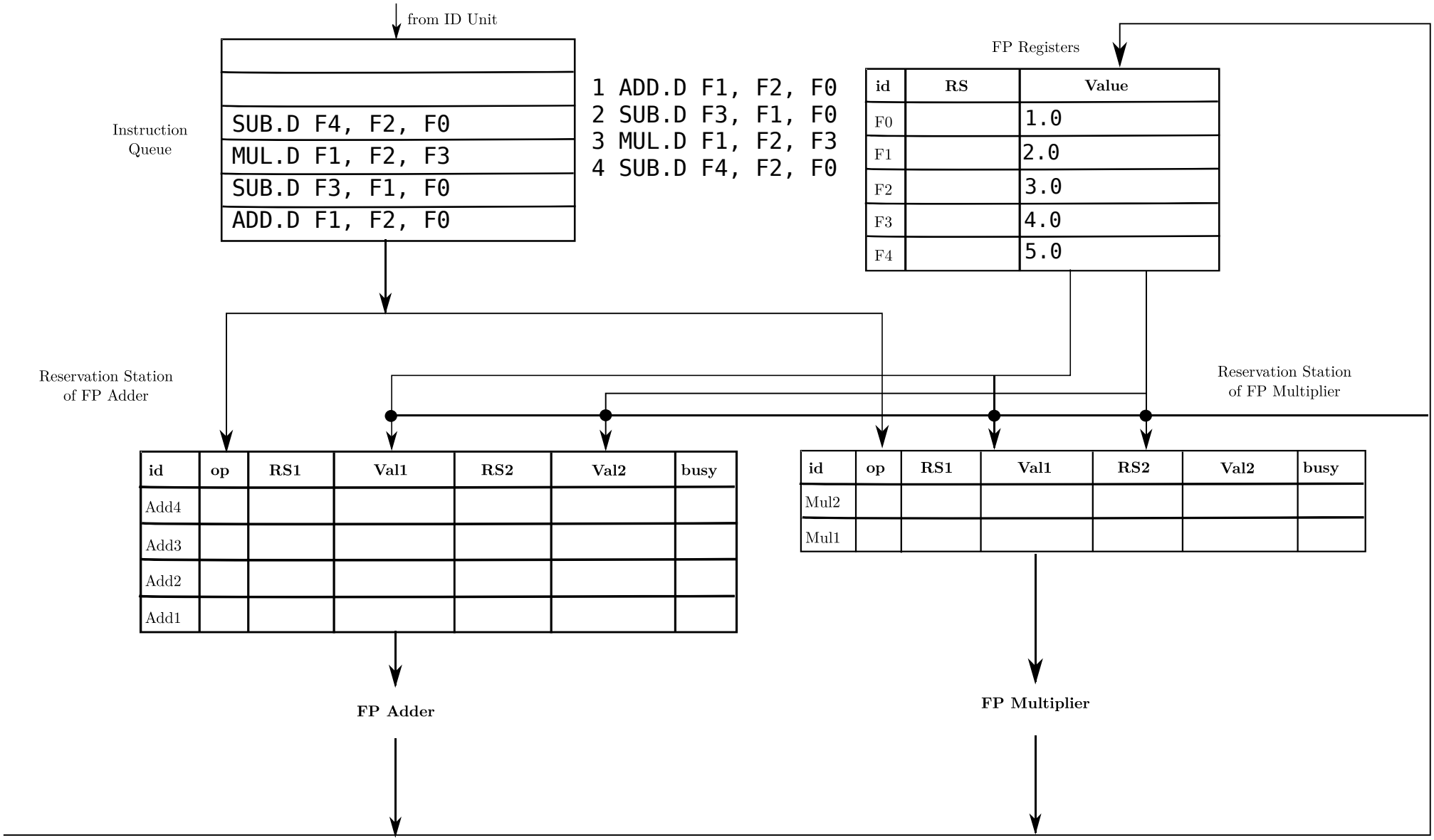
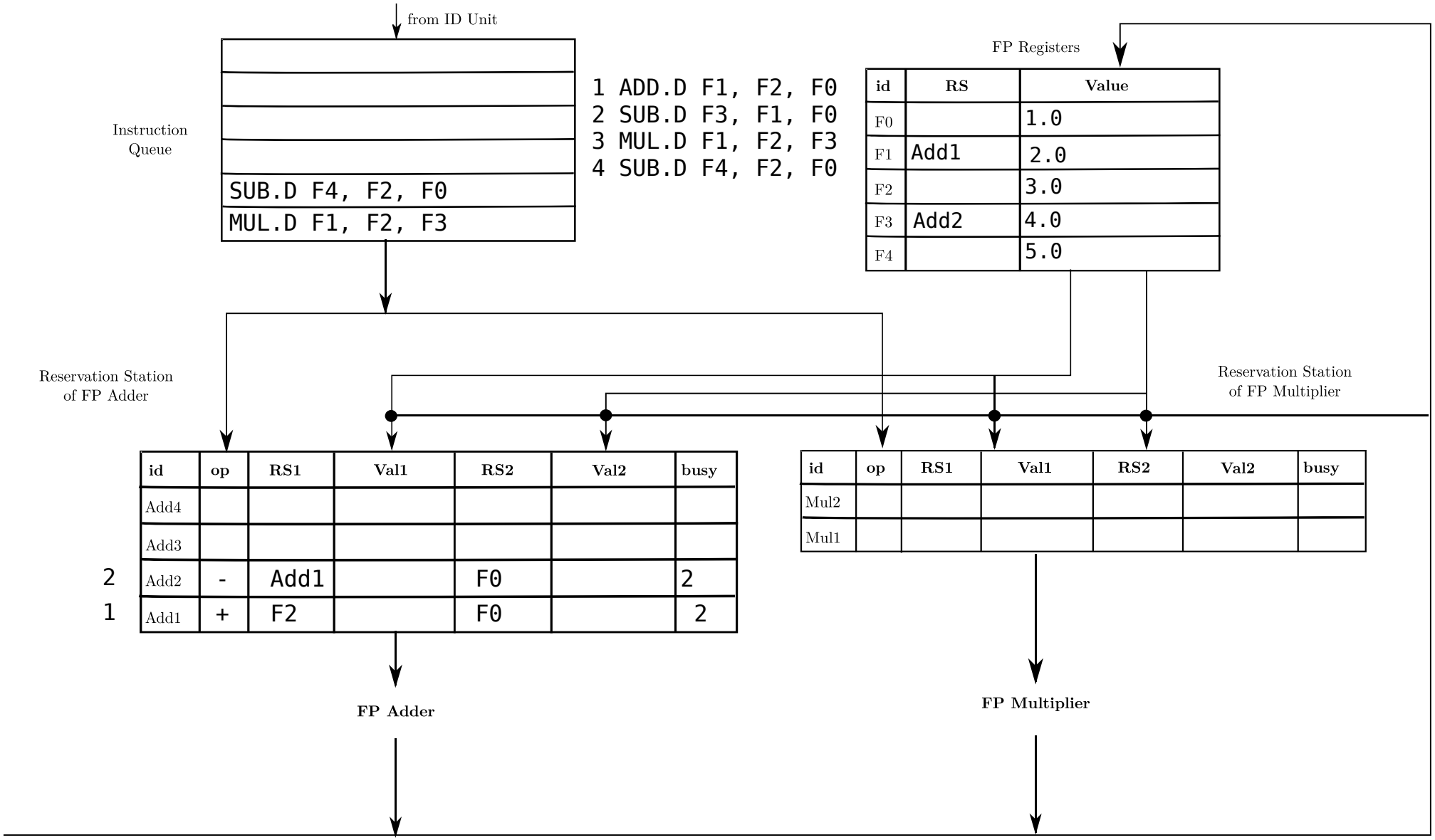
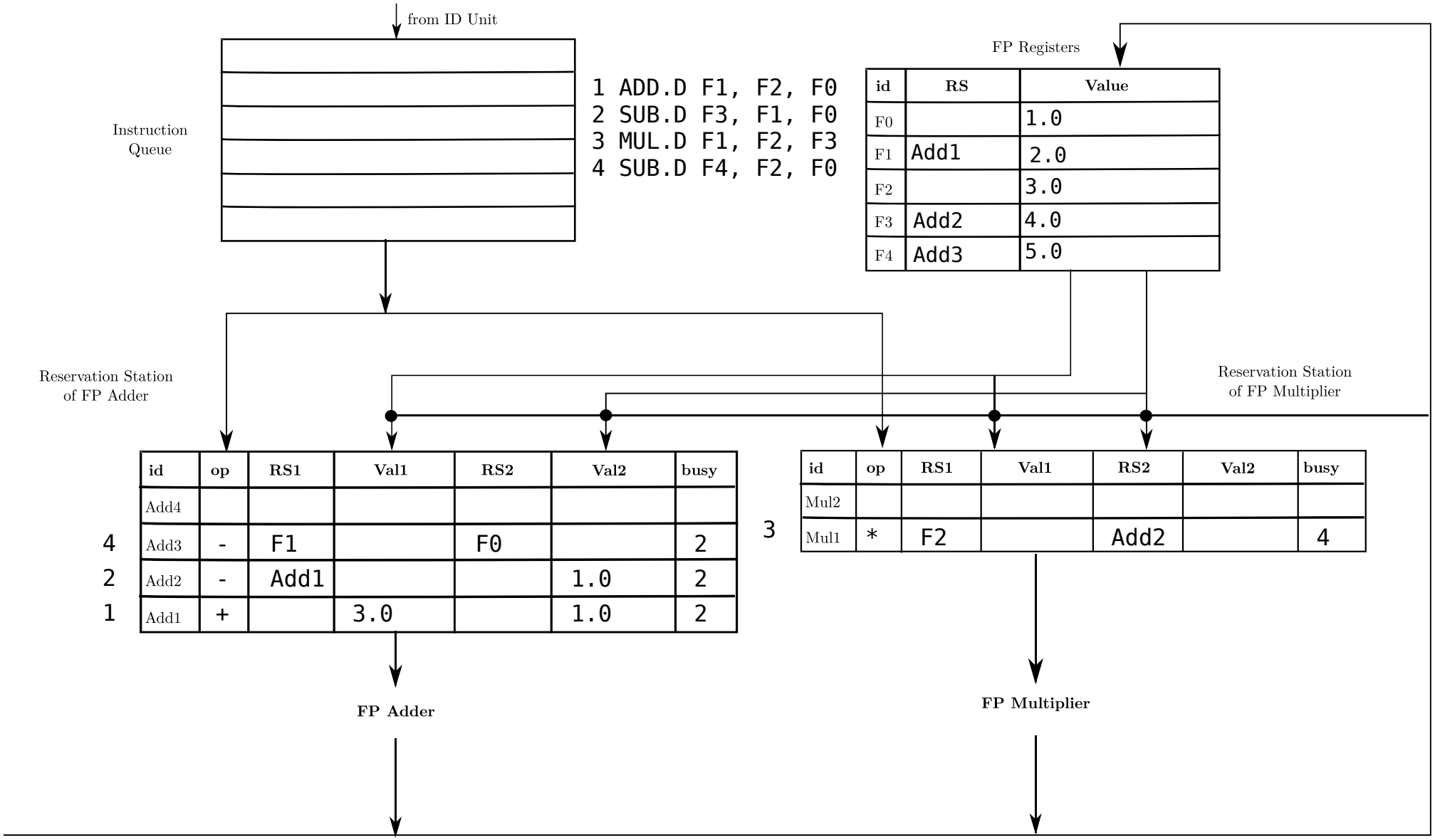
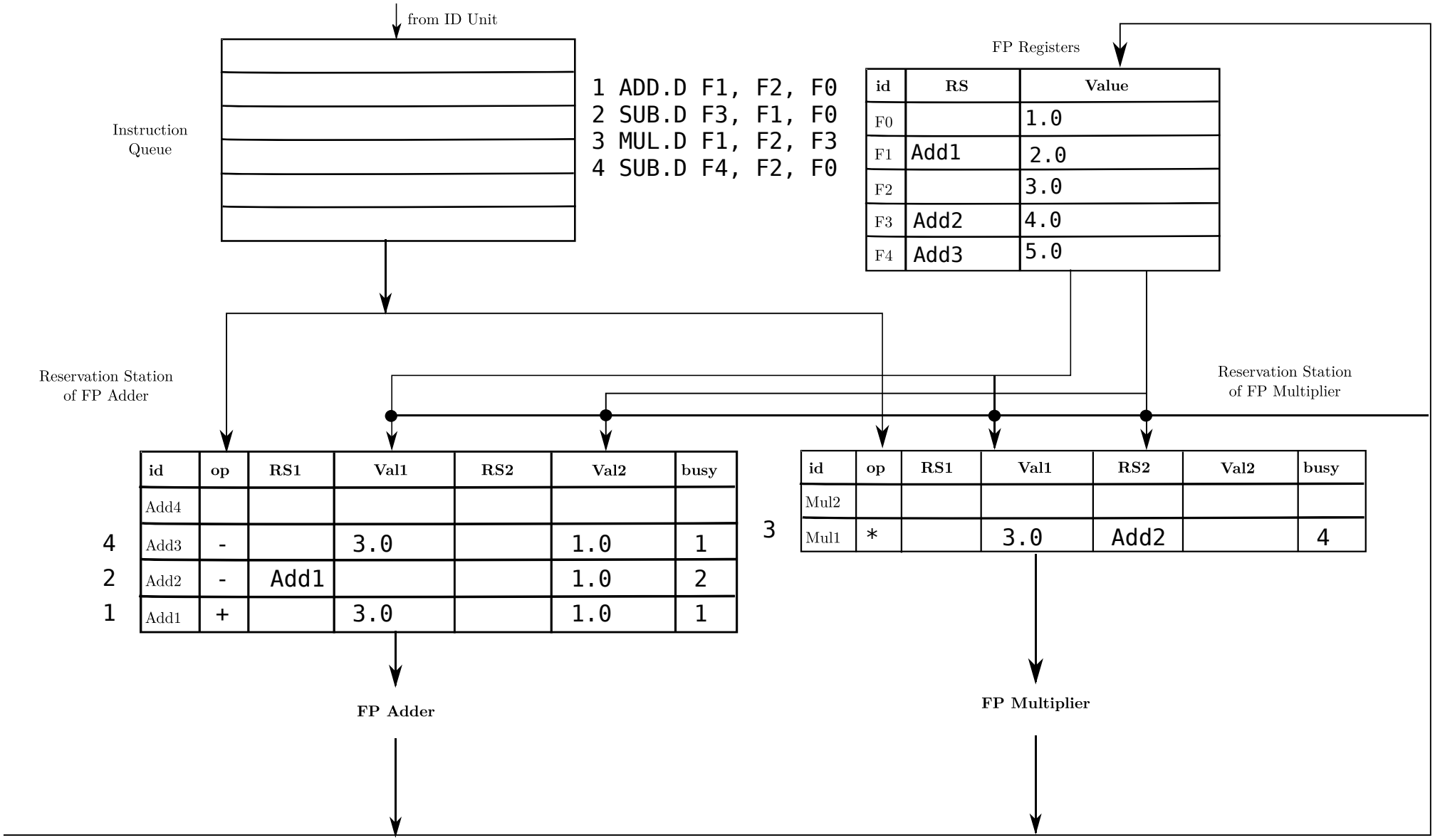
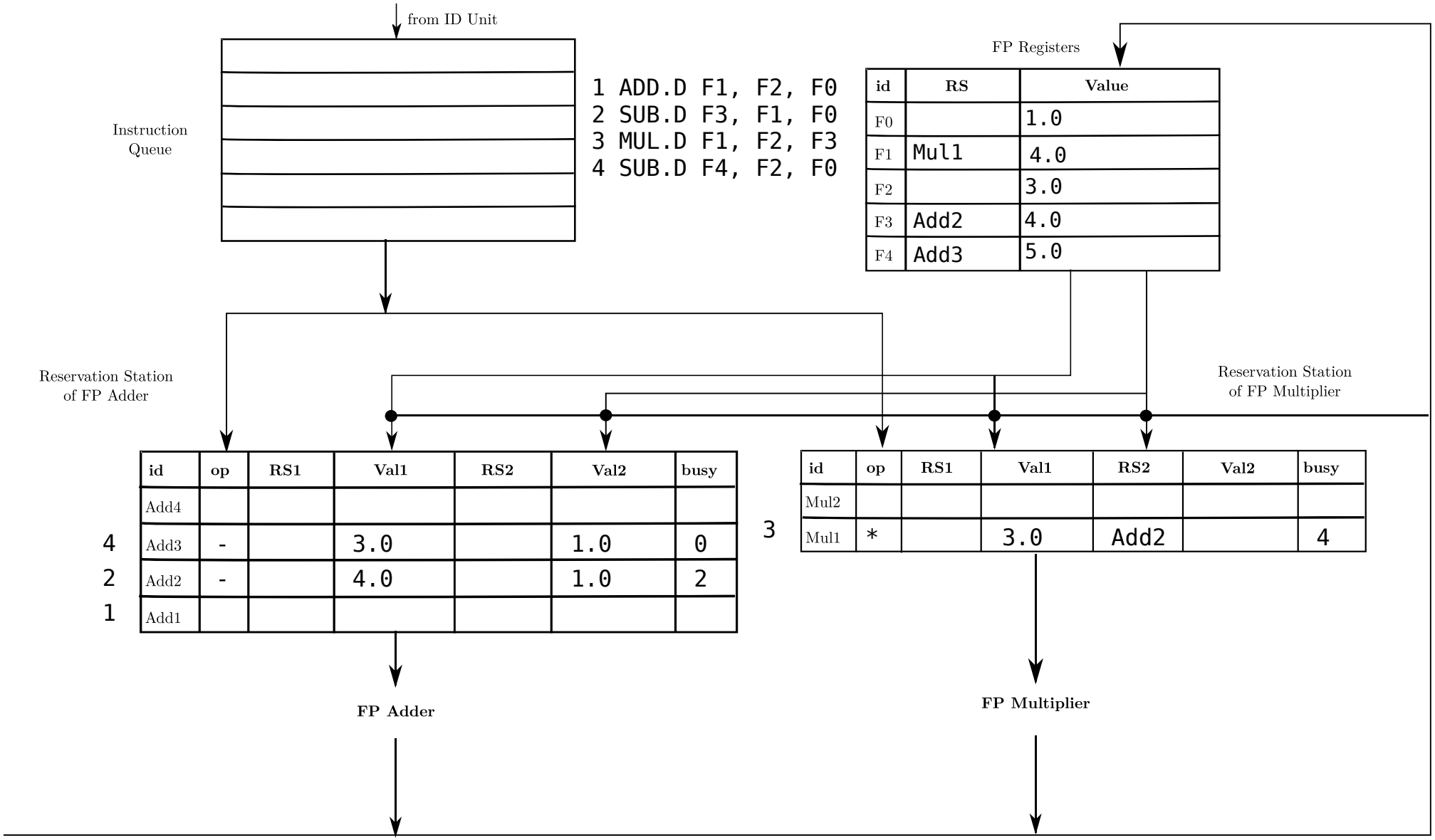
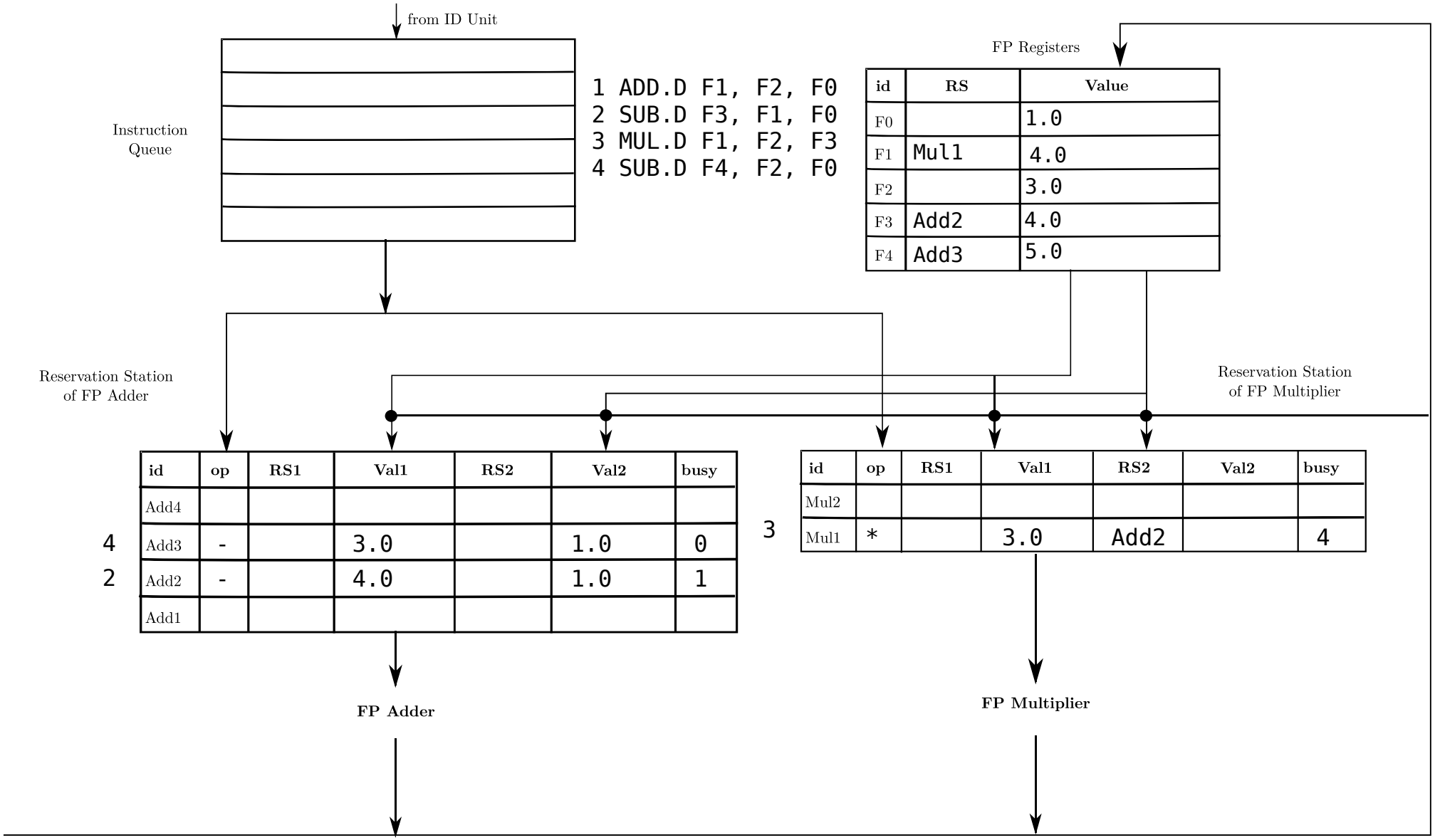

from ID Unit
Instruction Queue
SUB.D F4, F2, F0
MUL.D F1, F2, F3
SUB.D F3, F1, F0
ADD.D F1, F2, F0
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 2.0
F2 3.0
F3 4.0
