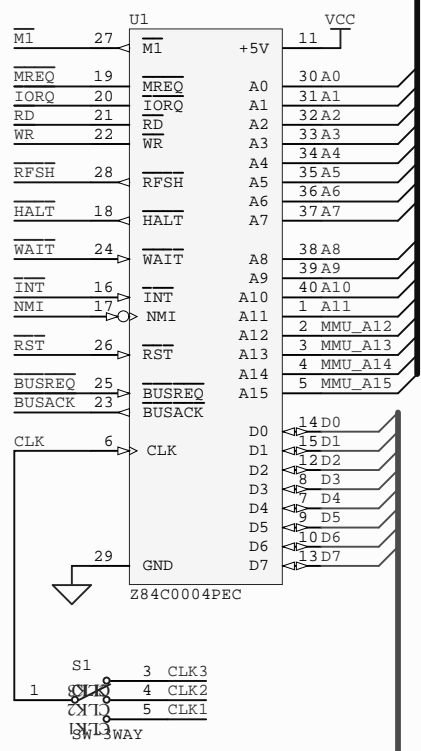
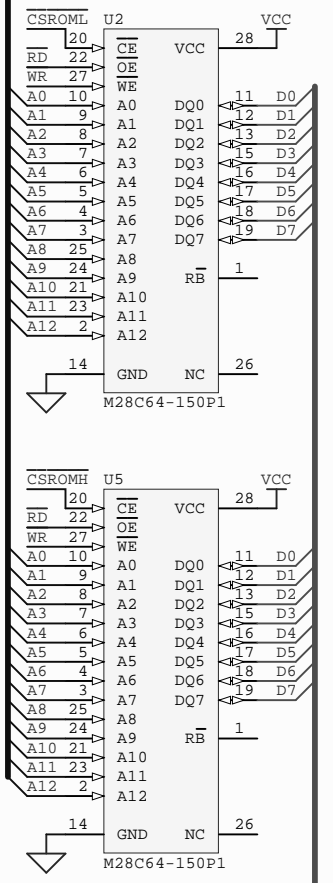


