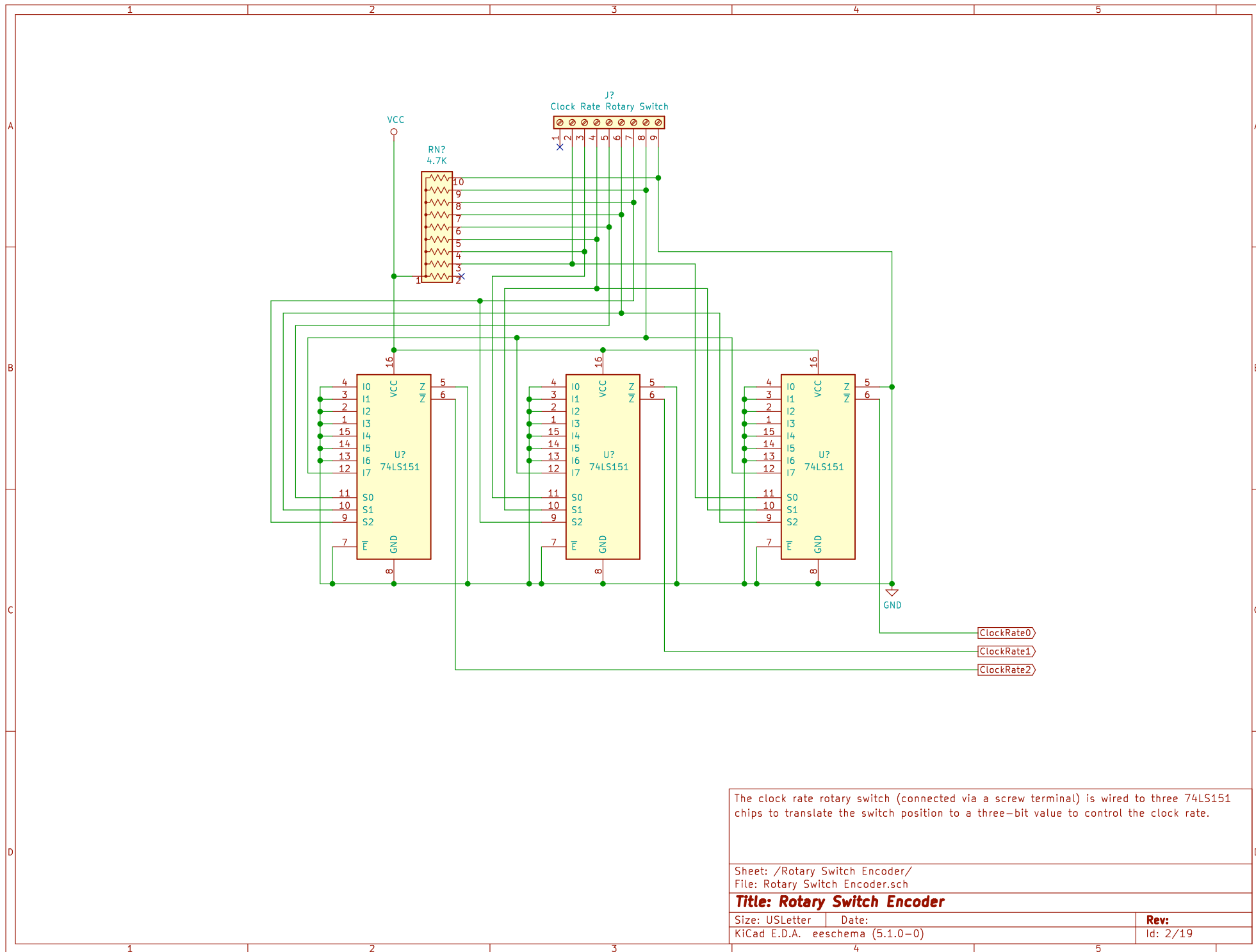


	1	2	3	4	5							
A			Sheet: Rotary Switch Encoder <div></div> File: Rotary Switch Encoder.sch Sheet: Clock <div></div> File: Clock.sch Sheet: Program Counter <div></div> File: Program Counter.sch Sheet: Instruction ROM <div></div> File: Instruction ROM.sch Sheet: Instruction Register <div></div> File: Instruction Register.sch Sheet: Instruction Decoder <div></div> File: Instruction Decoder.sch Sheet: Execute <div></div> File: Execute.sch Sheet: Control Word Display <div></div> File: Control Word Display.sch	Sheet: Output Display <div></div> File: Output Display.sch Sheet: Register D <div></div> File: Register D.sch Sheet: Register A <div></div> File: Register A.sch Sheet: ALU <div></div> File: ALU.sch Sheet: Register B <div></div> File: Register B.sch Sheet: Transfer Register <div></div> File: Transfer Register.sch Sheet: Data RAM <div></div> File: Data RAM.sch Sheet: Bus Display <div></div> File: Bus Display.sch			A					
B	Sheet: Power-on Reset <div></div> File: Power-on Reset.sch Sheet: Instruction RAM <div></div> File: Instruction RAM.sch					B						
C						C						
D					TTL microcomputer built from 74xx series logic chips. Sheet: / File: TurtleTTL.sch Title: Turtle TTL <table><tr><td>Size: A</td><td>Date:</td><td>Rev:</td></tr><tr><td>KiCad E.D.A.</td><td>eeschema (5.1.0-0)</td><td>Id: 1/19</td></tr></table>	Size: A	Date:	Rev:	KiCad E.D.A.	eeschema (5.1.0-0)	Id: 1/19	D
Size: A	Date:	Rev:										
KiCad E.D.A.	eeschema (5.1.0-0)	Id: 1/19										
	1	2	3	4	5							



