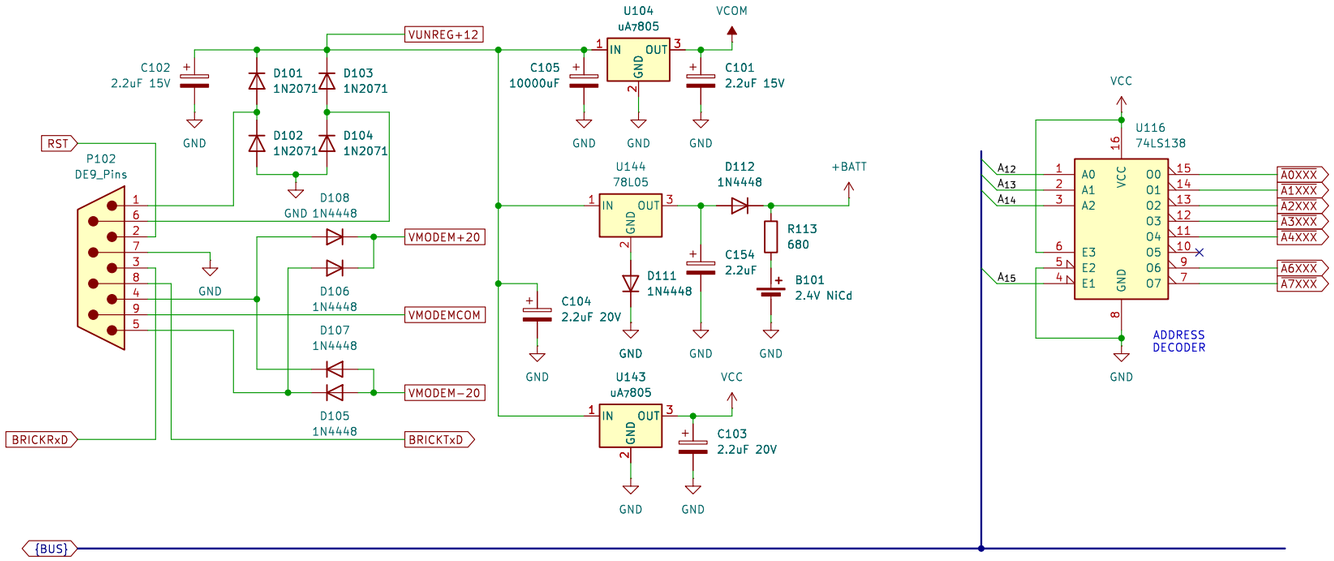


Modem Interface
File: modem.kicad_sch

Keyboard
File: keyboard.kicad_sch

VRAM