CPU

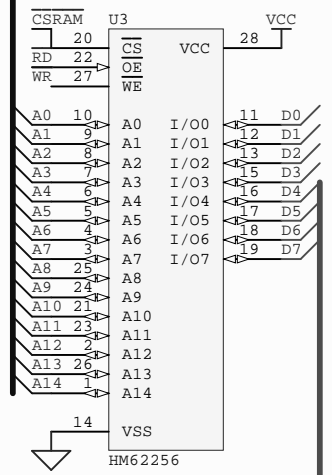


ROM

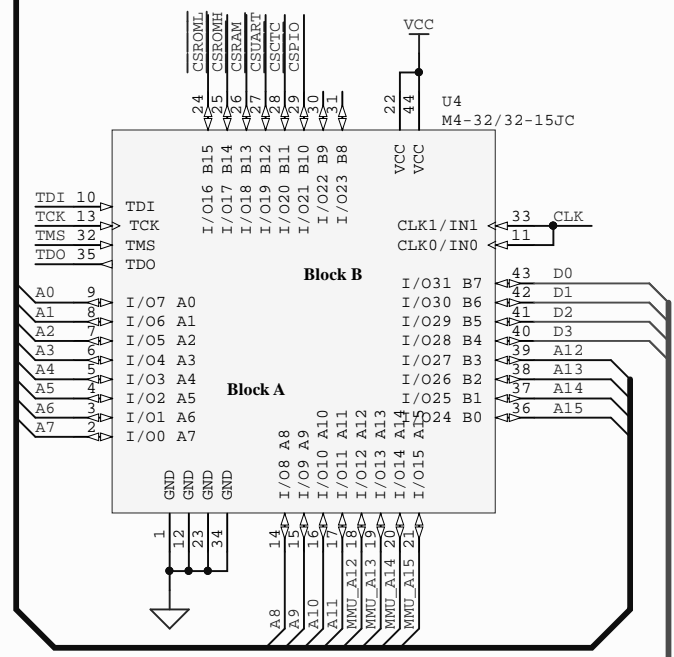
ROM



RAM



Address Decoder

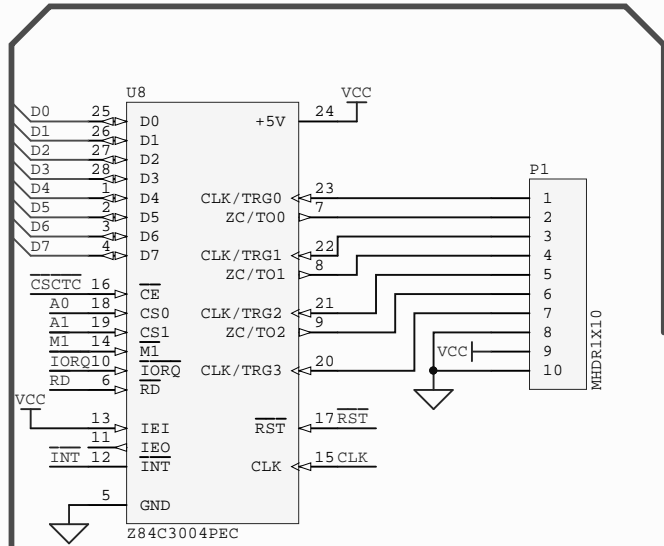


Z80 Micro Computer

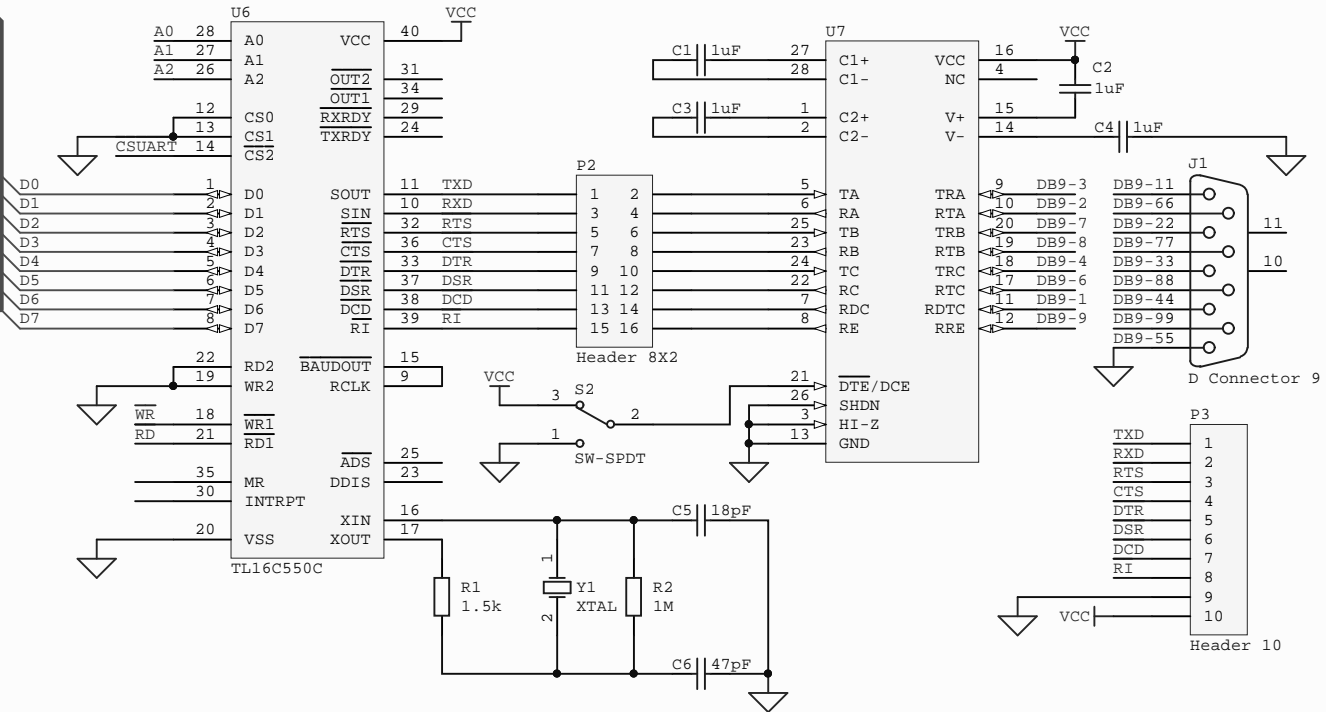
Questo schema e` stato realizzato per il progetto di semestre presso la Scuola delle Arti e Mestieri di Bellinzona. Il progetto di retrocomputing consiste nell'implementazione completa di un architettura tipica per un computer con un processore Z80 dall'hardware al software.

