

Project 1 Execution Platforms

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January 2025

1 Introduction

This is the program listing for the RISC-V assembly code example with the hex instructions and their binary field breakdowns. By using a website "<https://projectf.io/posts/riscv-cheat-sheet/>" [1]

Table 1: Code listing with hex instructions and binary fields

Hex instruction	Binary fields	Instruction
0x00050893	fnc7 rs1 fnc3 rd op1 000000000000 ; 01010 ; 000 ; 10001 ; 0010011	addi a8 a17 0 - error in format
0x00068513	fnc7 rs1 fnc3 rd op1 000000000000 ; 01101 ; 000 ; 01010 ; 0010011	addi a13 a8 0 - error in format
0x04088063	imm rs2 rs1 fnc3 imm op1 0000010 ; 00000 ; 10001 ; 000 ; 00000 ; 1100011	beq a0 a17 0xA0 - error in jmp calc ;1
0x04058263	imm rs2 rs1 fnc3 imm op1 0000010 ; 00000 ; 01011 ; 000 ; 00100 ; 1100011	beq a0 a1 0x22 - error in jmp calc
0x04060063	imm rs1 fnc3 rd op1 000001000000 ; 01100 ; 000 ; 00000 ; 0000011	addi a0, a12, 0x64
0x04d05063	imm rs2 rs1 fnc3 imm op1 0000010011010000; 101; 00000; 1100011	bge , a0
0x00088793	00000000000010001000011110010011	-
0x00269713	00000000001001101001011100010011	-
0x00e88b3	00000000111010001000100010110011	-
0x0007a703	00000000000001111010011100000011	-
0x0005a803	00000000000001011010100000000011	-
0x01070733	00000001000001110000011100110011	-
0x00e62023	0000000011100110001000000100011	-
0x00478793	00000000010001111000011110010011	-
0x00458593	00000000010001011000010110010011	-
0x00460613	00000000010001100000011000010011	-
0xff1792e3	11111111000101111001001011100011	-
0x0008067	0000000000000000100000001100111	-
0xfff00513	1111111111100000000010100010011	-
0x0008067	0000000000000000100000001100111	-
0xfff00513	1111111111100000000010100010011	-
0x0008067	0000000000000000100000001100111	-

References

- [1] projectf.io. riscv-cheat-sheet, 2024. Accessed: December 18, 2025.