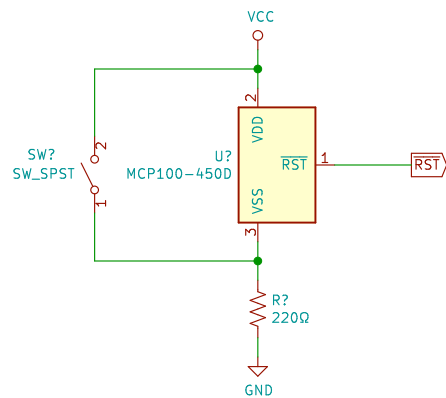
The clock rate rotary switch (connected via a screw terminal) is wired to three 74LS151 chips to translate the switch position to a three-bit value to control the clock rate.

Sheet: /Rotary Switch Encoder/
File: Rotary Switch Encoder.sch

Title: Rotary Switch Encoder

Size: USLetter Date:
KiCad E.D.A. eeschema (5.1.0-0)

Rev:
Id: 2/19

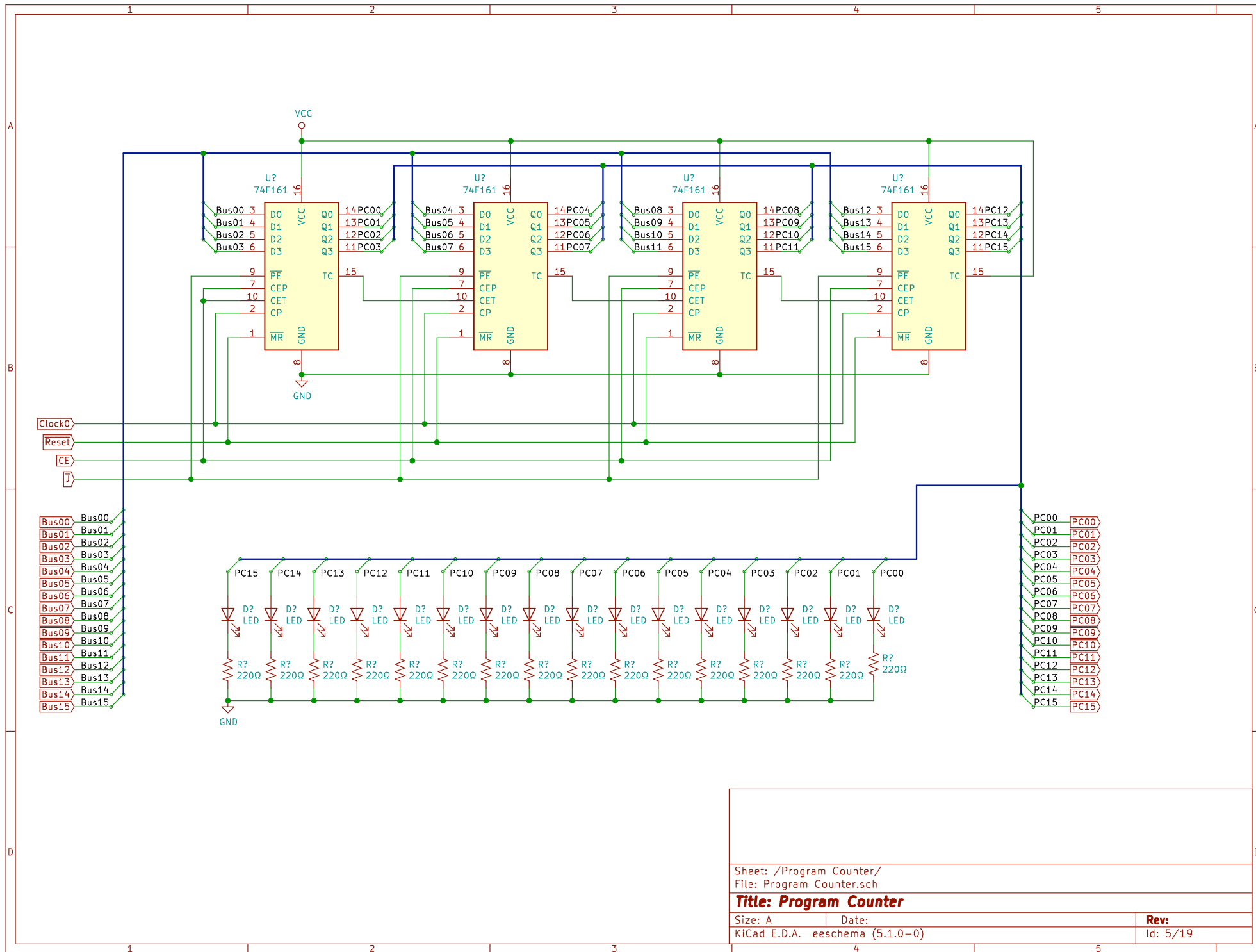


Sheet: /Power-on Reset/
File: Power-on Reset.sch

Title: Power-on Reset

Size: A Date:
KiCad E.D.A. eeschema (5.1.0-0)