Title z80 Single Board Computer: Base		
Size A4	Number	Revision
Date: 19.05.2017	Sheet 1 of 4	
File: F:\School\...\MainSheet.SchDoc Drawn By: Naoki Pross		

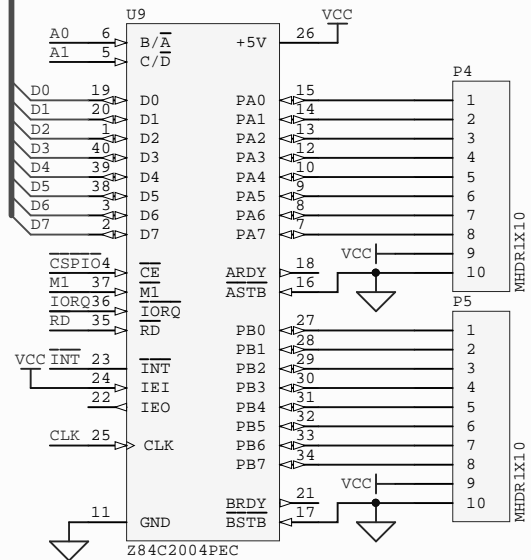
Counter Timer Circuit



Serial Communication Device

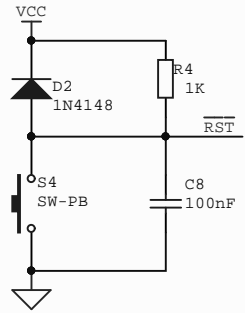


Parallel I/O Controller



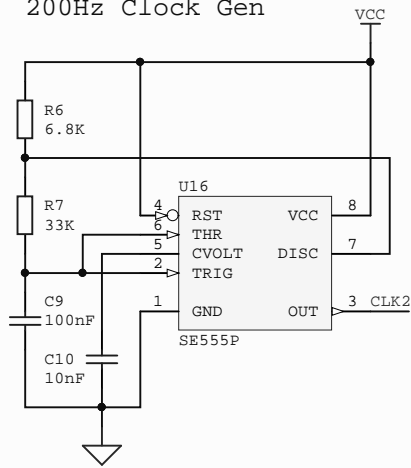
Title		
z80 Single Board Computer: I/O Devices		
Size	Number	Revision
A4		
Date:	19.05.2017	Sheet 2 of 4
File:	F:\School\...\IODevices.SchDoc	Drawn By: Naoki Pross

Reset Circuit

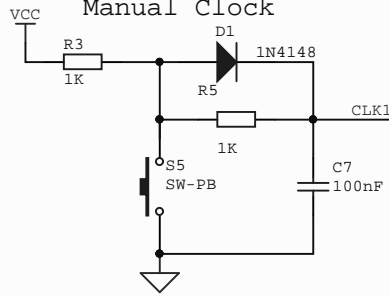


Clock Circuits

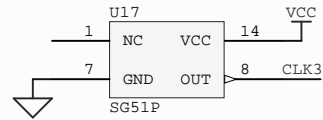
200Hz Clock Gen



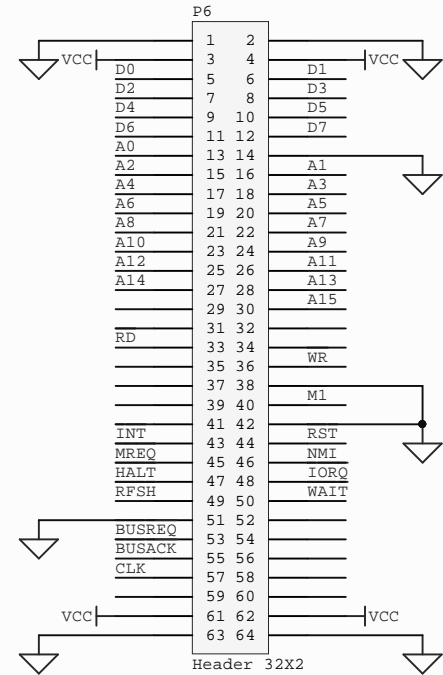
Manual Clock



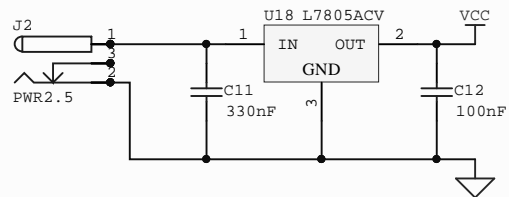
4MHz Clock XTAL



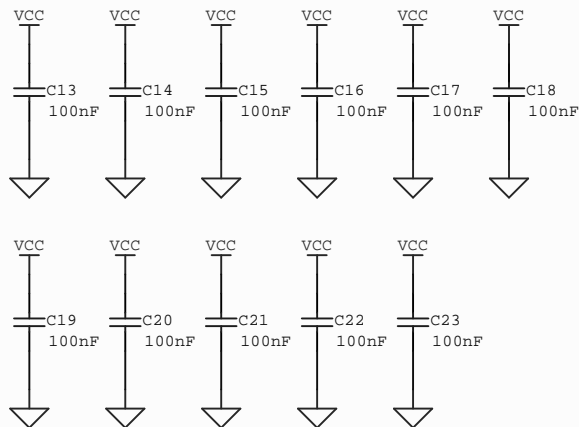
Expansion Connector (DIN41612)