F4 5.0
Reservation Station of FP Adder
id op RS1 Val1 RS2 Val2 busy
Add4
Add3
Add2
Add1
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Mul2
Mul1
FP Adder
FP Multiplier

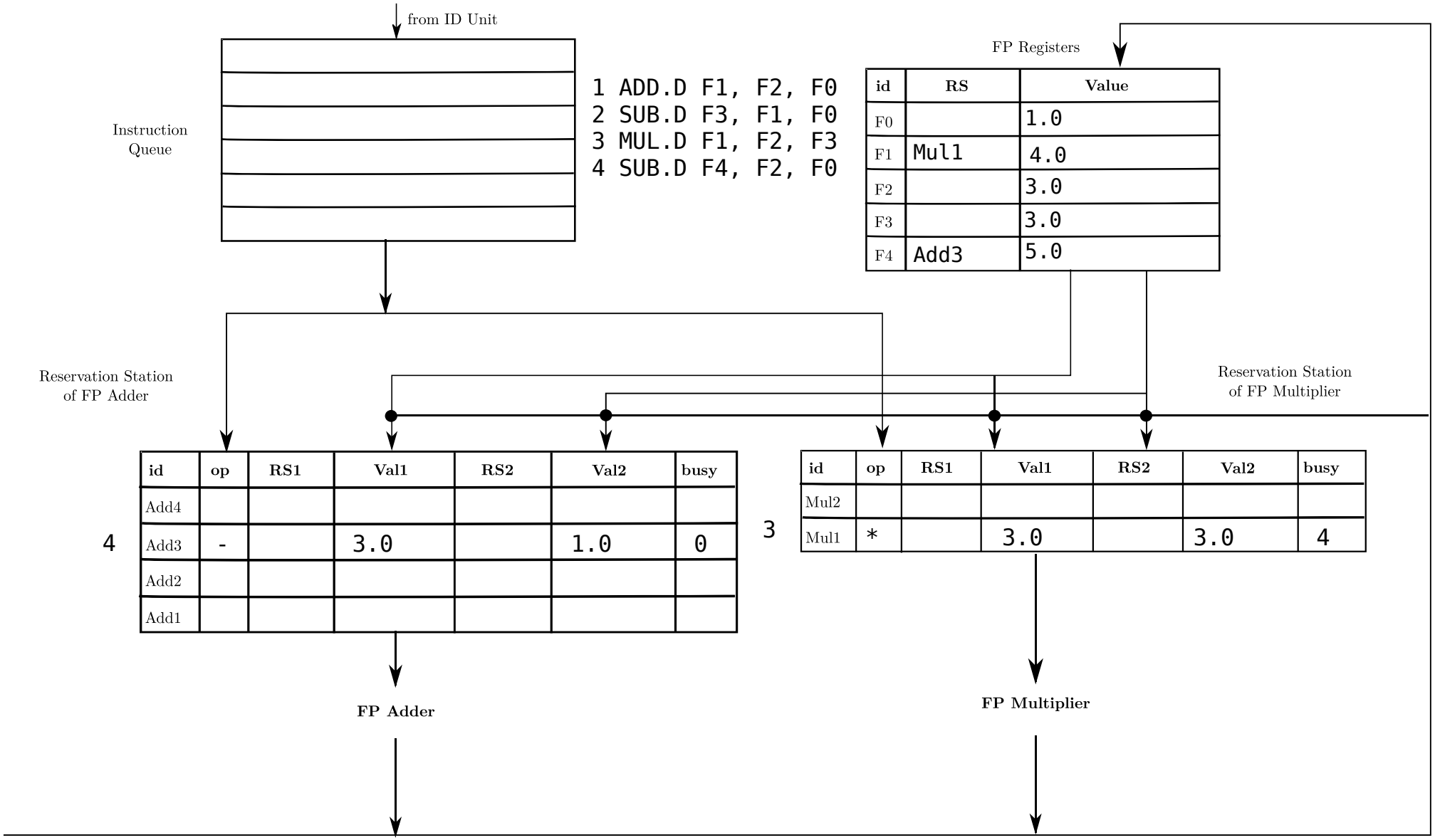

from ID Unit
Instruction Queue
SUB.D F4, F2, F0
MUL.D F1, F2, F3
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Add1 2.0
F2 3.0
F3 Add2 4.0
F4 5.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