Rev:
Id: 4/19

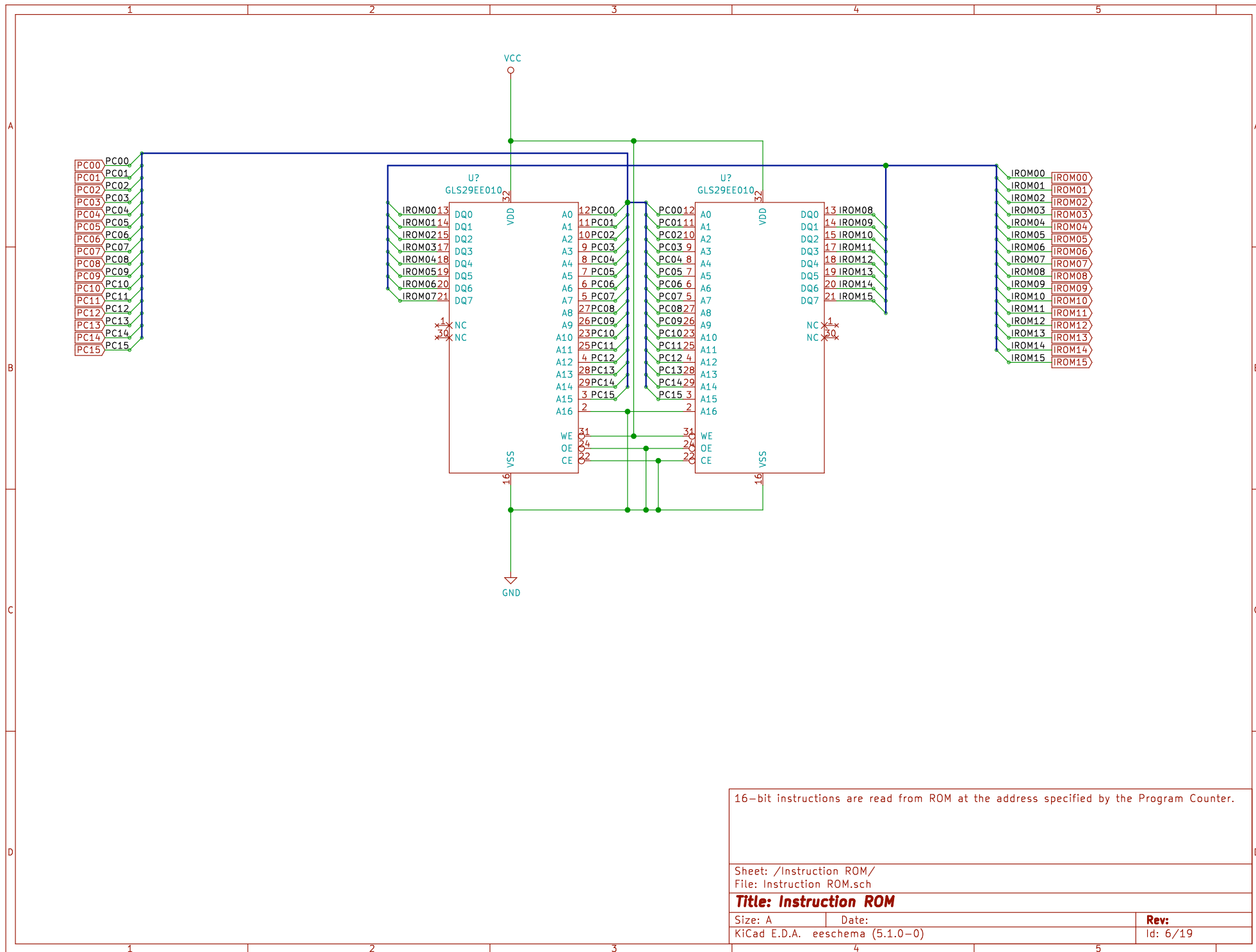


Sheet: /Program Counter/
File: Program Counter.sch

Title: Program Counter

Size: A Date:
KiCad E.D.A. eeschema (5.1.0-0)

Rev:
Id: 5/19



1					2					3					4					5					
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C																									C
D																									D
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Sheet: /Instruction RAM/
File: Instruction RAM.sch

Title: Instruction RAM

Size: ADate:

KiCad E.D.A. eeschema (5.1.0-0)Id: 7/19

Sheet: /Instruction RAM/		
File: Instruction RAM.sch		
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KiCad E.D.A. eeschema (5.1.0-0)		Id: 7/19

1					2					3					4					5					
A																									A
B																									B
C																									C
D																									D
1					2					3					4					5					

Sheet: /Instruction Decoder/
File: Instruction Decoder.sch

Title: **Instruction Decoder**

Size: ADate:

KiCad E.D.A. eeschema (5.1.0-0)

Rev:
Id: 8/19

Sheet: /Instruction Decoder/
File: Instruction Decoder.sch

Title: Instruction Decoder

Size: A	Date:	Rev:
KiCad E.D.A. eeschema (5.1.0-0)		Id: 8/19

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Sheet: /Execute/
File: Execute.sch

