

COL216 Assignment 2 Stage 6

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1 Introduction

In this stage, we were required to include byte and half word transfers (signed and unsigned), auto increment/decrement with option of pre/post indexing.

A new component named PM Connect is designed to allow full word/ half word / byte transfer.

2 Acknowledgement

I acknowledge **Mayank Mangla- 2020CS50430** for the test case that I have used in testing my program.

3 PM Connect

Inputs are:

- rout: output from register file
- mout: output from memory
- adr10:
- instr-class:

Outputs are:

- rin: input data for register file in load instruction
- m-in: input data for memory in store instruction
- mwrite:

4 TestCases

```
0 => x"E3A00FFF",
1 => x"E3A01008",
2 => x"E5810000",
3 => x"E5810004",
4 => x"E4D12001",
5 => x"E0D130D1",
6 => x"E0D140B2",
7 => x"E05150F2",
8 => x"E5B16004",
others => x"00000000"
```