File: VRAM.kicad_sch

DMA
File: DMA.kicad_sch

Printer
File: printer.kicad_sch

Video
File: video.kicad_sch

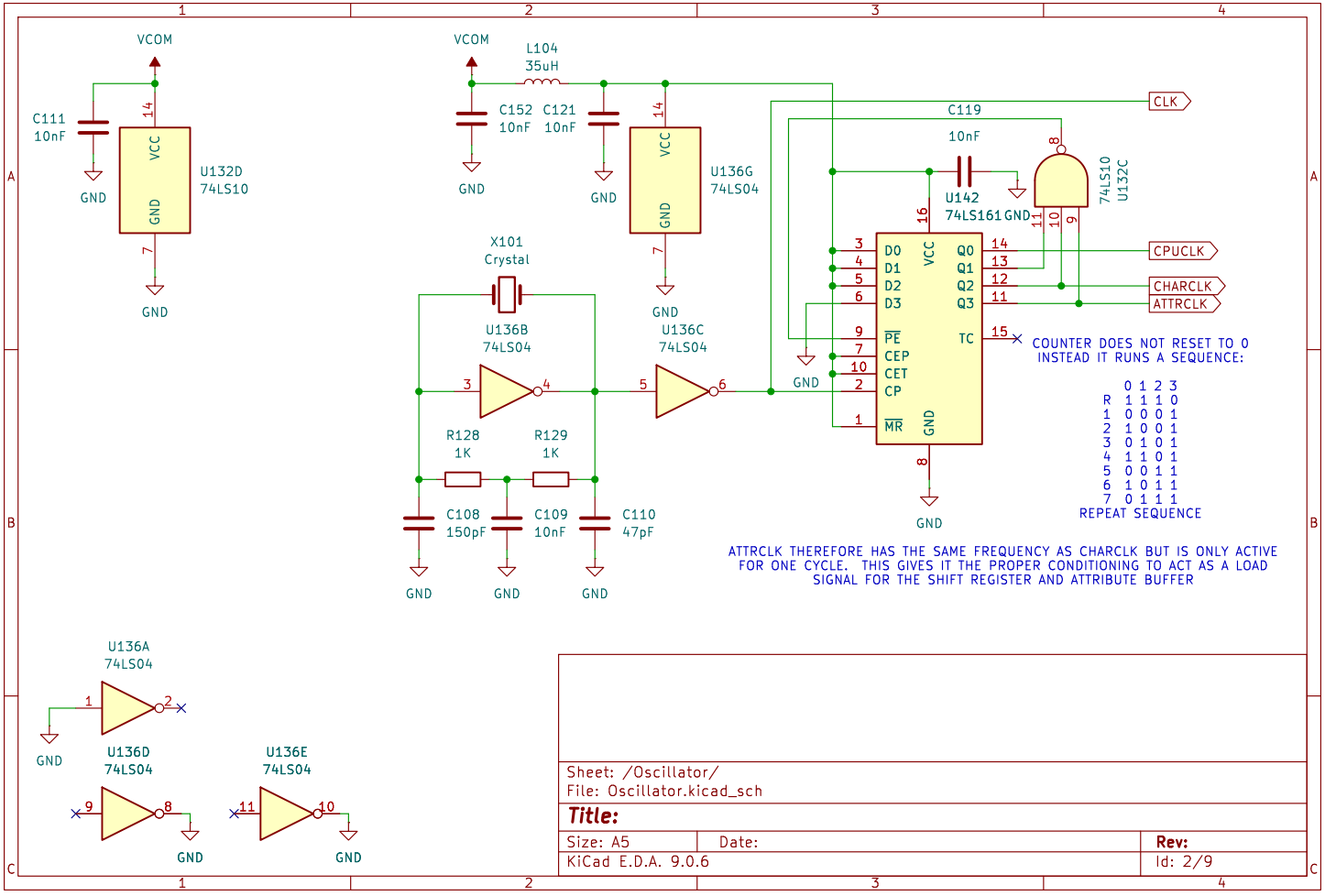
Oscillator
File: Oscillator.kicad_sch

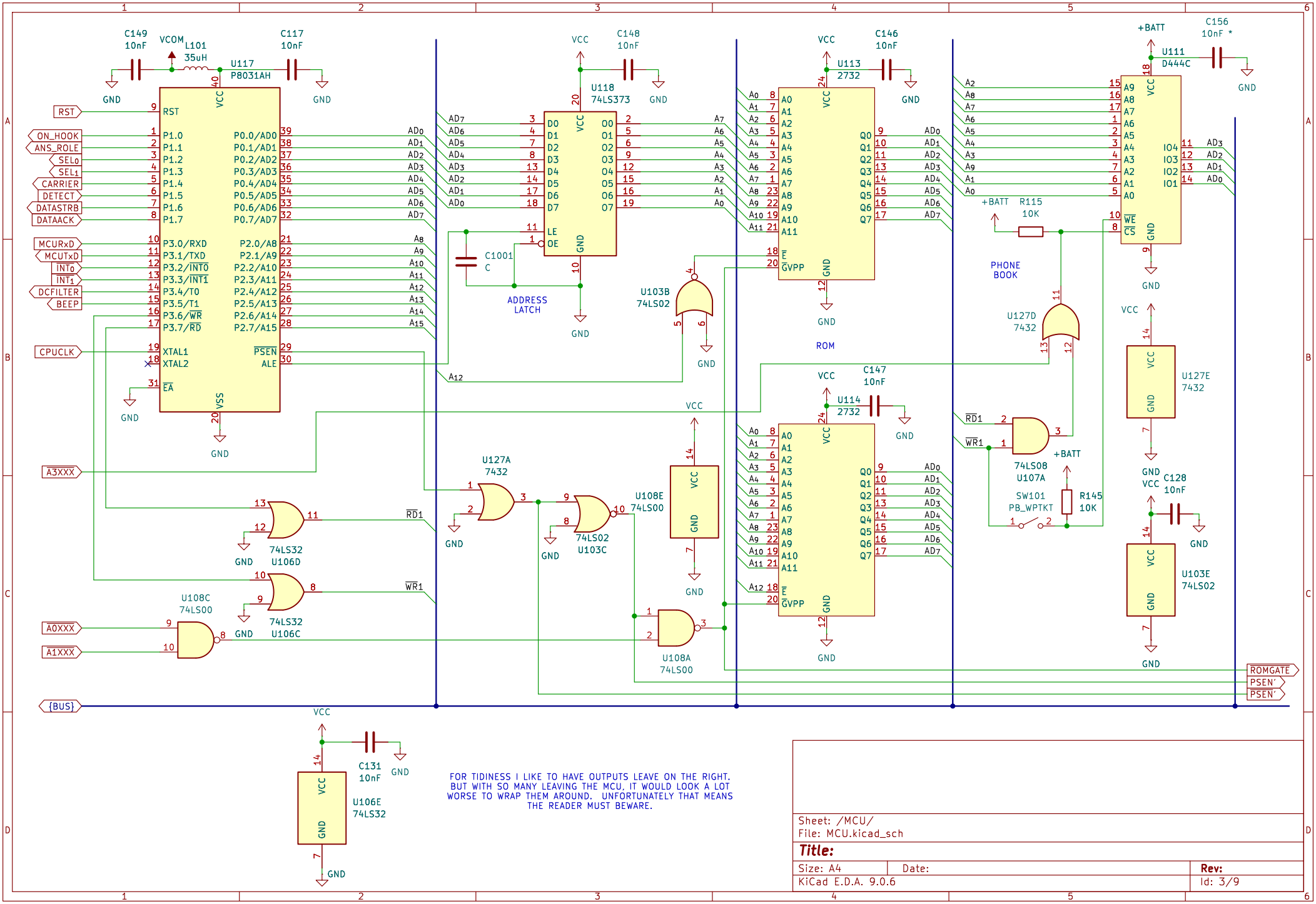
MCU
File: MCU.kicad_sch