Add3
2 Add2 - Add1 F0 2
1 Add1 + F2 F0 2
id op RS1 Val1 RS2 Val2 busy
Mul2
Mul1
FP Adder
FP Multiplier

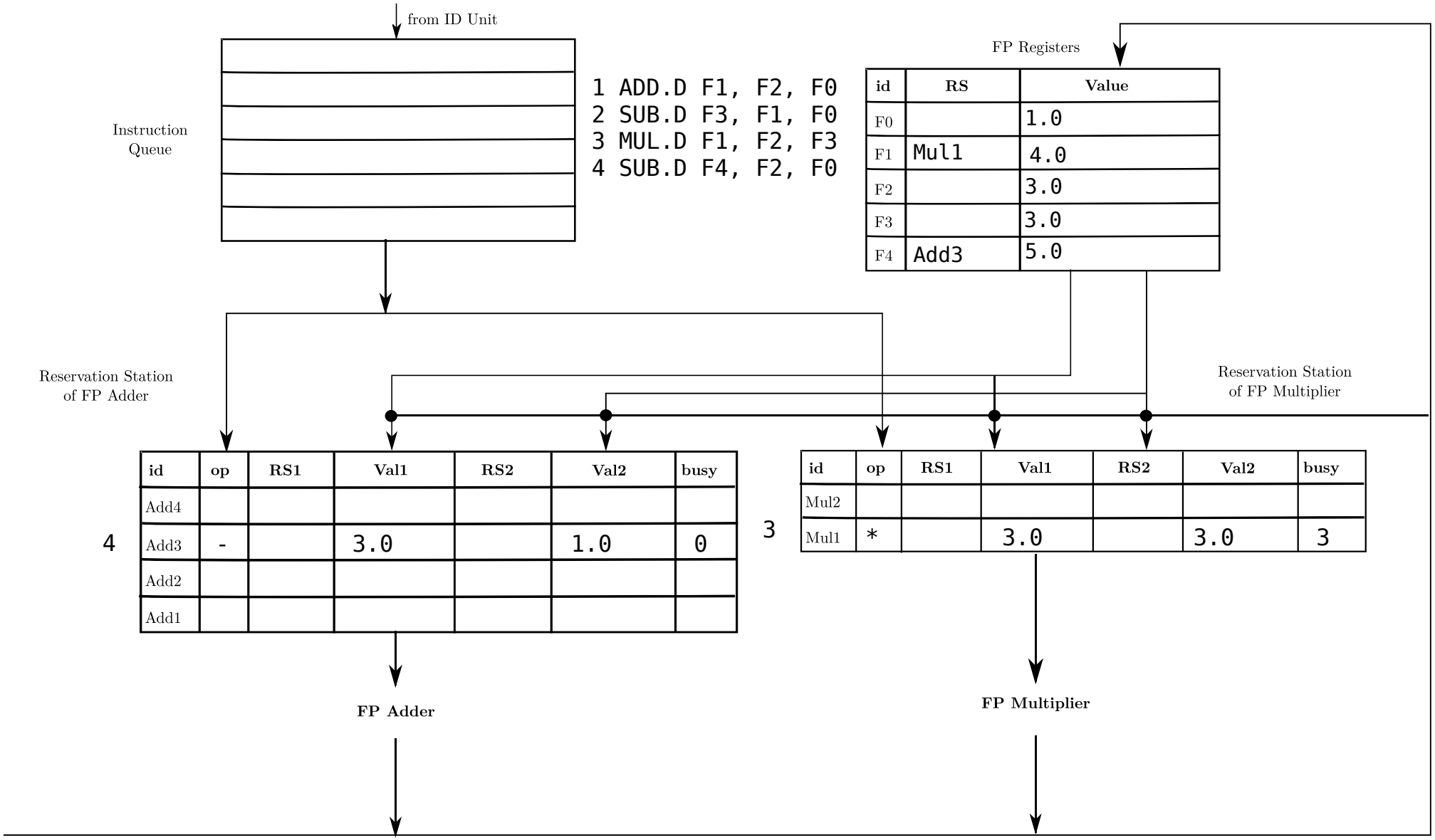

from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Add1 2.0
F2 3.0
F3 Add2 4.0
F4 Add3 5.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - F1 F0 2
2 Add2 - Add1 1.0 2
1 Add1 + 3.0 1.0 2
id op RS1 Val1 RS2 Val2 busy
Mul2
3 Mul1 * F2 Add2 4
FP Adder
