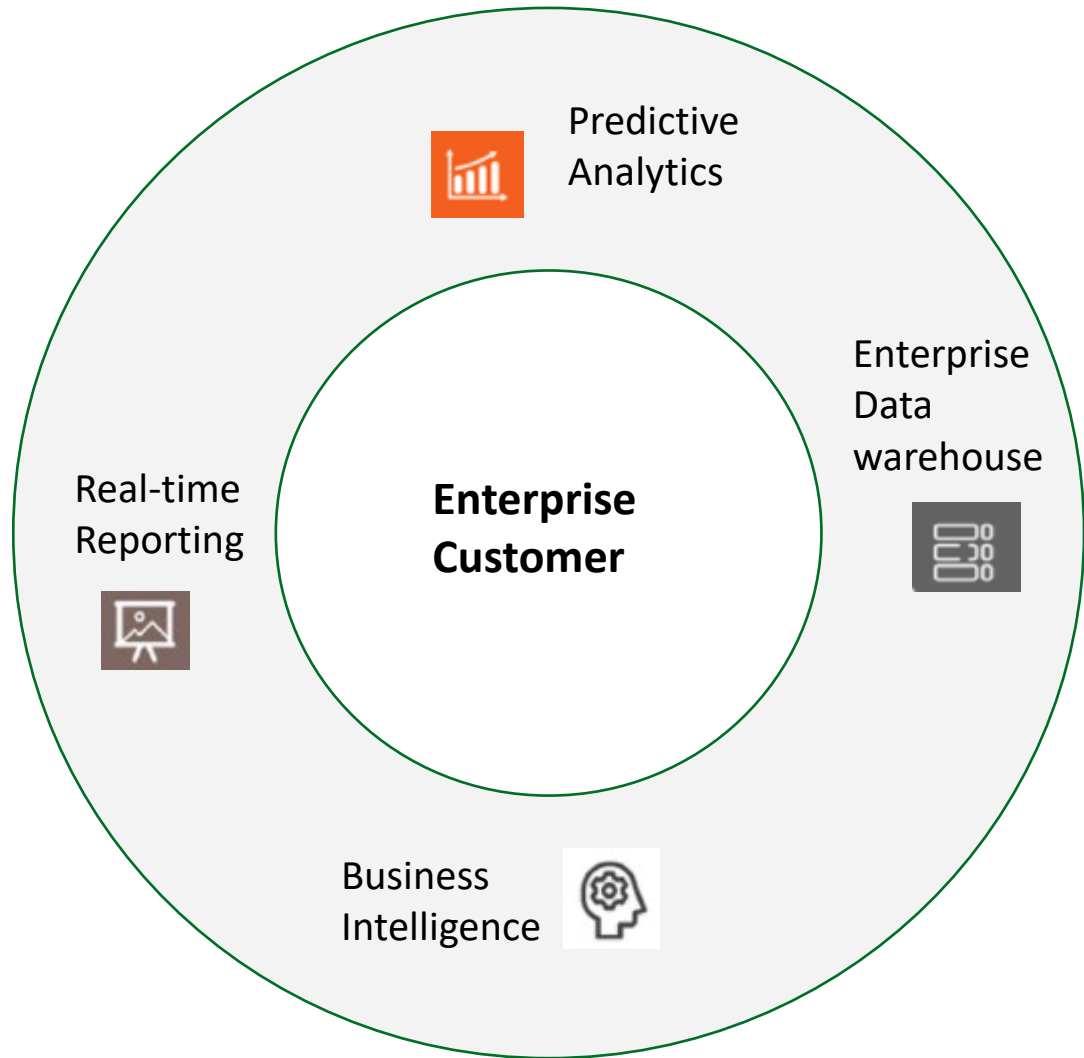


Agenda



- Enterprise Customer Challenges
- Why Focus on SAP HANA Solutions?
- What is SAP HANA?
- Deployment Options
- Why Supermicro?
- Partner Engagement
- Detail of Solution Offering
- Q/A
- Contacts/Resource

