



# Tachyum Prodigy®

## Software Emulation Systems

Customers and partners can use Prodigy's software emulation for evaluation, development and debug, and with it, they can begin to transition existing applications that demand high performance and low power to run optimally on Prodigy processors. Pre-built systems include a Prodigy emulator, native Linux, toolchains, compilers, user mode applications, x86, ARM and RISC-V emulators.

### Emulators

- Gdb-sim
- QEMU

### x86, ARM and RISC-V emulators

### Object Toolchains

- GNU Gcc cross version
- GNU Gcc native version

### Debugging capabilities

- Native/cross GDB
- KGDB

### C Compilers and Libraries

- Gcc toolchain
- Glibc, Musl

### OS kernels and distro tools

- Linux kernel 5.10
- Yocto Project (Open Embedded)
- Buildroot

### System tools

- Top, Htop, Iotop, Sar, Nc
- Tar, Unzip, gzip, Util-linux
- Wget, Rsync
- Strace

### User mode applications

- Web server: Apache
- SQL server: MariaDB, SQLite
- Non-SQL server: MongoDB
- Scripting languages: PHP, Python, Perl, Ruby, Tcl
- Non-JIT version of JVM
- Git, Subversion
- Sed, Gawk, Grep

### Scientific libraries

- Eigen library
- Vectorized and tensorized BLAS including GEMM
- Vectorized and tensorized LAPACK
- FFT library
- ODE/PDE solvers

### AI software

- PyTorch 1.7.1
- TensorFlow 2.0