Title: Execute

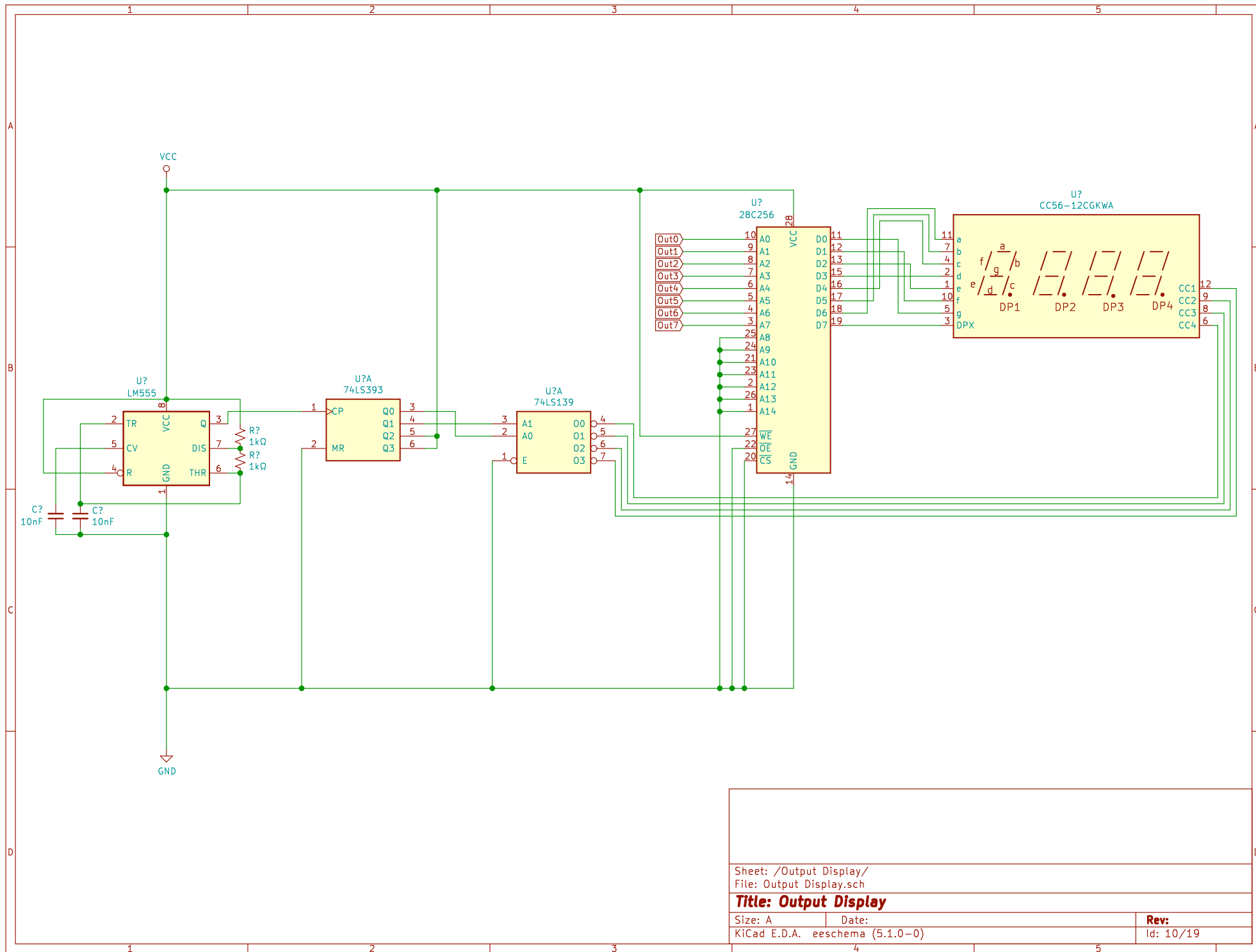
Size: A

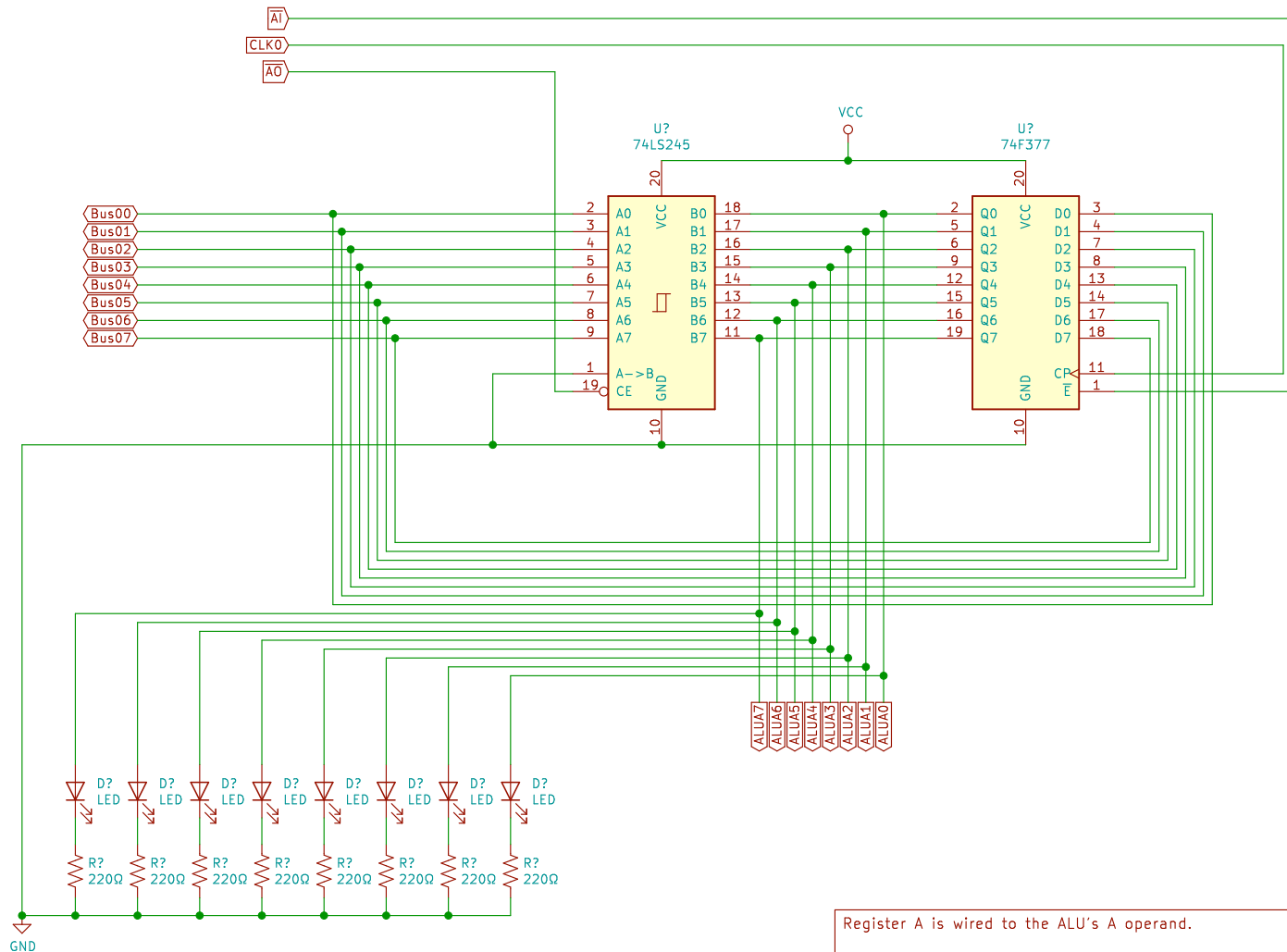
Date:

KiCad E.D.A. eeschema (5.1.0-0)

Id: 9/19

Sheet: /Execute/		
File: Execute.sch		
Title: Execute		
Size: A	Date:	Rev:
KiCad E.D.A. eeschema (5.1.0-0)		Id: 9/19





Register A is wired to the ALU's A operand.

Sheet: /Register A/
File: Register A.sch

Title: Register A

Size: A Date:
KiCad E.D.A. eeschema (5.1.0-0)

Rev:
Id: 11/19

1					2					3					4					5					
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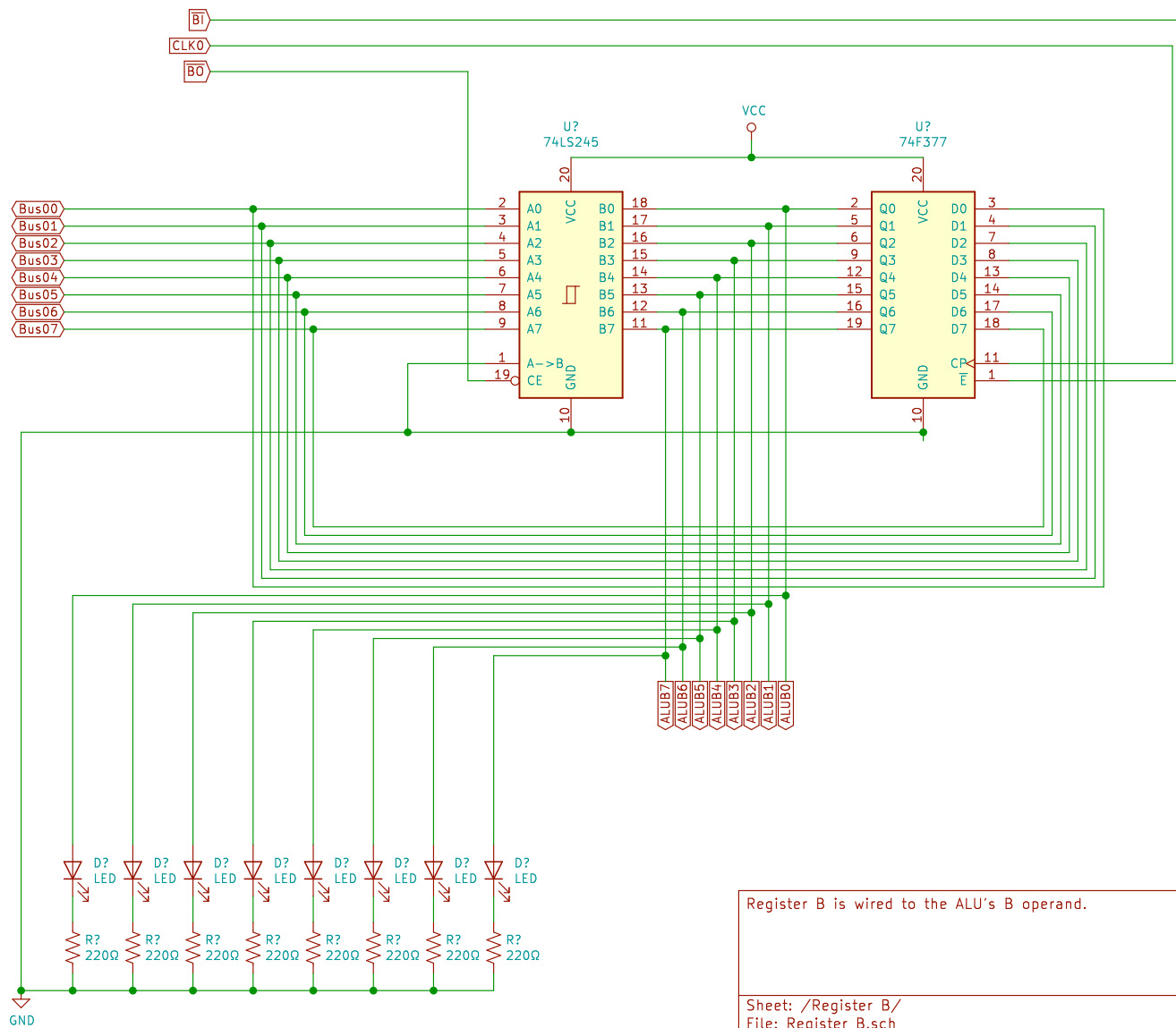
Sheet: /ALU/
File: ALU.sch

Title: ALU

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KiCad E.D.A. eeschema (5.1.0-0)Id: 12/19

Sheet: /ALU/ File: ALU.sch									
Title: ALU									
Size: A					Date:				
KiCad E.D.A. eeschema (5.1.0-0)								Rev:	
								Id: 12/19	



Register B is wired to the ALU's B operand.