Enterprise Customer Challenges



All Enterprises' runs on analytics from data for their business services

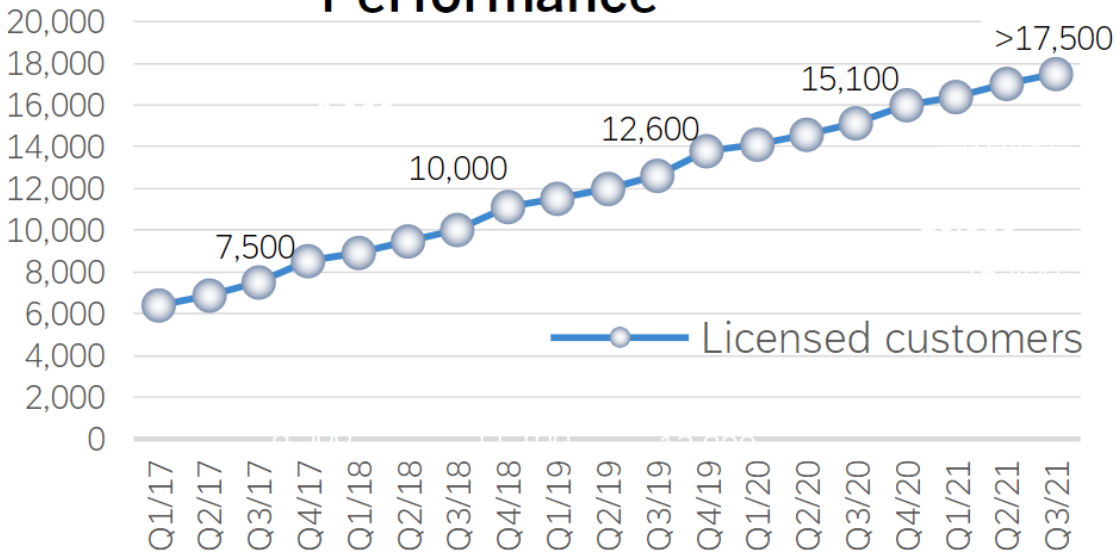
Challenges

- Data analysis for insightful info must be delivered in real time
- Require Database Platform such as SAP HANA to provide real-time business processes integration and performance
- SAP will cease support for legacy SAP platform and 3rd Party databases

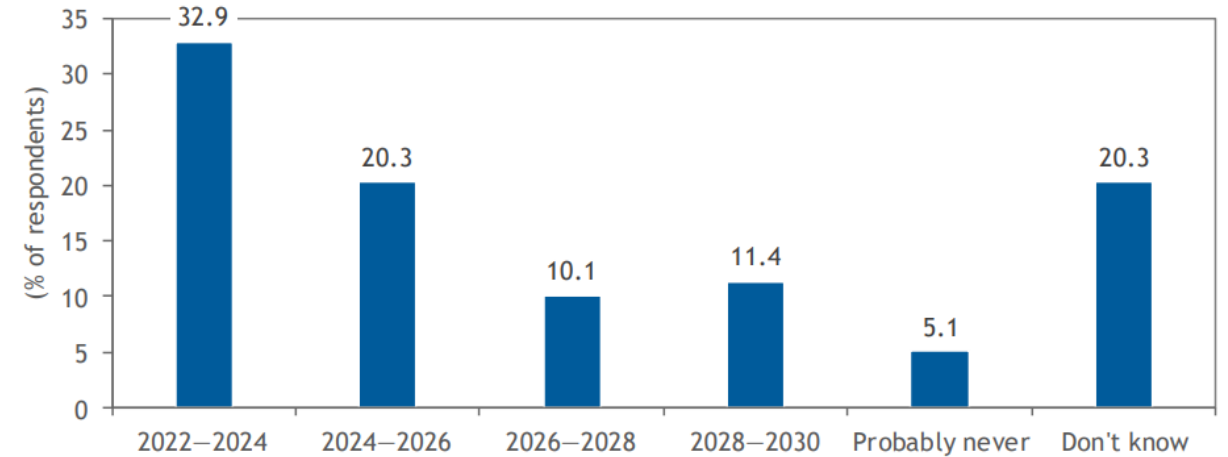
Why Focus on SAP HANA Solutions?