FP Multiplier

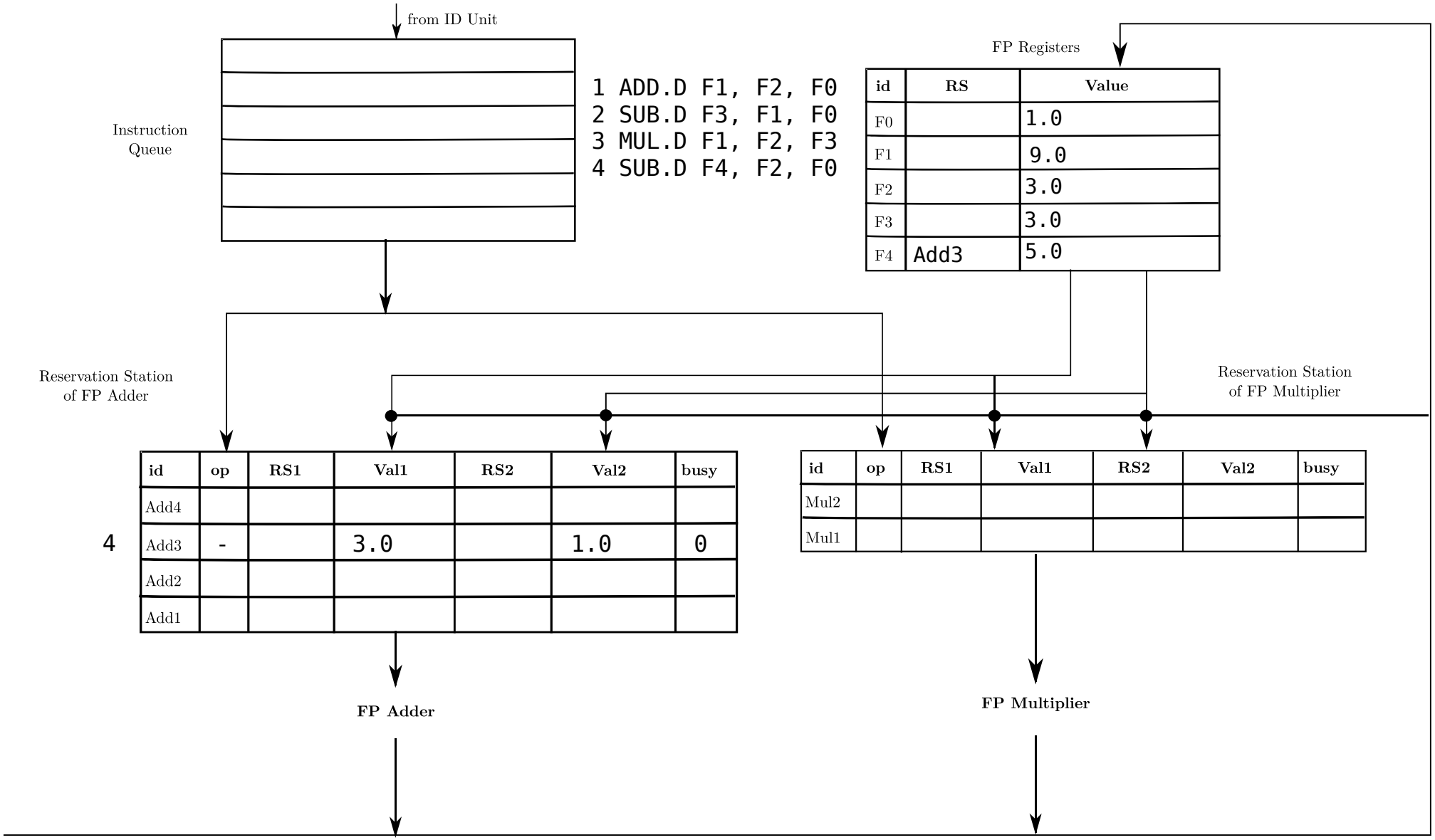

from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Add1 2.0
F2 3.0
F3 Add2 4.0
F4 Add3 5.0
Reservation Station of FP Adder
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - 3.0 1.0 1
2 Add2 - Add1 1.0 2
1 Add1 + 3.0 1.0 1
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Mul2
3 Mul1 * 3.0 Add2 4
FP Adder
FP Multiplier

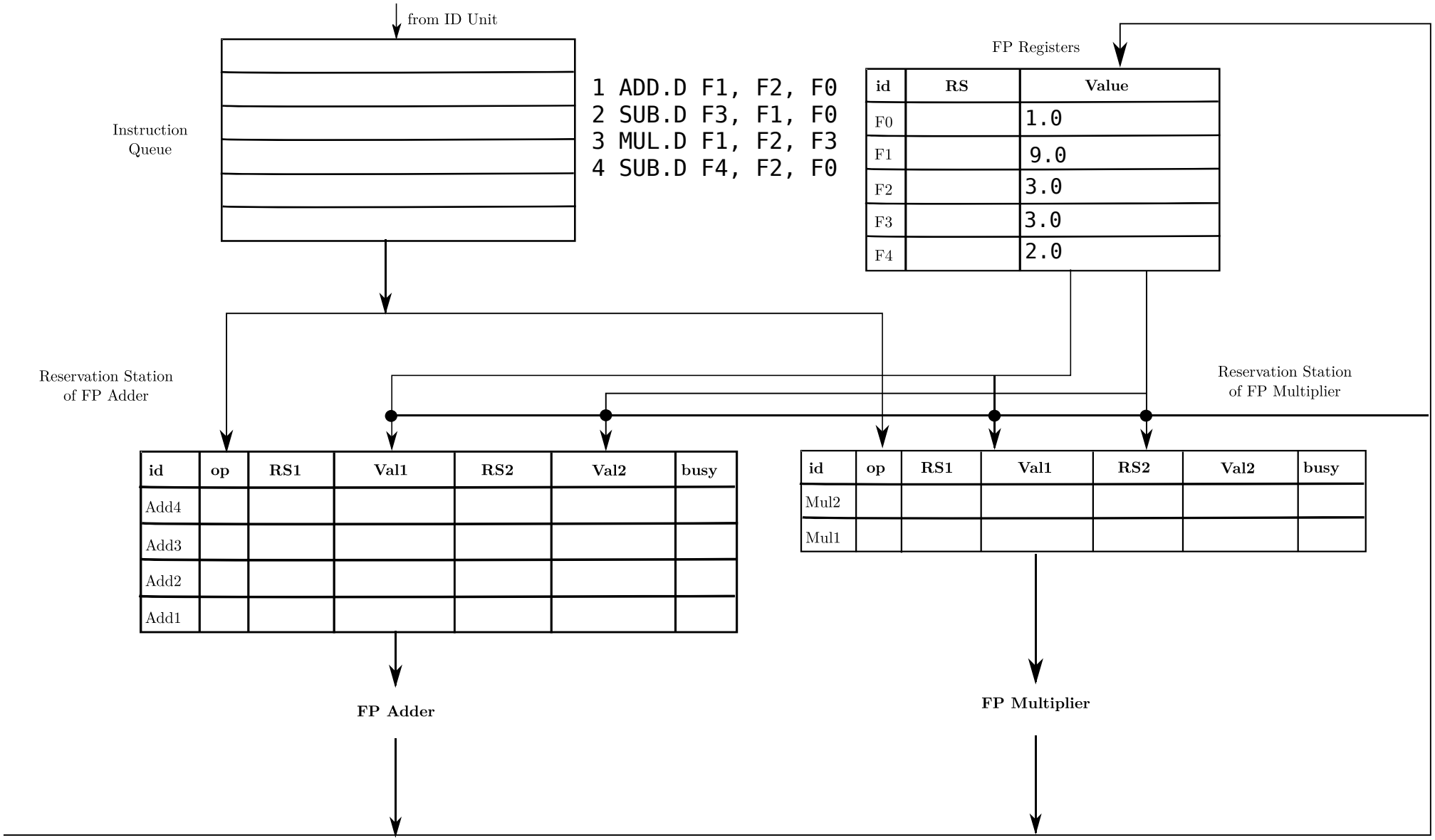