Sheet: /Register B/
File: Register B.sch

Title: Register B

Size: A Date:
KiCad E.D.A. eeschema (5.1.0-0)

Rev:
Id: 13/19

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Sheet: /Transfer Register/
File: Transfer Register.sch

Title: Transfer Register

Size: A

Date:

KiCad E.D.A. eeschema (5.1.0-0)

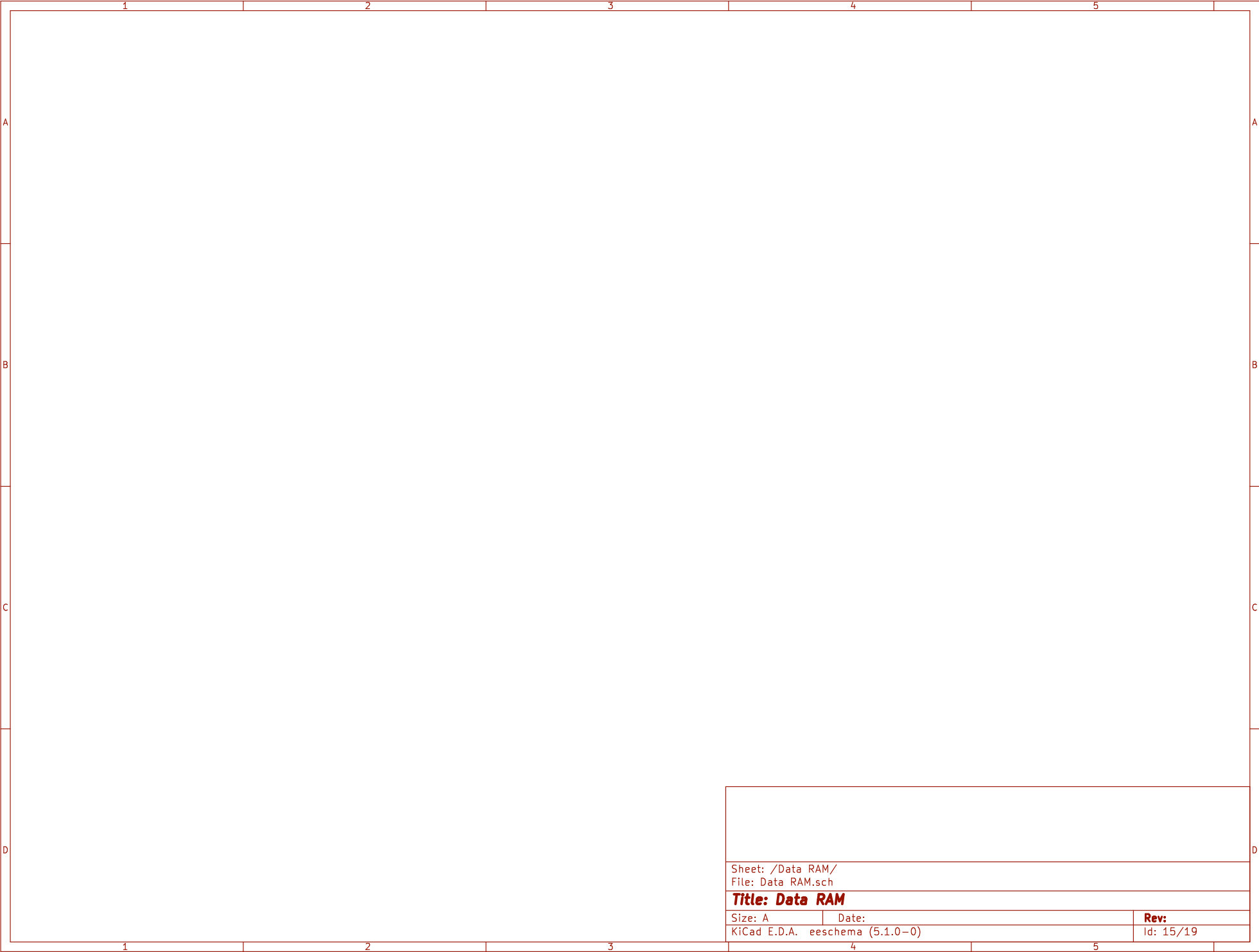
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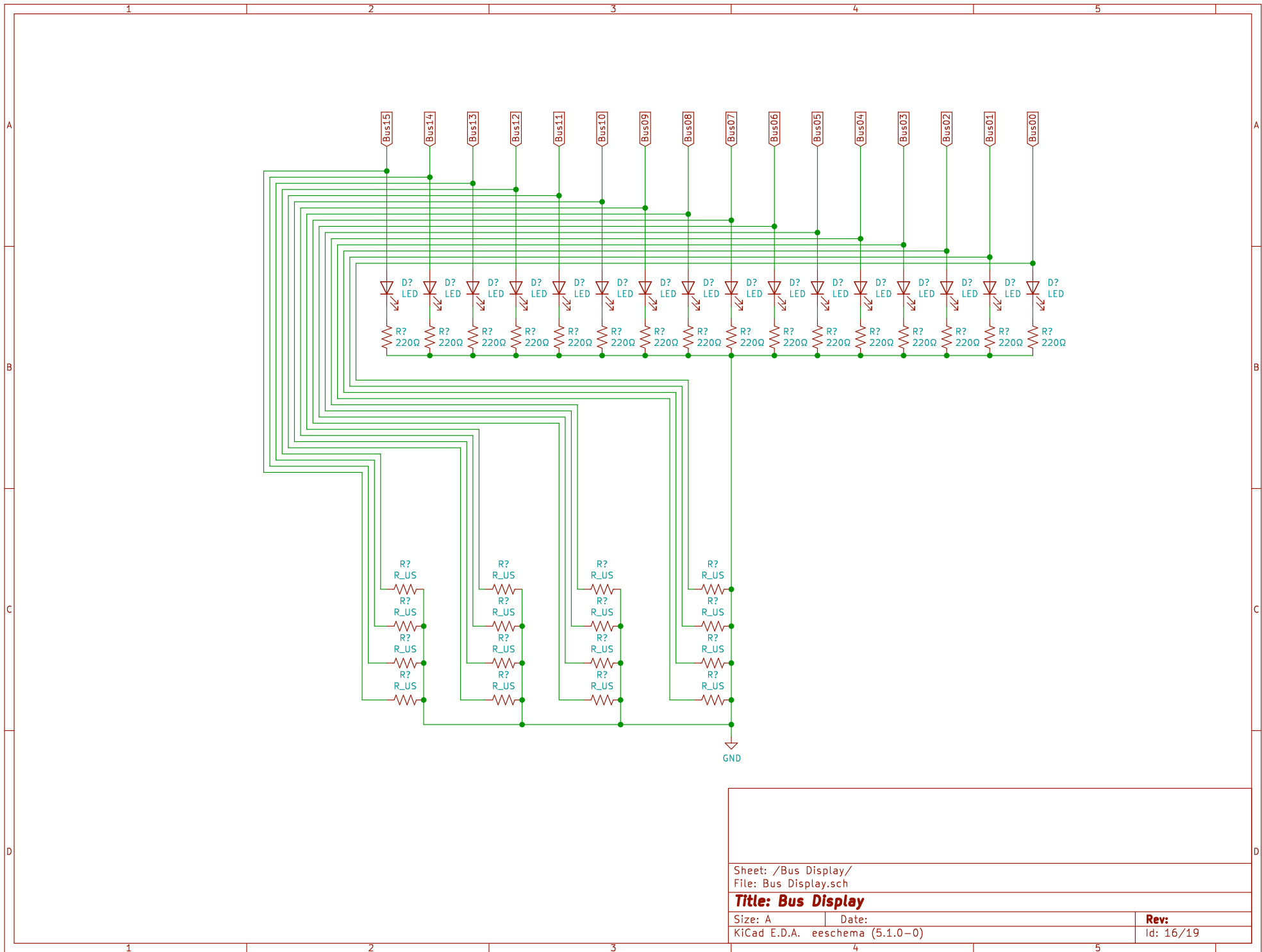
Id: 14/19