SAP S/4HANA Market Performance¹



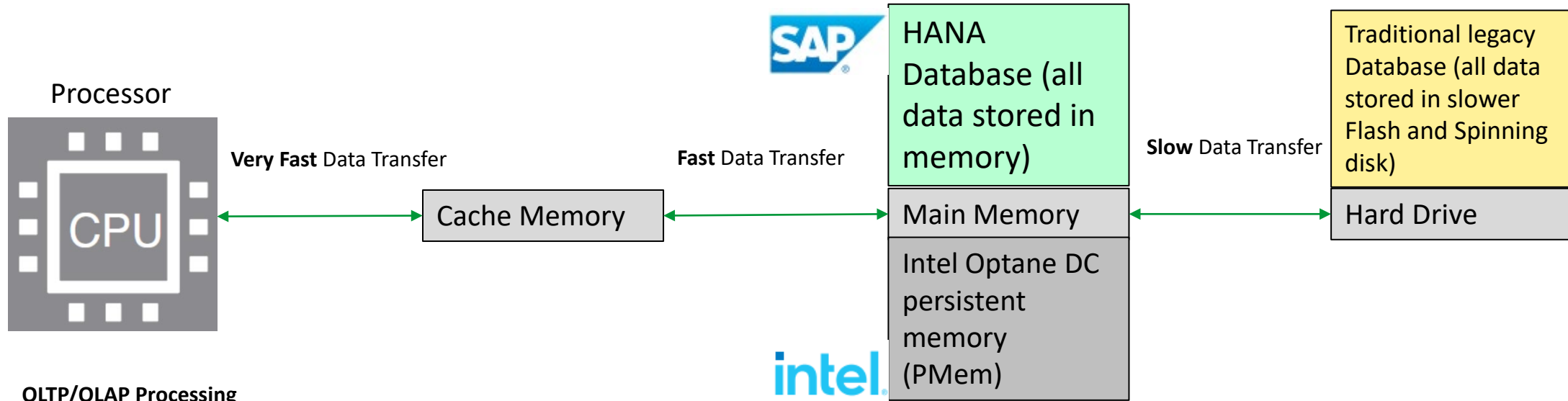
Expected Year When Migrating to SAP HANA or SAP S/4HANA



Source: IDC, 2020

1) Definition of SAP S/4HANA see p. 33 of SAP's Q4/2019 statement

In-memory computing with SAP HANA



OLTP/OLAP Processing

	Actual Latency	Human Scaled Latency	Volatility	Byte vs Block
CPU Cache	0.00001ms	1 second	Volatile	Byte
DRAM	0.0001ms	10 seconds	Volatile	Byte
Persistent Memory	0.0003ms	30 seconds	Non-volatile	Byte
NVMe	0.01ms	17 minutes	Non-volatile	Block
SSD	0.1ms	3 hours	Non-volatile	Block
HDD	10ms	11.5 days	Non-volatile	Block

Just how fast is SAP HANA?

3600x

faster than traditional databases

< 1second

answers queries in less than 1 second

3.5billion

scans per second per core

15million

aggregations per second per core

Deployment Options?



