

## Multi-Assembly Reversible Compiler

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### ABSTRACT

A compiler, that can use multiple assembly languages as a source language and as a target language, has been developed and tested. The Multi-Assembly Reversible Compiler, or MARC, has been tested using the assembly language for a PDP-11, MACRO 11, and the ARM assembly language for a Raspberry Pi. Details are given of the methods used to successfully create the MARC and the parameters used for testing, including an analysis of the MARCs capabilities and its uses in the modern world.



Figure 1. PDP-11 on left, Raspberry Pi on right

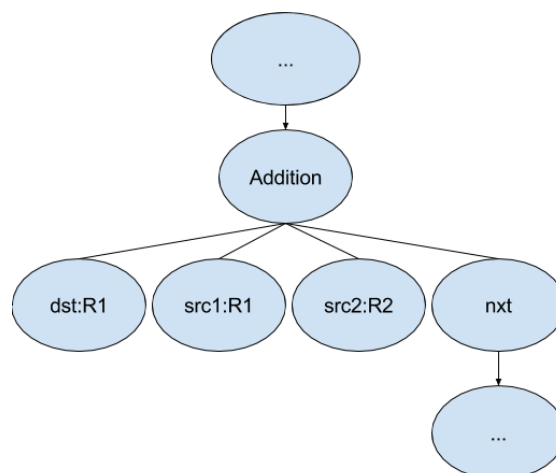


Figure 2. Diagram of Abstract Syntax Tree