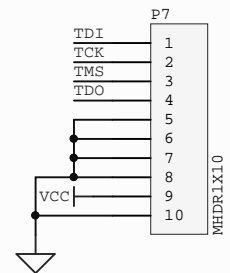
Main Power Supply



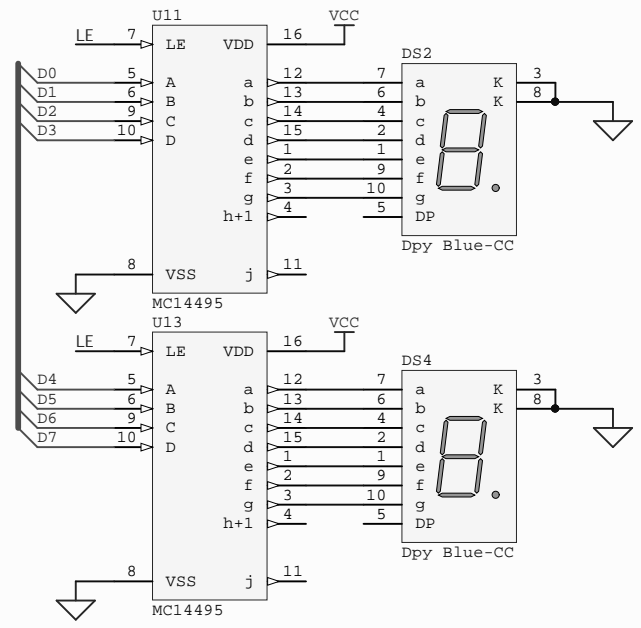
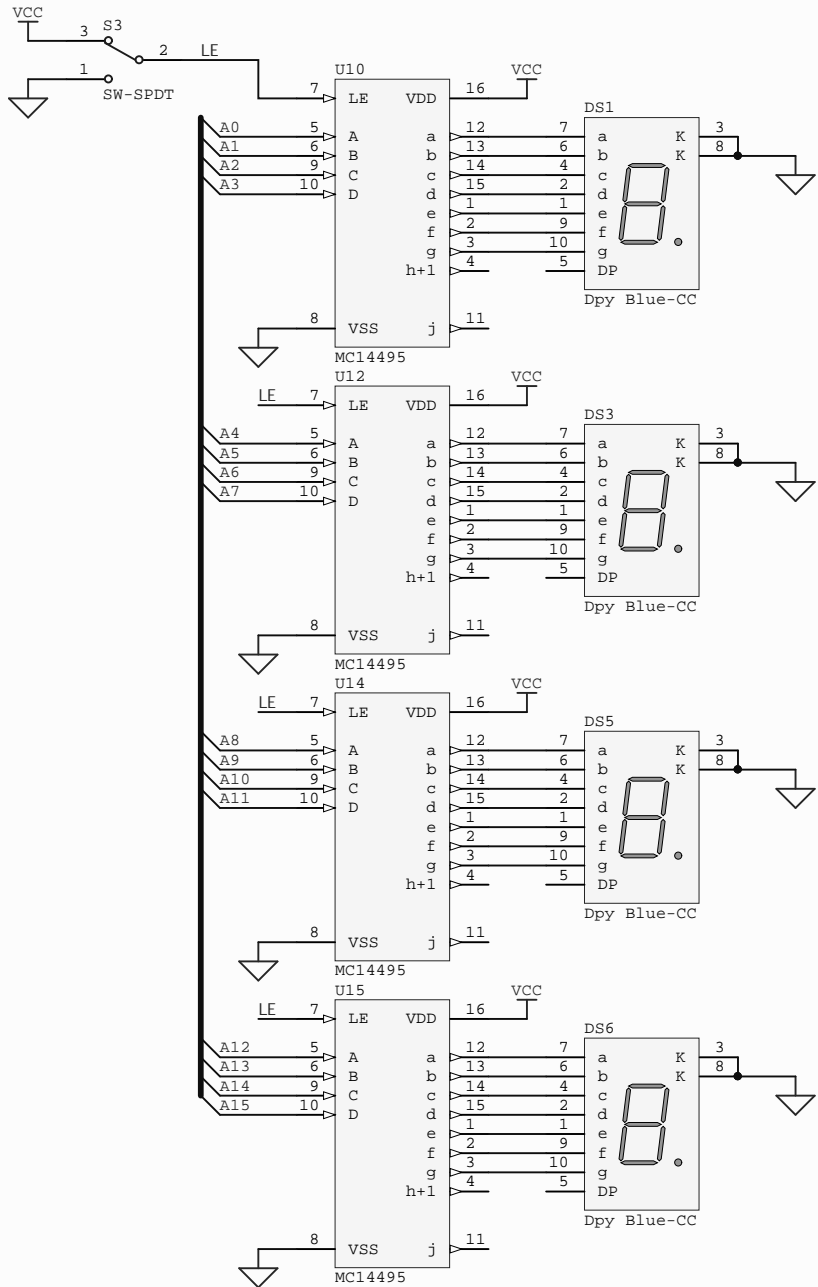
Decoupling Capacitors