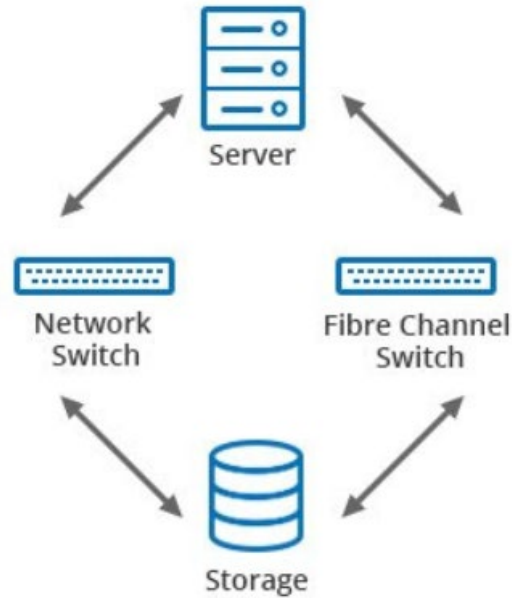
Single Node

On Premises Certified Appliances



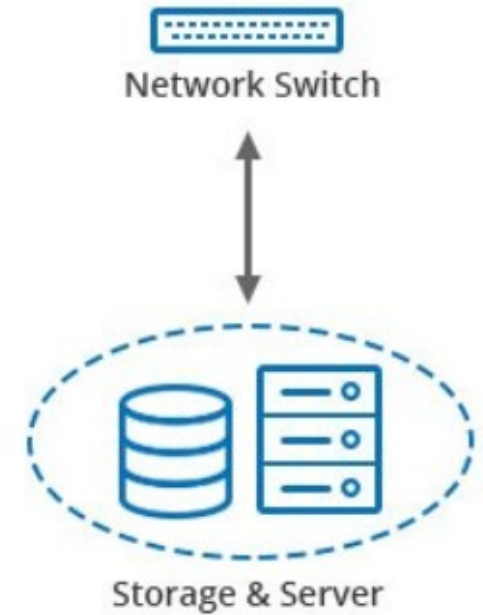
TDI

Tailored Data Integration

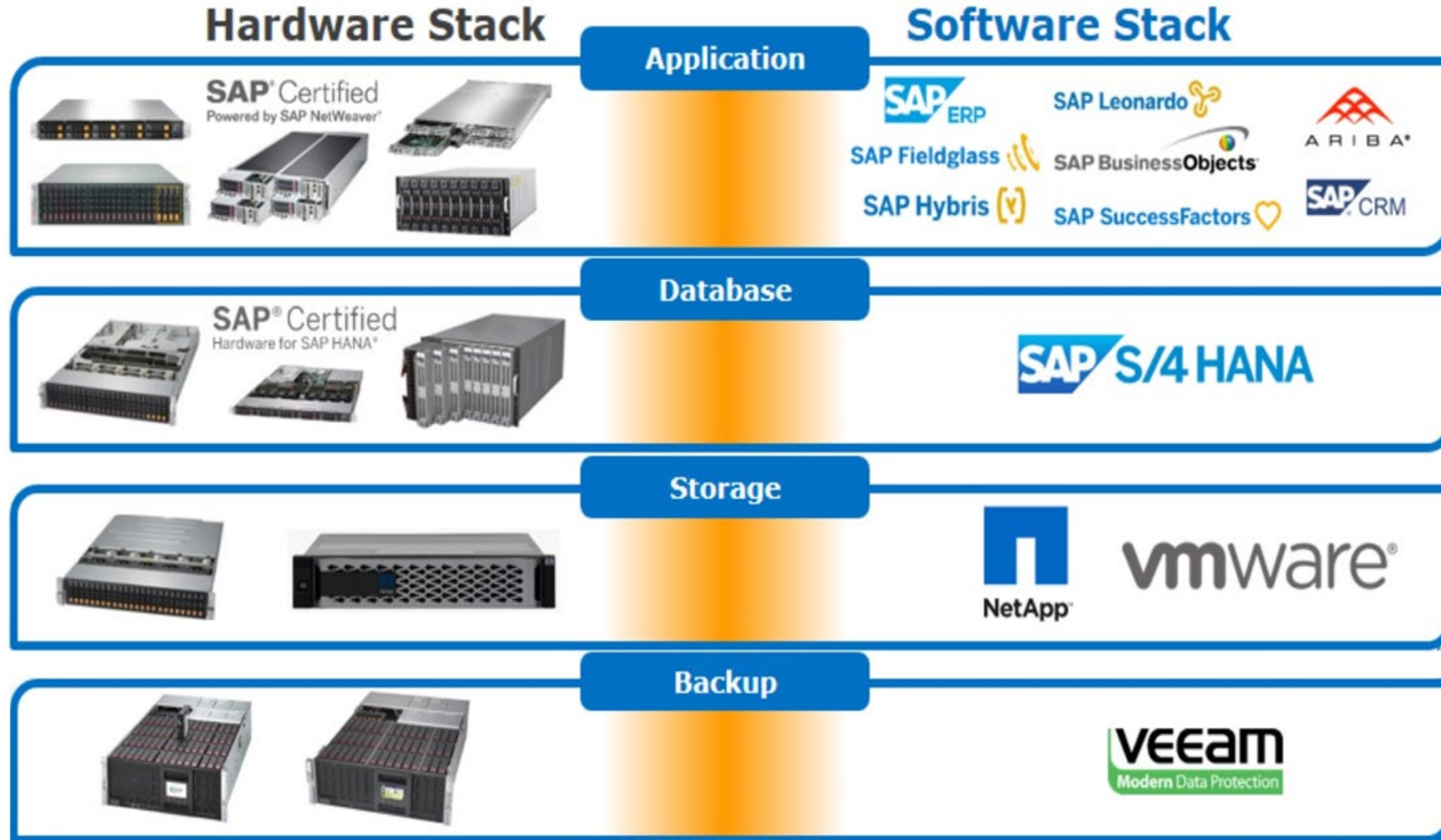


HCI

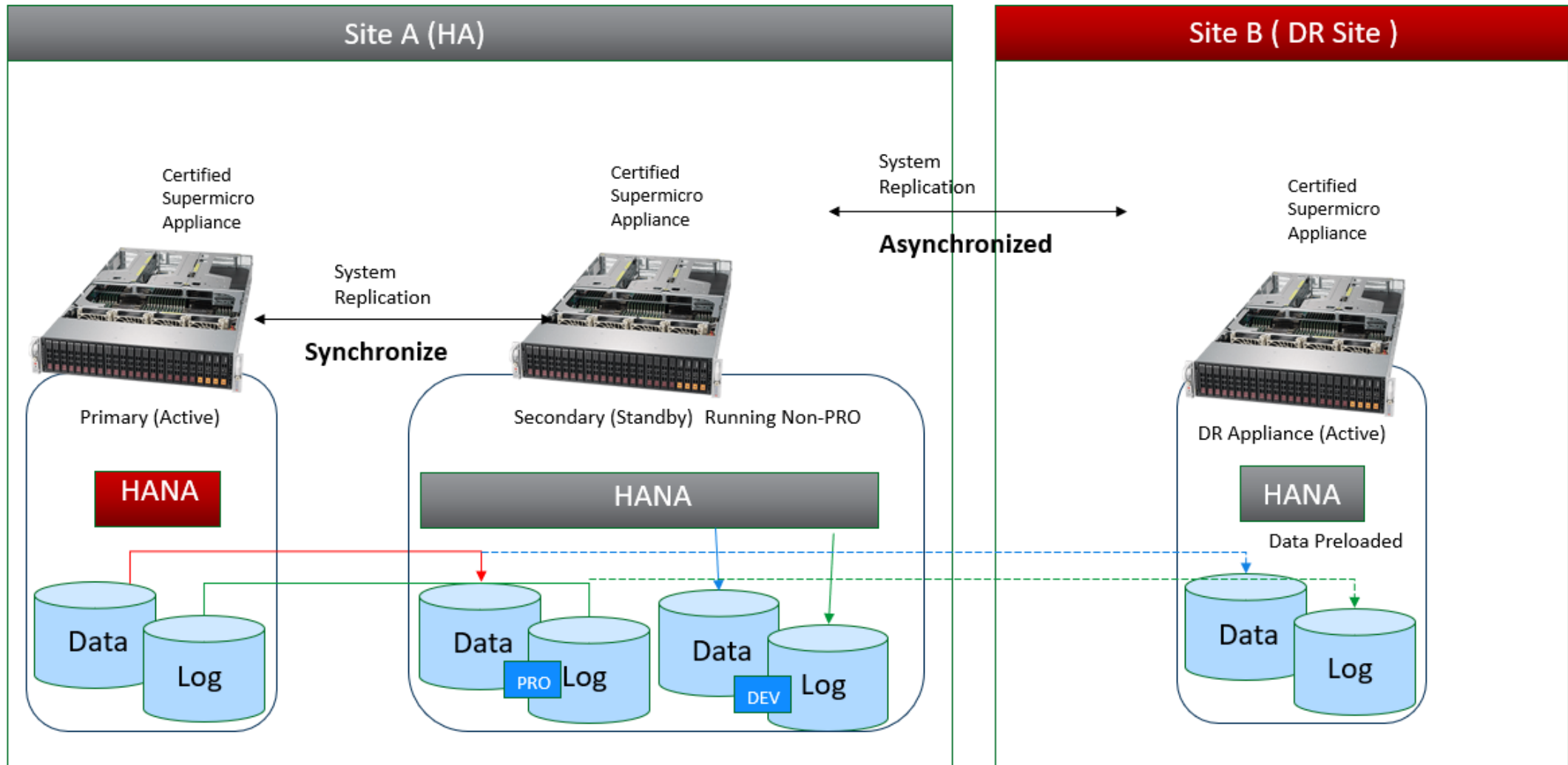
Hyper-Converged



Supermicro SAP HANA ecosystem



Supermicro SAP HANA High Availability



Why Supermicro for SAP HANA Solution?

- Choice Freedom for Appropriate Certified Partners/Integrators/Consultancy
(Trusted Advisor)
- True Leading Edge Hardware Solution Provider: Design, Innovations, Energy Efficient and Flexible Building Blocks
(Balanced Certified System for performance, reliability and efficiency)
- Comprehensive Partner Solution Portfolio
(Complementary Solution)
- Global Manufacturing/Production Line facilities based in North America-Silicon Valley , Europe-Netherlands and Asia-Taiwan
(Quality and Cost Control, Price-competitive)
- Own SAP sizing Lab and PoC facilities
(Engagement Resources)
- System Service Level Support

Certified SAP HANA Consultancy/Integration Partners



Find SAP-Certified Solutions

Selecting a certified partner solution helps ensure that you can cut implementation times, lower integration costs, and be confident of compatibility with your SAP technology infrastructure. Finding the right SAP-certified solution to address your business needs has never been easier.

SAP Store

SAP App Center for partner solutions merged with SAP Store for SAP solutions in February 2021. SAP Store is now the one digital marketplace where customers can discover, try, buy, and renew more than 1,800 solutions from SAP and its trusted partners, built on or that extend SAP solutions. For SAP partners, it's the only place you can market and deliver your applications, add-ins and integration kits to SAP's global customers. There, customers can find the solutions they need to grow their business.

