CLAMS-Forth for Forth Nerds

M. Edward (Ed) Borasky

The Prime Directives

Forth 2012 compatibility?

▶ Extended subject of Forth 2012 (Forth 200x Committee 2012)
  standard
▶ Not all CORE words implemented
▶ Some non-standard word sets implemented
▶ But ...
  ▶ CLAMS-Forth words *in* Forth 2012 work the same way.

Run on a Raspberry Pi Pico WH

- ▶ Documentation: (Raspberry Pi Ltd Accessed 2023-11-18)
- ▶ RP2040 CPU: Dual-core Arm Cortex M0+ with 264 KiB of SRAM
- ▶ Co-processors for division and digital signal processing
- ▶ I/O state machine (PIO) and **oodles** of real-world connectivity
- ▶ 2 MiB of flash
- ▶ 2.4 GHz WiFi / Bluetooth
- ▶ $7US with debug connector / headers for breadboarding

Build with Raspberry Pi Pico C/C++ SDK

▶ Documentation: (Raspberry Pi Ltd Accessed 2023-10-22)

Premature optimizations

- ▶ Dictionary split between RAM and flash
- ▶ Subroutine threading
- ▶ Inline coding / assembly
- ▶ Top of stack in register
- ▶ Engine in assembly

References

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