Address Decoder CPLD Header



Title z80 Single Board Computer: Peripherals		
Size A4	Number	Revision
Date:	19.05.2017	Sheet 2 of 4
File:	F:\School\...\Peripherals.Sch Drawn By Naoki Pross	



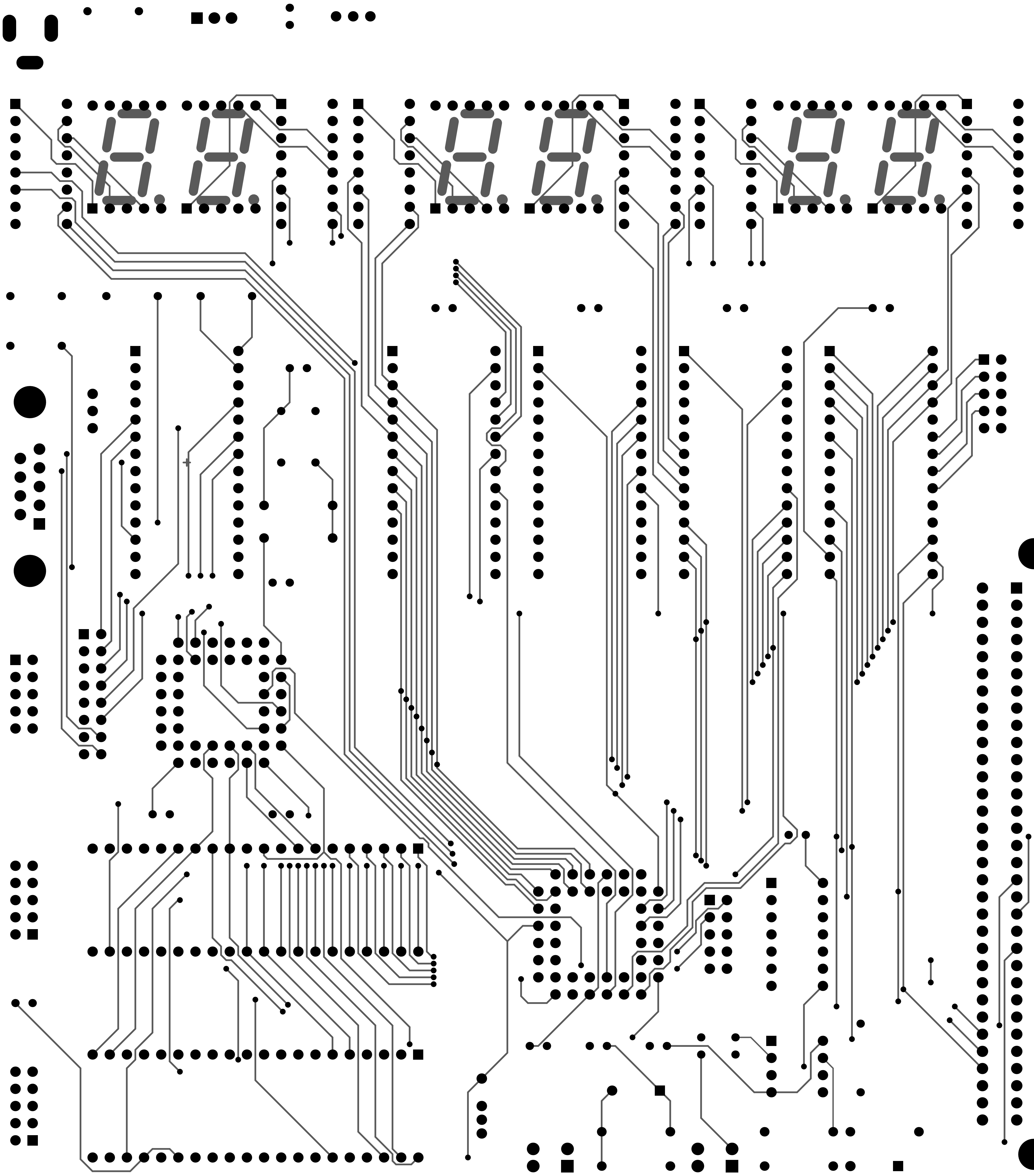
Title z80 Single Board Computer: Bus Data Visualizer		
Size A4	Number	Revision
Date: 19.05.2017	Sheet 4 of 4	
File: F:\School\...\BusViewer.SchDoc Drawn By: Naoki Pross		