Onboarding your solution to SAP Store is the first step in maximizing your solution exposure and gaining benefits from the marketplace. To learn more, please visit the [Partner With Us](#) page on SAP Store.

Access now

SAP-Certified Solutions Directory

Visit the SAP-Certified Solutions Directory for a complete listing of all SAP-certified solutions. This directory allows you to search for all certified solutions, confirm compatibility with SAP S/4HANA versions, and find out more about the integration that has been implemented.

Access now



<https://www.sap.com/netherlands/partner/certify-my-solution/software.html>

Details of Supermicro Certified Hardware Platforms and Deployment Options:

To my colleague Abdel..



Supermicro Solutions for enterprise applications

Abdel Boukachabine 11/04/2021

SAP Global Alliance Director

abdelb@Supermicro.com



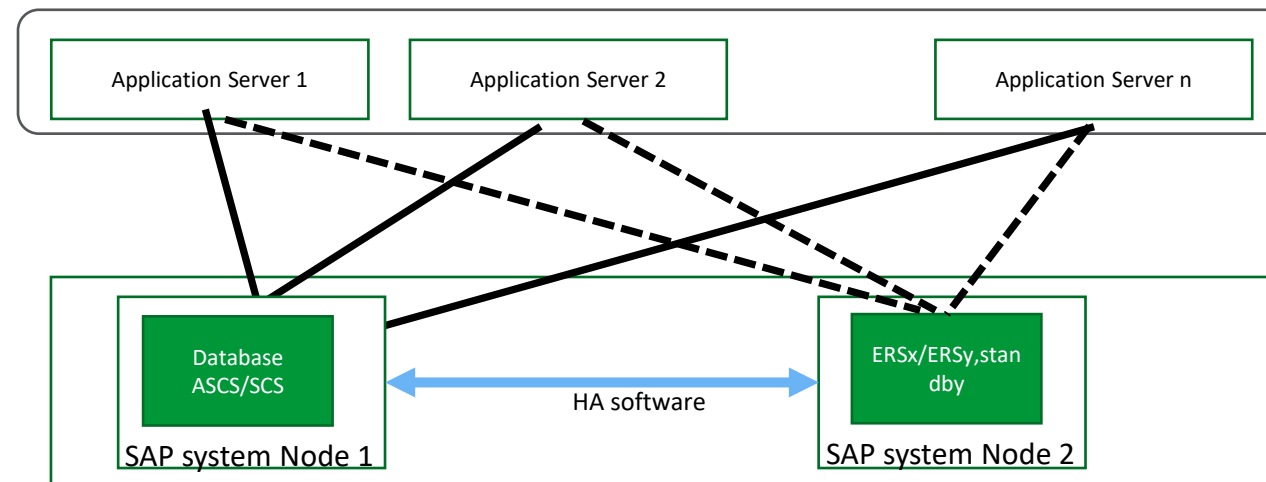
Supermicro Platform for SAP NetWeaver



- SAP customers on anyDB (support ends in 2027)
- UNIX (HP-UX, SPARC, AIX Power) customers are eager after migration from UNIX to Linux (RedHat and Suse) for SAP NetWeaver
 - easy scale out approach with SAP application instances on Supermicro platform
 - replace big iron and distribute workload over many instances
 - move entire architecture from UNIX to Linux on Supermicro platform
 - Virtualize application and database servers
- SMC systems available for application and Database tier, bare-metal or virtualized based
- Systems can be chosen based on SAP sizing and customer requirements

Supermicro for SAP Solutions

- Supermicro delivers its complete portfolio to support the SAP NetWeaver® technology platform e.g.
 - **Non-HANA and/or application server**
 - Rackmount 1U or 2U Ultra SuperServer
 - 2, 4 or 8-socket Multi-Processor Systems
 - Big-Twin, FatTwin, SuperBlade, etc..
 - **Bottom Line: Type of Use depends on required SAPS numbers**



List of SAP HANA certified Supermicro Systems

Appliance and TDI (Tailored Data Center Integration)