from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Mul1 4.0
F2 3.0
F3 Add2 4.0
F4 Add3 5.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - 3.0 1.0 0
2 Add2 - 4.0 1.0 2
1 Add1
id op RS1 Val1 RS2 Val2 busy
Mul2
3 Mul1 * 3.0 Add2 4
FP Adder
FP Multiplier


from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Mul1 4.0
F2 3.0
F3 Add2 4.0
F4 Add3 5.0
Reservation Station of FP Adder
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - 3.0 1.0 0
2 Add2 - 4.0 1.0 1
Add1
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Mul2
3 Mul1 * 3.0 Add2 4
FP Adder
FP Multiplier


from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Mul1 4.0
F2 3.0
F3 3.0
F4 Add3 5.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - 3.0 1.0 0
Add2
Add1
id op RS1 Val1 RS2 Val2 busy
Mul2
3 Mul1 * 3.0 3.0 4
FP Adder
FP Multiplier


from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 Mul1 4.0
F2 3.0
F3 3.0
F4 Add3 5.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - 3.0 1.0 0
Add2
Add1
id op RS1 Val1 RS2 Val2 busy
Mul2
3 Mul1 * 3.0 3.0 3
FP Adder
FP Multiplier


from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 9.0
F2 3.0
F3 3.0
F4 Add3 5.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
4 Add3 - 3.0 1.0 0
Add2
Add1
id op RS1 Val1 RS2 Val2 busy
Mul2
Mul1
FP Adder
FP Multiplier


from ID Unit
Instruction Queue
1 ADD.D F1, F2, F0
2 SUB.D F3, F1, F0
3 MUL.D F1, F2, F3
4 SUB.D F4, F2, F0
FP Registers
id RS Value
F0 1.0
F1 9.0
F2 3.0
F3 3.0
F4 2.0
Reservation Station of FP Adder
Reservation Station of FP Multiplier
id op RS1 Val1 RS2 Val2 busy
Add4
Add3
Add2
Add1
id op RS1 Val1 RS2 Val2 busy
Mul2
Mul1
FP Adder
FP Multiplier