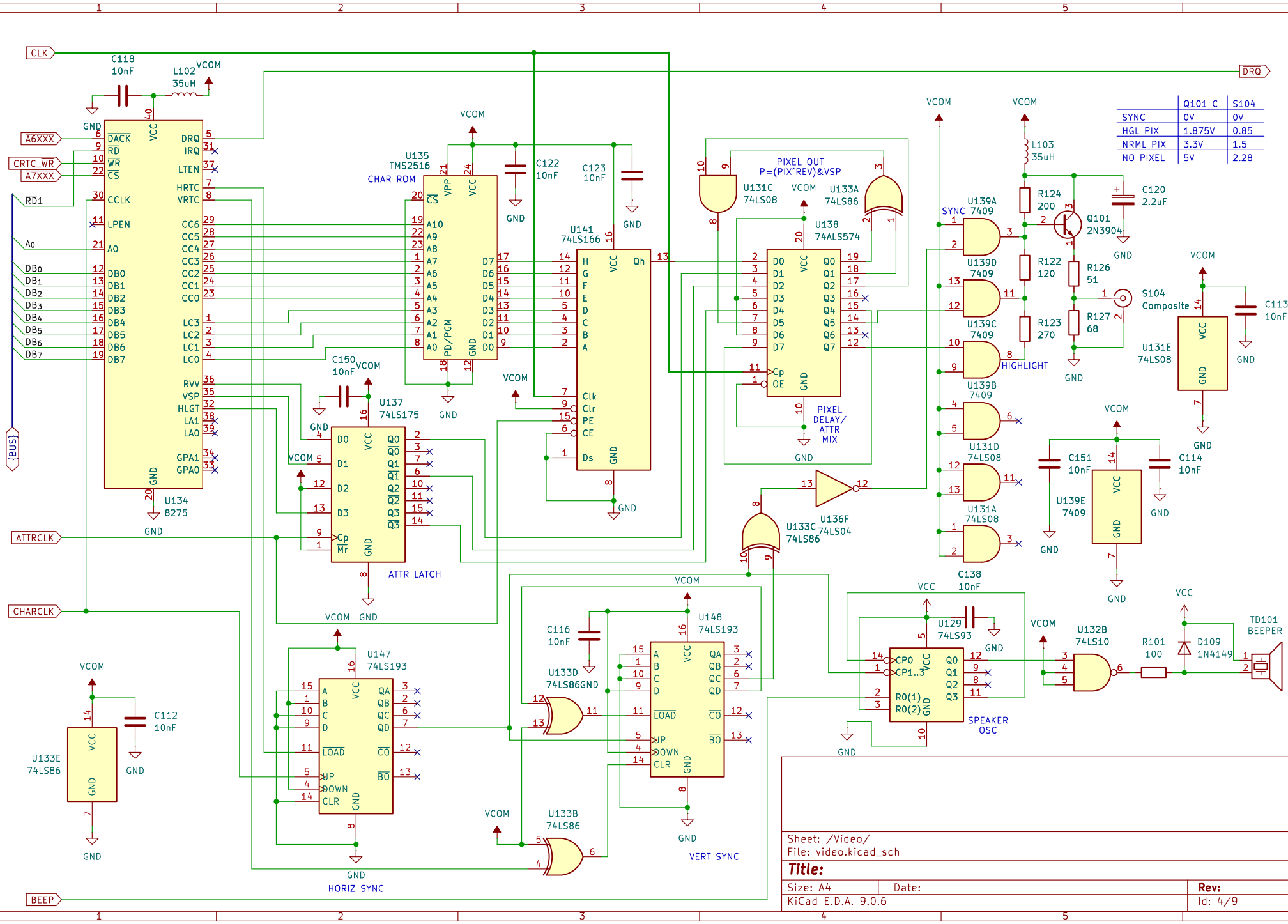
Sheet: /
File: ZT1.kicad_sch

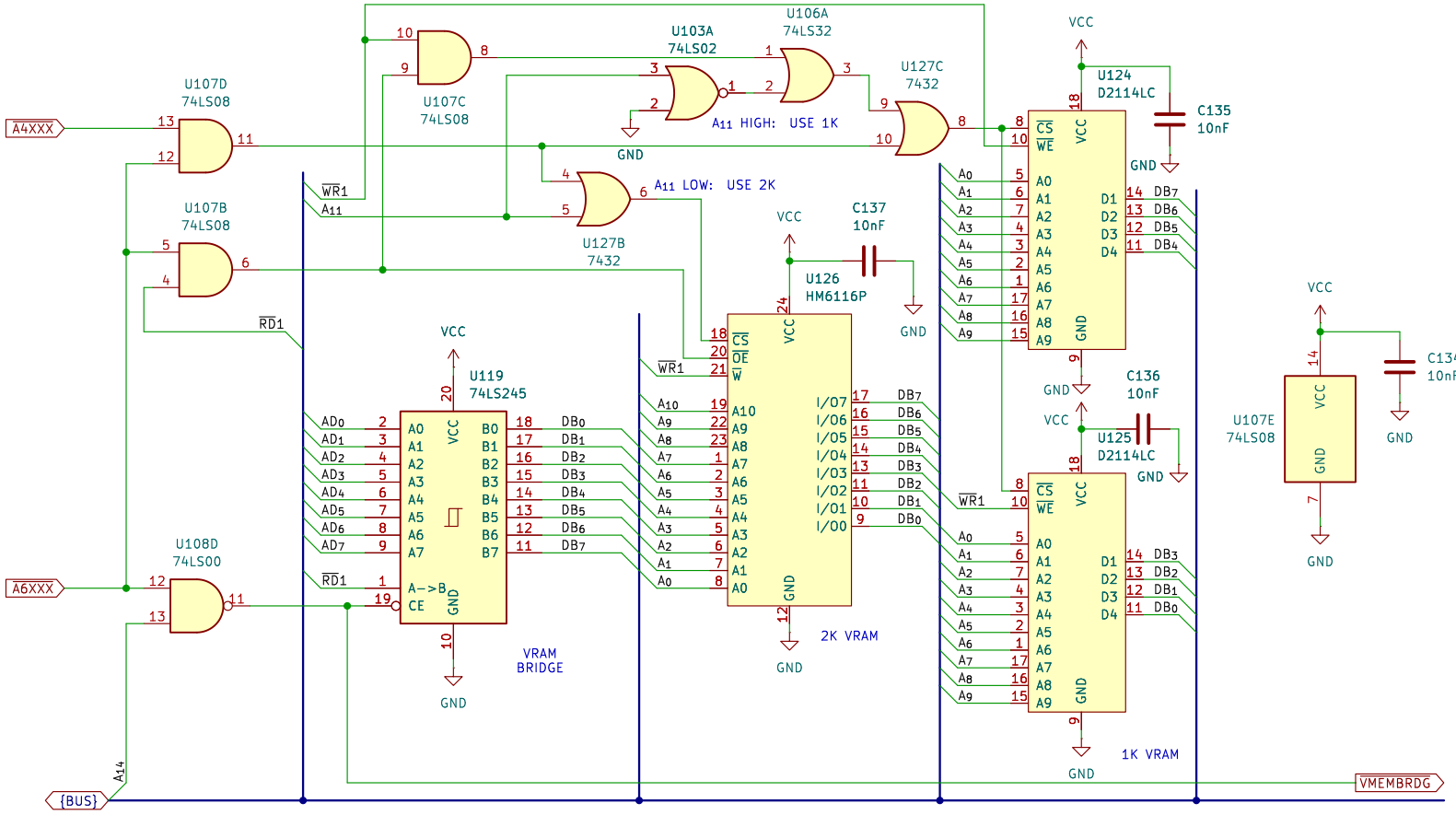
Title:

Size: A3	Date:	**Rev:**
KiCad E.D.A. 9.0.6		Id: 1/9

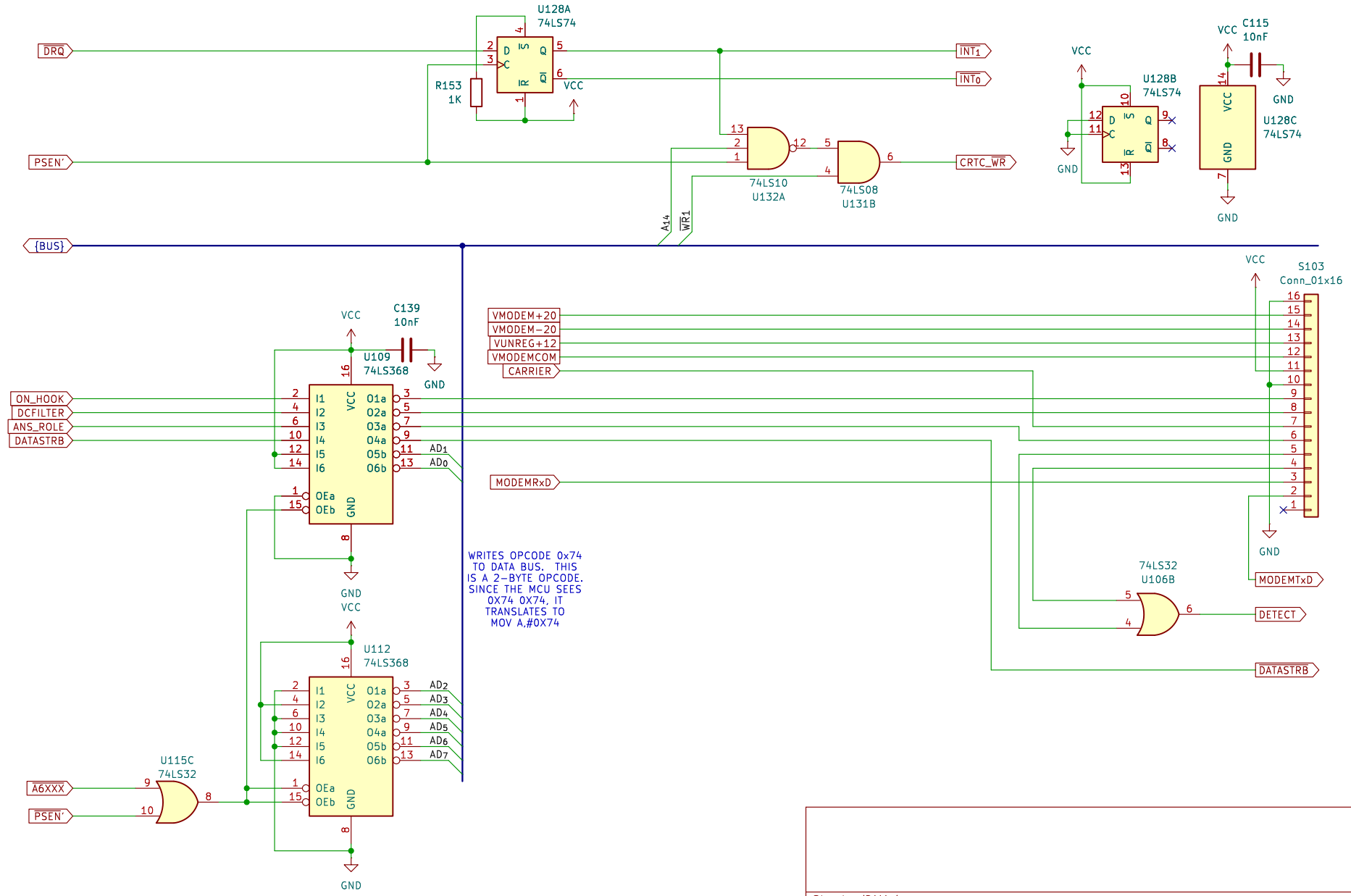

VCOM
C111
10nF
GND
U132D
74LS10
L104
35uH
C152
10nF
C121
10nF
U136G
74LS04
X101
Crystal
U136B
74LS04
U136C
74LS04
R128
1K
R129
1K
C108
150pF
C109
10nF
C110
47pF
C119
10nF
U142
74LS161
74LS10
U132C
CLK
CPUCLK
CHARCLK
ATTRCLK
COUNTER DOES NOT RESET TO 0
INSTEAD IT RUNS A SEQUENCE:
0 1 2 3
R 1 1 1 0
1 0 0 0 1
2 1 0 0 1
3 0 1 0 1
4 1 1 0 1
5 0 0 1 1
6 1 0 1 1
7 0 1 1 1
REPEAT SEQUENCE
ATTRCLK THEREFORE HAS THE SAME FREQUENCY AS CHARCLK BUT IS ONLY ACTIVE
FOR ONE CYCLE. THIS GIVES IT THE PROPER CONDITIONING TO ACT AS A LOAD
SIGNAL FOR THE SHIFT REGISTER AND ATTRIBUTE BUFFER
U136A
74LS04
U136D
74LS04
U136E
74LS04
Sheet: /Oscillator/
File: Oscillator.kicad_sch
Title:
Size: A5
Date:
Rev:
KiCad E.D.A. 9.0.6
Id: 2/9


C149 10nF
VCOM
L101 35uH
C117 10nF
U117 P8031AH
GND
VCC
RST
ON_HOOK
ANS_ROLE
SEL0
SEL1
CARRIER
DETECT
DATASTRB
DATAACK
MCURxD
MCUTxD
INT0
INT1
DCFILTER