Assign impedance area to slot
layer PCB up to 400 ohms
Path 2 - Clearancy, move to internal plane if present

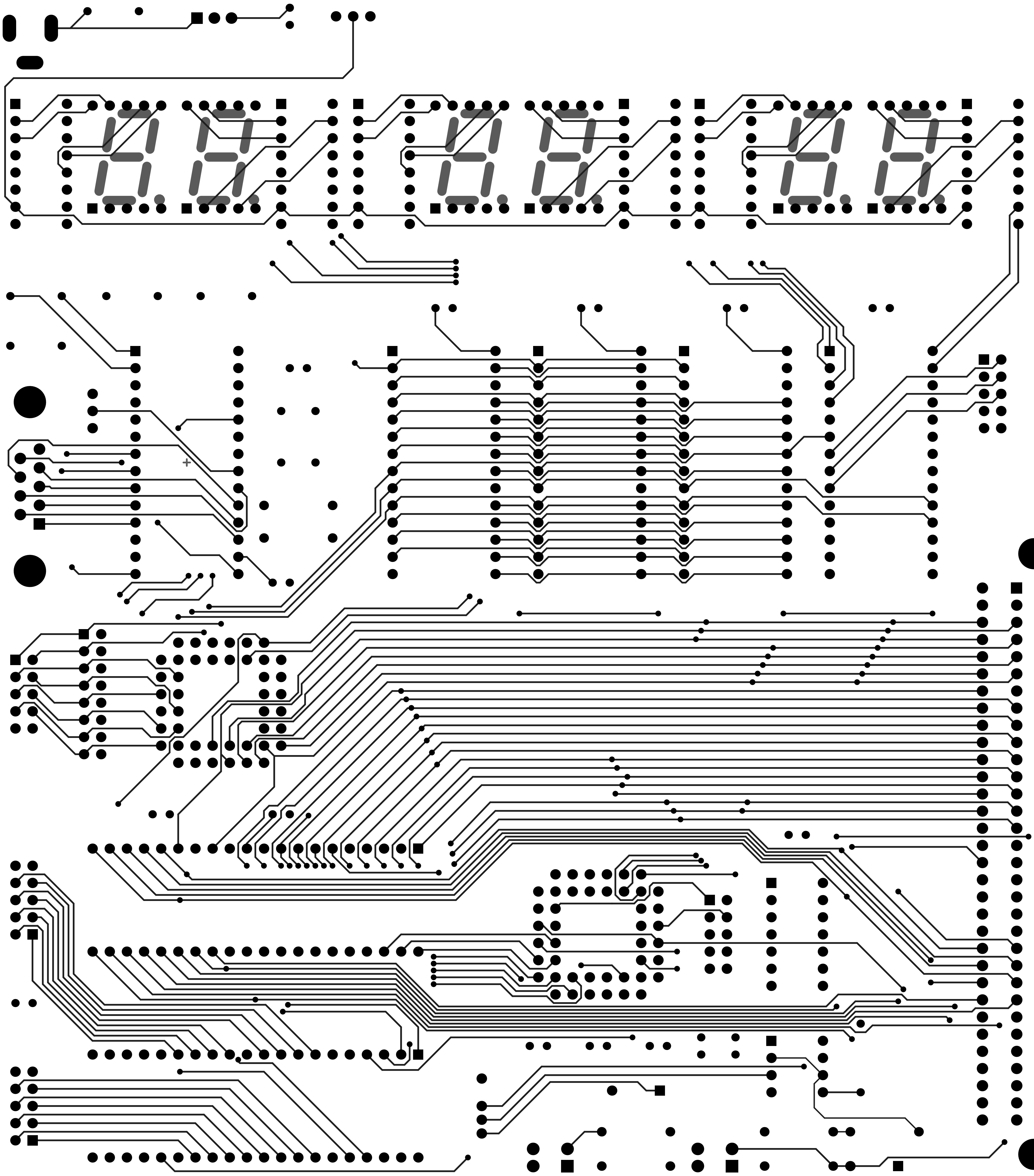
233,35

160,00

PCB Edge



Assign impedance area to slot
layer PCB up to 400 ohms
Pitch 2 - Clearancy, move to internal plane if present