Sheet: /Transfer Register/
File: Transfer Register.sch

Title: Transfer Register

Size: A	Date:	Rev:
KiCad E.D.A. eeschema (5.1.0-0)		Id: 14/19





Sheet: /Bus Display/ File: Bus Display.sch		
Title: Bus Display		
Size: A	Date:	Rev:
KiCad E.D.A. eeschema (5.1.0-0)		Id: 16/19

1					2					3					4					5					
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Sheet: /Control Word Display/
File: Control Word Display.sch

Title: Control Word Display

Size: A

Date:

KiCad E.D.A. eeschema (5.1.0-0)

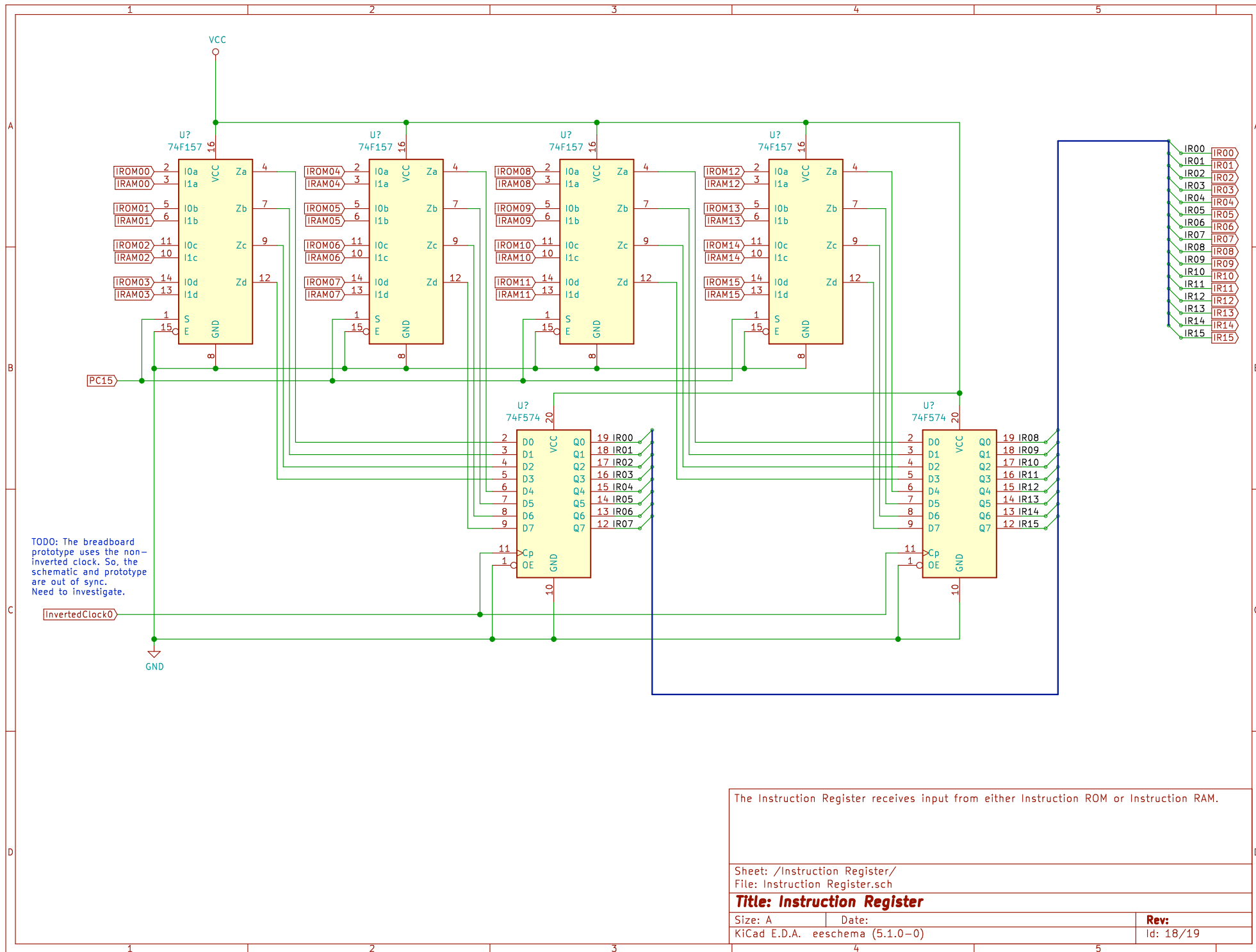
Rev:

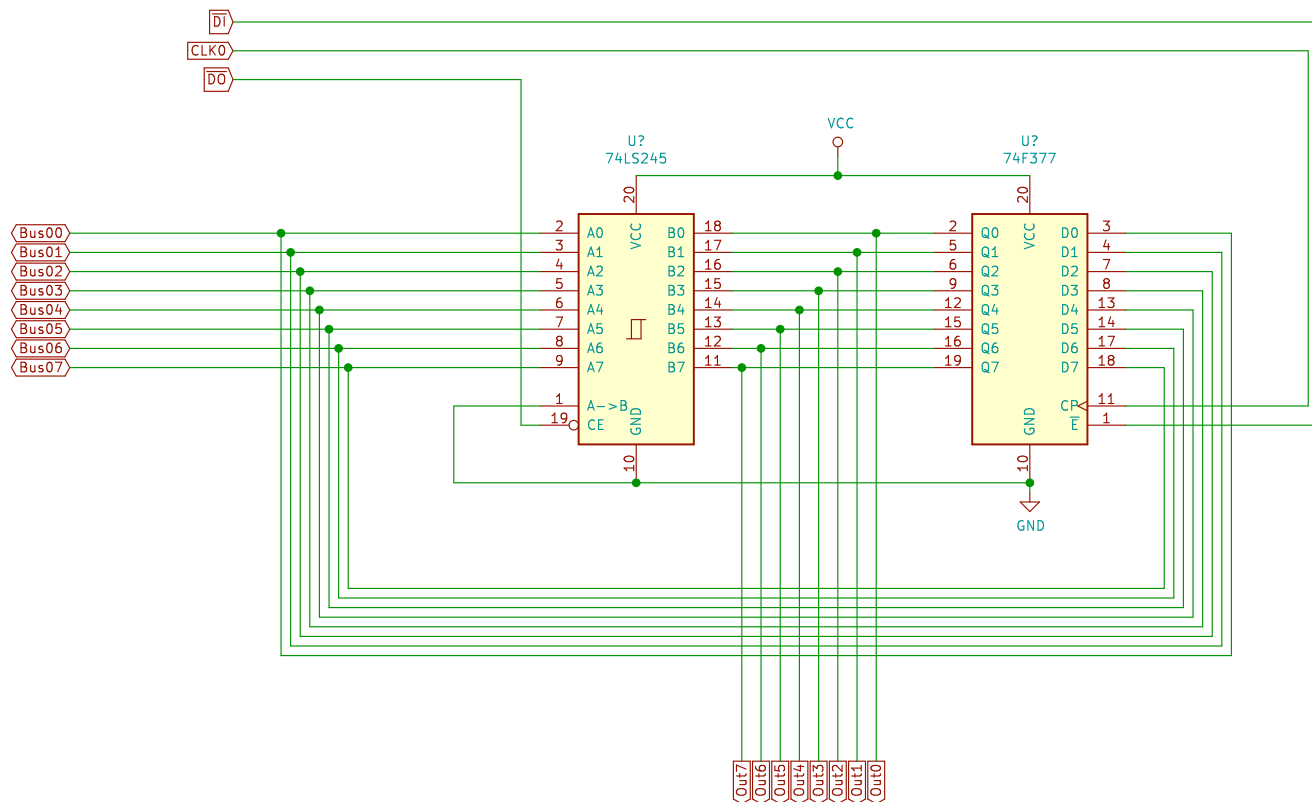
Id: 17/19

Sheet: /Control Word Display/
File: Control Word Display.sch

Title: Control Word Display

Size: A	Date:	Rev:
KiCad E.D.A. eeschema (5.1.0-0)		Id: 17/19





Register D is wired directly to the Output Display Module.