WR – Write enable for the 16bit x 8 Register

DA – Destination select for the 16bit x 8 Register

AA – Selects which register data line A will be (16bit x 8 Register)

BA – Selects which register data line A will be (16bit x 8 Register)

MD – Mux select for choosing whether to send data from the ALU or from RAM to the 16bit x 8 Register

input D

MB – Mux select for choosing whether B (from the 16bit x 8 Register) or the literal is getting sent to the

RAM’s data input and the ALU’s B input

FS – Function select for the ALU

MM – Mux select for choosing whether the RAM’s address is taken from the A output of the 16bit x 8 Register or the literal

MW – Write enable for the RAM