Fling on Ampere Altra-based Servers

Info

The Ampere Computing™ Altra provides industry leading power efficiency/core for cloud workloads.

The Altra is based on the Arm Neoverse N1 microarchitecture, supports up to 80 cores/socket, up to 4TB RAM/socket and 128 lanes of PCIe Gen4/socket. See the official Altra info at https://amperecomputing.com/altra/, including purchasing options.

Note: At this time, the support for dual-socket Altra systems is experimental.

Here are some Altra-based choices:

- Systems available from multiple retailers (official Ampere link to distributors)
- Avantek Ampere Altra Mt. Snow 2U Server (online store link)
- Avantek Ampere Altra Workstation (online store link)

All of these have connectivity options expected from a server, such as a BMC, RS-232 serial console, USB, PCIe, NVMe, etc.

Required and supported hardware

Minimally, you need:

- An Ampere Altra-based system
- 1 x USB drive for installer ISO
- 1 x USB, or NVMe drive for actual ESXi installation
- 1 x USB or PCle NIC

The following hardware is supported:

- USB and NVMe storage
- USB and PCIe networking
- VGA video and USB keyboards
- · Serial console

Preparation

This document does not cover server unpacking, assembly or configuration as UEFI firmware updates. Please use official documentation.

Note that with a server, there are usually more than one way to do things.

For example, for console access:

- VGA + USB keyboard
- BMC web interface for VGA + USB keyboard
- BMC serial port redirection via IPMI

Or for booting:

- ESXi installer on USB key
- ISO via virtual media redirection

Install ESXi-Arm

- Get a working console (via IPMI, BMC KVM, VGA, etc)
- Power on system
- When prompted, choose to boot from USB drive
- Follow the generic installation steps.