

Tachyum Prodigy

The World's First Universal Processor

PRODUCT BRIEF

Prodigy Evaluation Platform Software Package

Tachyum Prodigy, the world's first universal processor, unifies the functionality of CPU, GPGPU, and TPU into a single monolithic package, delivering high performance across a range of workloads without costly and power-hungry accelerators. Prodigy's Evaluation Platform Support Package provides the required software infrastructure to complement the Prodigy platform hardware and ensure a smooth customer experience from initial out-of-the-box evaluation to advanced development and integration. The key features are summarized below.

KEY FEATURES



Toolchain Integration

All tools needed to compile software to run the native Prodigy instruction set are included, with support for both gcc and LLVM.



Natively Compiled Application Software

The package contains a wide range of popular open-source software applications natively compiled for Prodigy that includes AI models and frameworks, programming languages, and applications for databases and big data.



RAID 1 Boot Partitions

High reliability is provided with RAID 1 boot partitions on two SSDs, providing data mirroring and ensuring data integrity for the boot image. Additional customer-defined partitions can be defined as needed.



64K Page Support

Prodigy supports 64K page sizes to maximize efficiency. Legacy 4K pages can be supported as a backup solution if there is a special requirement.



Large Virtual Address Space

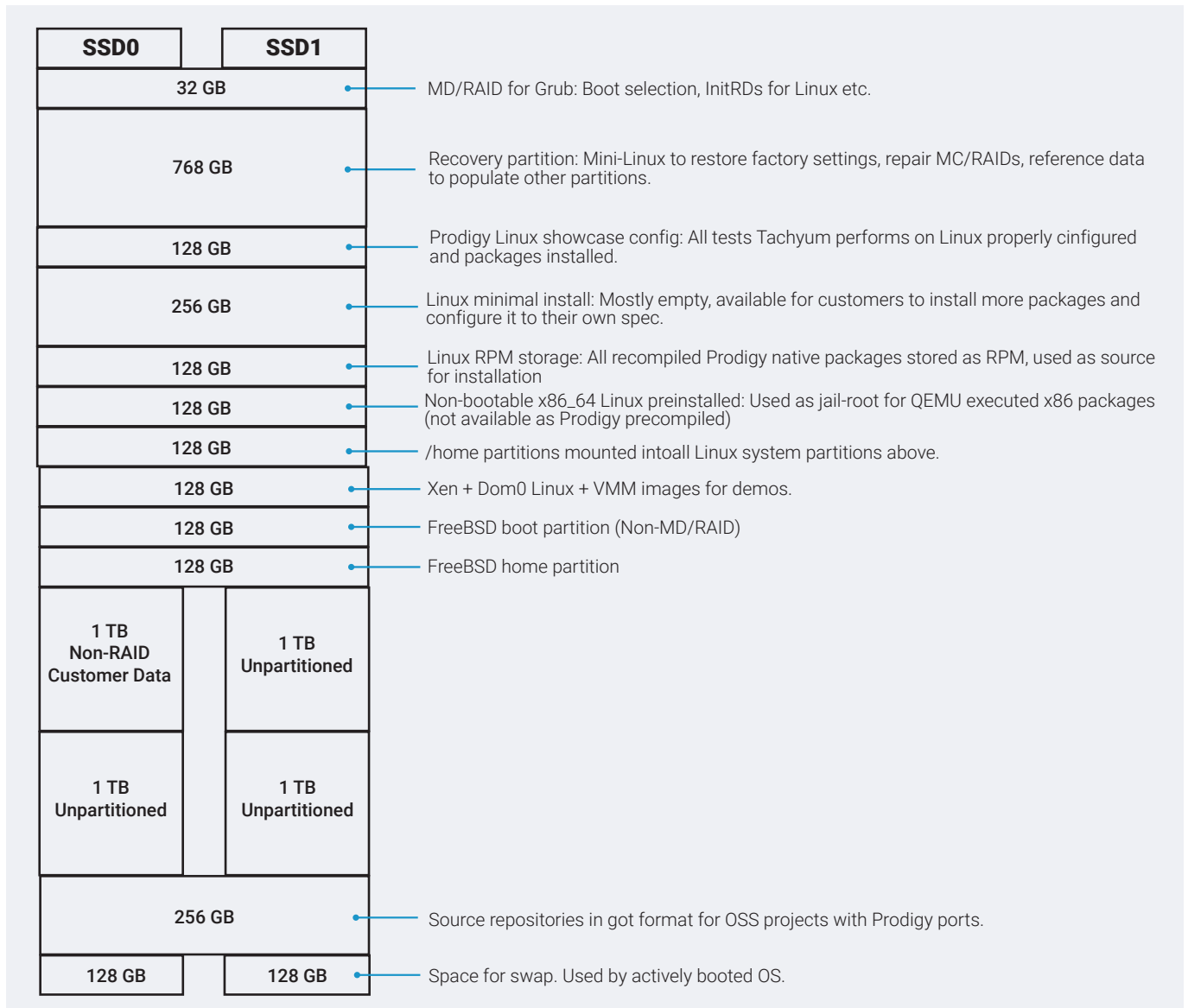
Prodigy's 57 bits of virtual addressing support 128 petabytes, which is ideal for memory-intensive applications such as in-memory databases and big data.

A single processor
that delivers industry leading performance



Evaluation Platform Disk Partition Map

The Prodigy disk map for SSD 1 and 2 is shown in the following diagram and provides the flexibility to support both Linux and FreeBSD.



Notes:

1. All Linux system partitions in md-raid format. FreeBSD has its own format (not repairable from "recovery" Linux).
2. Unpartitioned space available for customer use.
3. Non-RAID customer data mounted into every OS.

Prodigy's Evaluation Platform Software Package provides all the required software customers and partners need for initial testing and evaluation of Prodigy platforms. RAID 1 boot partitions enable high reliability for booting, 64K pages maximize efficiency, and 57 bits of virtual address space are optimal for applications such as in-memory data bases and big data.