4-8 CPU systems

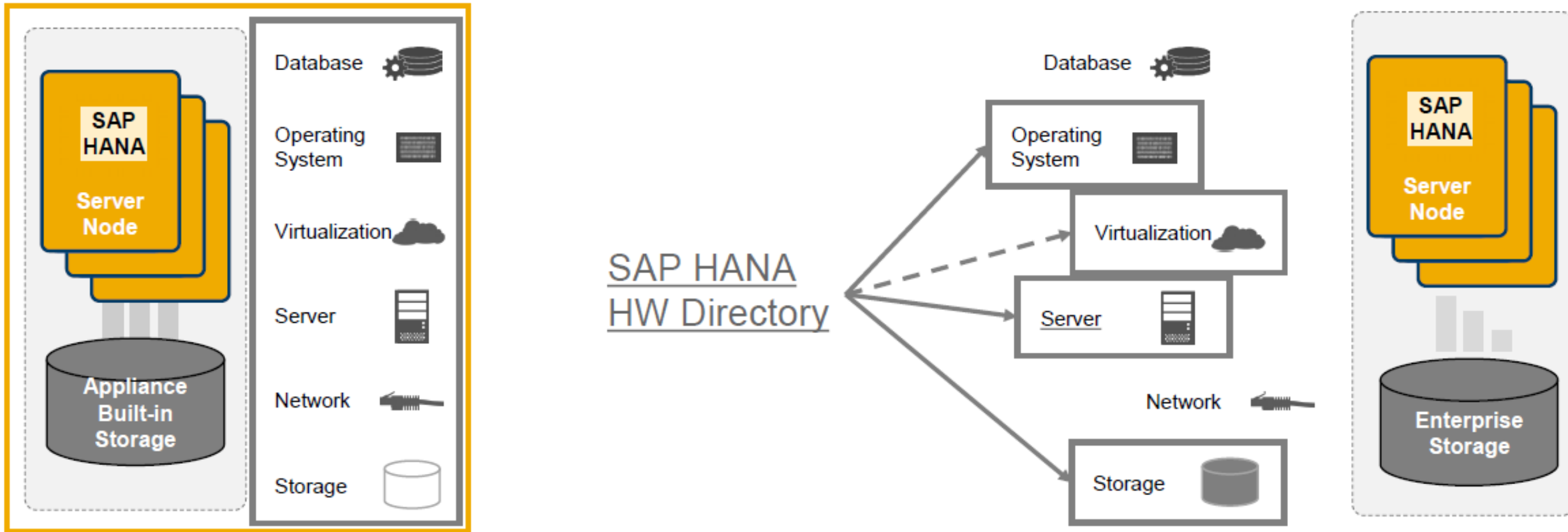
SYS-240P-TNRT
SYS-2049U-TR4
SYS-7089P-TR4T

2 CPU systems

SYS-620U-TNR
SYS-120U-TNR
SYS-2029U-E1CRT (HCI), B1
SYS-6029U-E1CR4T (HCI)
Blade SBI-420P-1C2N

SYS-1029U-TN10RT
SSG-6029P-E1CR12H
SSG-1029P-NES32R

SAP HANA options for certified systems



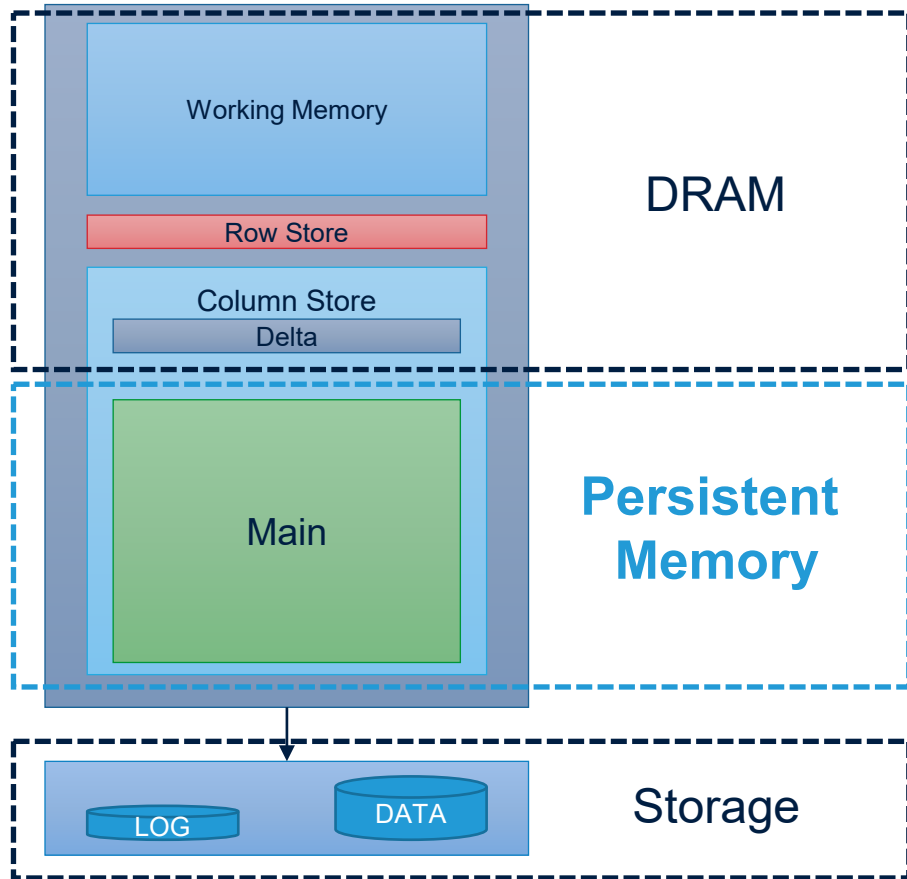
- HANA system: Database & Application instance(s)
 - Database server to be certified
 - Application server: any SMC system (Linux only)

