Joseph Thornton

Professor Faroughi

CSC 137/ Section 3

Project 4

DATA path and Control Unit

A B C D

2 to 1 mux

Register

Add/Sub

2 to 1 mux

2 to 1 mux

S1

S2

S0

Modee

1. FSD

Reset

Start =0

Mode=d/e=0,m=d,s0=d,s1=d,s2=d

Start =1

Mode=d/e=1,m=d,s0=0,s1=d,s2=d,done=0

Start =d

Mode=0/e=1,m=0,s0=1,s1=0,s2=d,done=0

Start =d

Mode=1/e=1,m=1,s0=1,s1=0,s2=d,done=0

Start =d

Mode=1/e=1,m=0,s0=1,s1=0,s2=0,done=0

Start =d

Mode=0/e=1,m=1,s0=1,s1=0,s2=0,done=0

Start =d

Mode=d/e=1,m=1,s0=1,s1=0,s2=1,done=1

E=0