

# 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.



#### 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.



#### 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.



#### 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

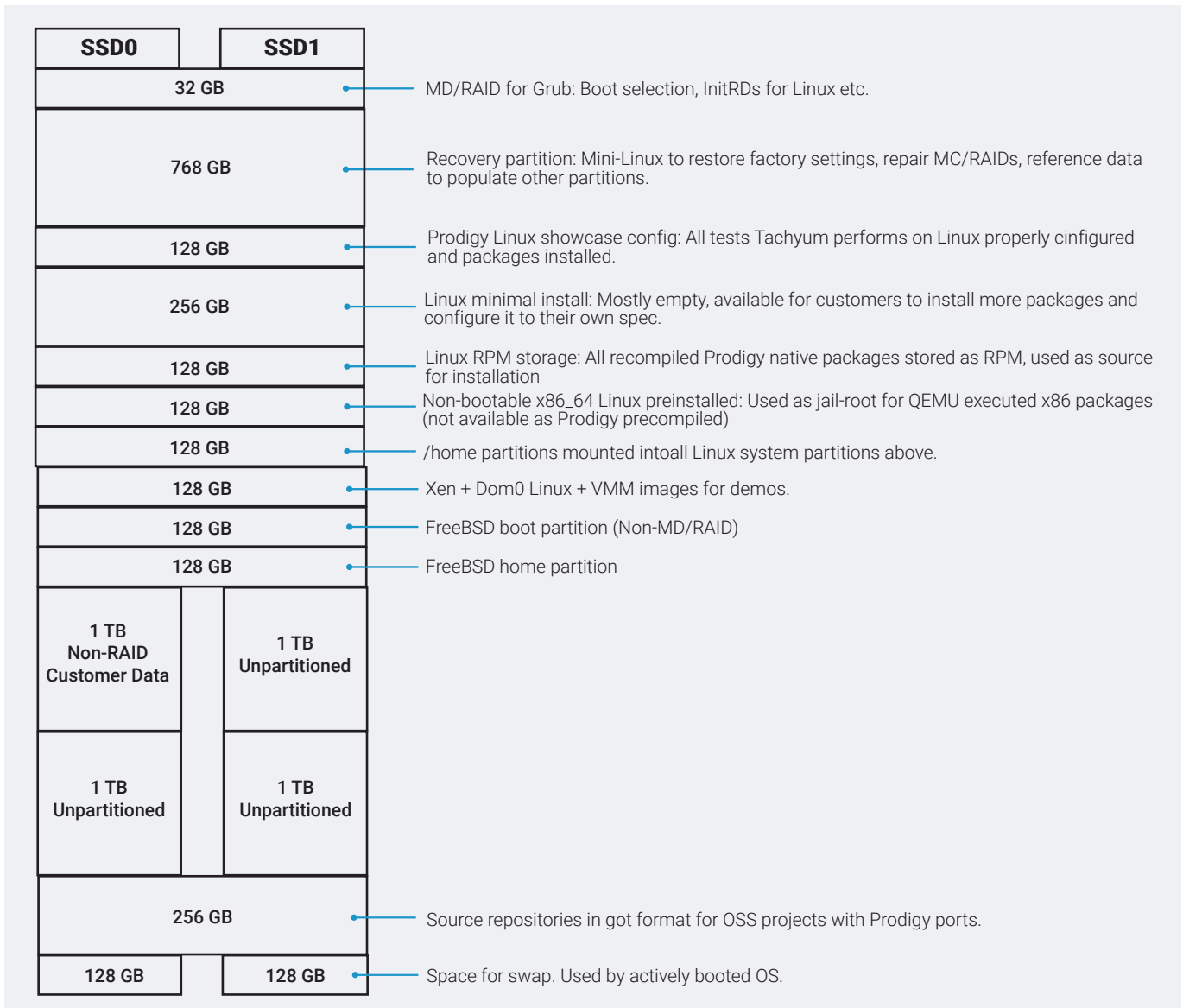
Prodigy's 57 bits of virtual addressing support 128 petabytes, which is ideal for memory-intensive applications such as in-memory databases and big data.

**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.