SAP HANA Persistent Memory

HANA 2.0 SPS 03 rev35 and higher



SAP HANA controls what is placed in Persistent Memory and what remains in DRAM



Volatile data structures remain in DRAM.

Column Store Main moves to Persistent Memory

- More than 95% of data in most HANA systems.
- Loading of tables into memory at startup becomes obsolete.
- Lower TCO, larger capacity.
- App Direct mode ONLY
- Memory Mode – not used by HANA!

No changes to the persistence.

Pick and Choose

- Configuration from 128 GB scale up to 192 TB scale-out systems
- Flexible models
 - Bare Metal or virtualized (vSphere and vSAN)
 - Skylake, Cascade Lake, Cooper Lake, **Ice Lake (up to 40 cores)**
 - **Intel Optane Persistent Memory Support**
 - SAP HANA appliance or TDI
 - Scale-up and/or scale-out
 - Both OS supported: RHEL or SUSE



Supermicro Solutions for SAP HANA

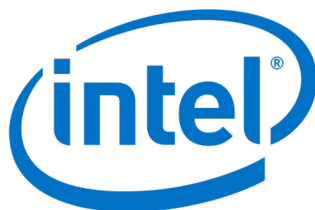


SAP Certified
Hardware for SAP HANA



Supermicro SAP Global Technology Partner

- Offers solutions to enable business- and mission-critical SAP HANA infrastructure: SAP S/4HANA and BW/4HANA
- Single system with up to 24 TB memory to address data growth
- Verified for Intel Select Solutions for SAP HANA using **Intel Optane DC persistent memory**
- Easy deployment to support SAP HANA database HA and DR
- Available as bare-metal or virtualized by VMware vSAN



Approaching SAP prospects

- Who's responsible for SAP infrastructure?
 - SAP Competence Center, SAP Administrator, SAP Basis, SAP infrastructure Administrator
- Any Plan to migrate to or install SAP HANA (S/4HANA)?
- Collect information about current SAP landscape, most likely SAP NetWeaver
- Can you tell us about current SAP environment such as:
 - Platform (OS, hw) for app/DB and Storage vendor, Database vendor
 - SAP NetWeaver version, size of landscape, list of SAP applications
 - database size, HA, DR, etc..

DISCLAIMER

Super Micro Computer, Inc. may make changes to specifications and product descriptions at any time, without notice. The information presented in this document is for informational purposes only and may contain technical inaccuracies, omissions and typographical errors. Any performance tests and ratings are measured using systems that reflect the approximate performance of Super Micro Computer, Inc. products as measured by those tests. Any differences in software or hardware configuration may affect actual performance, and Super Micro Computer, Inc. does not control the design or implementation of third party benchmarks or websites referenced in this document. The information contained herein is subject to change and may be rendered inaccurate for many reasons, including but not limited to any changes in product and/or roadmap, component and hardware revision changes, new model and/or product releases, software changes, firmware changes, or the like. Super Micro Computer, Inc. assumes no obligation to update or otherwise correct or revise this information.

SUPER MICRO COMPUTER, INC. MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE CONTENTS HEREOF AND ASSUMES NO RESPONSIBILITY FOR ANY INACCURACIES, ERRORS OR OMISSIONS THAT MAY APPEAR IN THIS INFORMATION.

SUPER MICRO COMPUTER, INC. SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT WILL SUPER MICRO COMPUTER, INC. BE LIABLE TO ANY PERSON FOR ANY DIRECT, INDIRECT, SPECIAL OR OTHER CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF ANY INFORMATION CONTAINED HEREIN, EVEN IF SUPER MICRO COMPUTER, Inc. IS EXPRESSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

ATTRIBUTION

© 2021 Super Micro Computer, Inc. All rights reserved.

Thank You



www.supermicro.com