233,35

160,00

PCB Edge

J2

Assign component area to slot
Place PCB slot to slot device
Place 2 - Slot 1
Place 2 - Slot 2
Place 2 - Slot 3
Place 2 - Slot 4
Place 2 - Slot 5
Place 2 - Slot 6
Place 2 - Slot 7
Place 2 - Slot 8
Place 2 - Slot 9
Place 2 - Slot 10
Place 2 - Slot 11
Place 2 - Slot 12
Place 2 - Slot 13
Place 2 - Slot 14
Place 2 - Slot 15
Place 2 - Slot 16
Place 2 - Slot 17
Place 2 - Slot 18
Place 2 - Slot 19
Place 2 - Slot 20
Place 2 - Slot 21
Place 2 - Slot 22
Place 2 - Slot 23
Place 2 - Slot 24
Place 2 - Slot 25
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Place 2 - Slot 27
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Place 2 - Slot 99
Place 2 - Slot 100

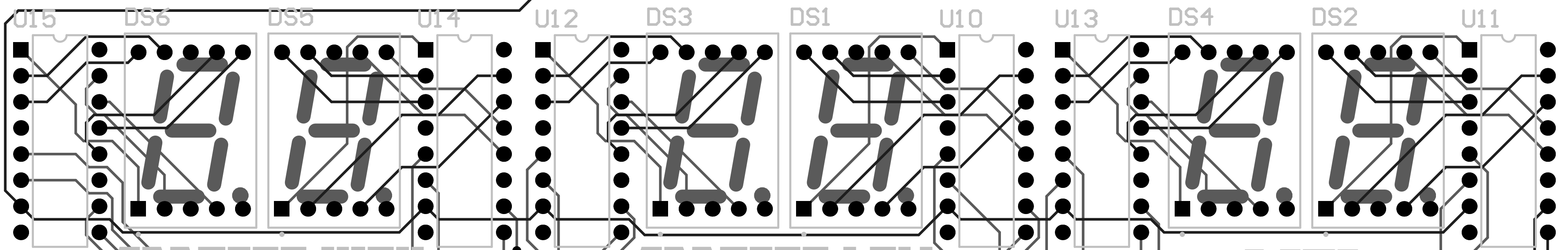
C11

U18

C12

S3

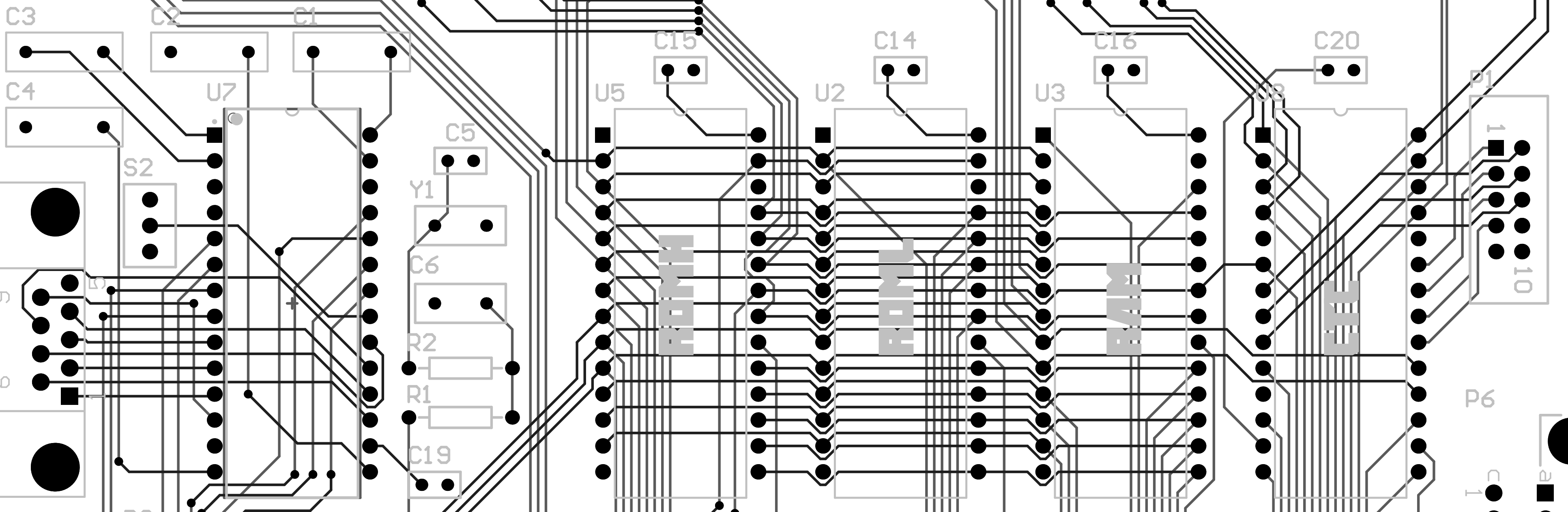
1 3 2



ADDRESS HIGH

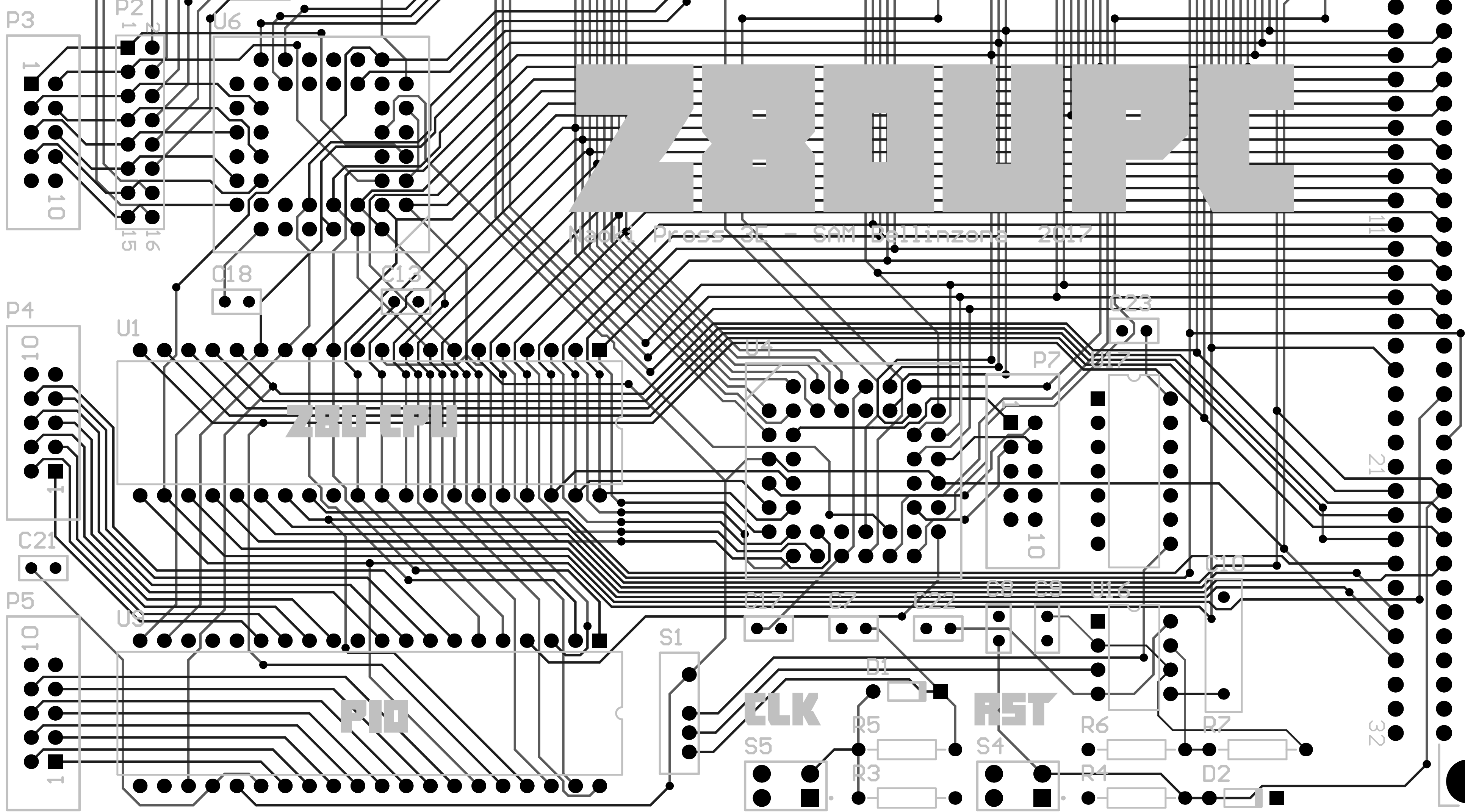
ADDRESS LOW

DATA



Z80 CPU

Micro Process 3k - SAM Gallinzoni 2017



P10

CLK

RST

233, 35

160,00

PCB Edge