OOKAMI PROJECT APPLICATION

Date: **09/30/2022**

Project Title: **Floating point performance tests**

Usage:

☒ Testbed

☐ Production

Principal Investigator:

University/Company/Institute:

Mailing address including country: 19 Schooner Cove, East Setauket, NY 11733

Phone number: 631 403 0099

Email: wwcsmail@gmail.com

Names & Email of initial project users:

Usage Description: Test of A64FX architectures using multiple compilers/compiler settings

Computational Resources:

Total node hours per year: 2

Size (nodes) and duration (hours) for a typical batch job: 1 x 0.02

Disk space (home, project, scratch):   1G, 10G, 10G

Personnel Resources (assistance in porting/tuning, or training for your users**): hopefully none**

Required software: gcc / openblas, clang?

If your research is supported by US federal agencies:

Agency:

Grant number(s):

Production projects:

Production projects should provide an additional 1-2 pages of documentation about how
(a) the code has been tuned to perform well on A64FX (ideally including benchmark data comparing performance with other architectures such as x86 or GPUs)
(b) it can make effective use of the key A64FX architectural features (notably SVE, the high-bandwidth memory, and NUMA characteristics)
(c) it can accomplish the scientific objectives within the available 32 Gbyte memory per node