BEEP
CPUCLK
EA
XTAL1
XTAL2
PSEN
ALE
P1.0
P1.1
P1.2
P1.3
P1.4
P1.5
P1.6
P1.7
P3.0/RXD
P3.1/TXD
P3.2/INT0
P3.3/INT1
P3.4/T0
P3.5/T1
P3.6/WR
P3.7/RD
P0.0/AD0
P0.1/AD1
P0.2/AD2
P0.3/AD3
P0.4/AD4
P0.5/AD5
P0.6/AD6
P0.7/AD7
P2.0/A8
P2.1/A9
P2.2/A10
P2.3/A11
P2.4/A12
P2.5/A13
P2.6/A14
P2.7/A15
C148 10nF
U118 74LS373
C1001 C
ADDRESS LATCH
U113 2732
C146 10nF
U103B 74LS02
ROM
U114 2732
C147 10nF
U111 D444C
C156 10nF *
+BATT
R115 10K
PHONE BOOK
U127D 7432
U127E 7432
74LS08 U107A
SW101 PB_WPTKT
R145 10K
C128 10nF
U103E 74LS02
U127A 7432
U108E 74LS00
74LS02 U103C
U108C 74LS00
74LS32 U106D
74LS32 U106C
U108A 74LS00
U106E 74LS32
C131 10nF
A3XXX
A0XXX
A1XXX
RD1
WR1
{BUS}
ROMGATE
PSEN'
PSEN'
FOR TIDINESS I LIKE TO HAVE OUTPUTS LEAVE ON THE RIGHT. BUT WITH SO MANY LEAVING THE MCU, IT WOULD LOOK A LOT WORSE TO WRAP THEM AROUND. UNFORTUNATELY THAT MEANS THE READER MUST BEWARE.
Sheet: /MCU/
File: MCU.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. 9.0.6
Id: 3/9

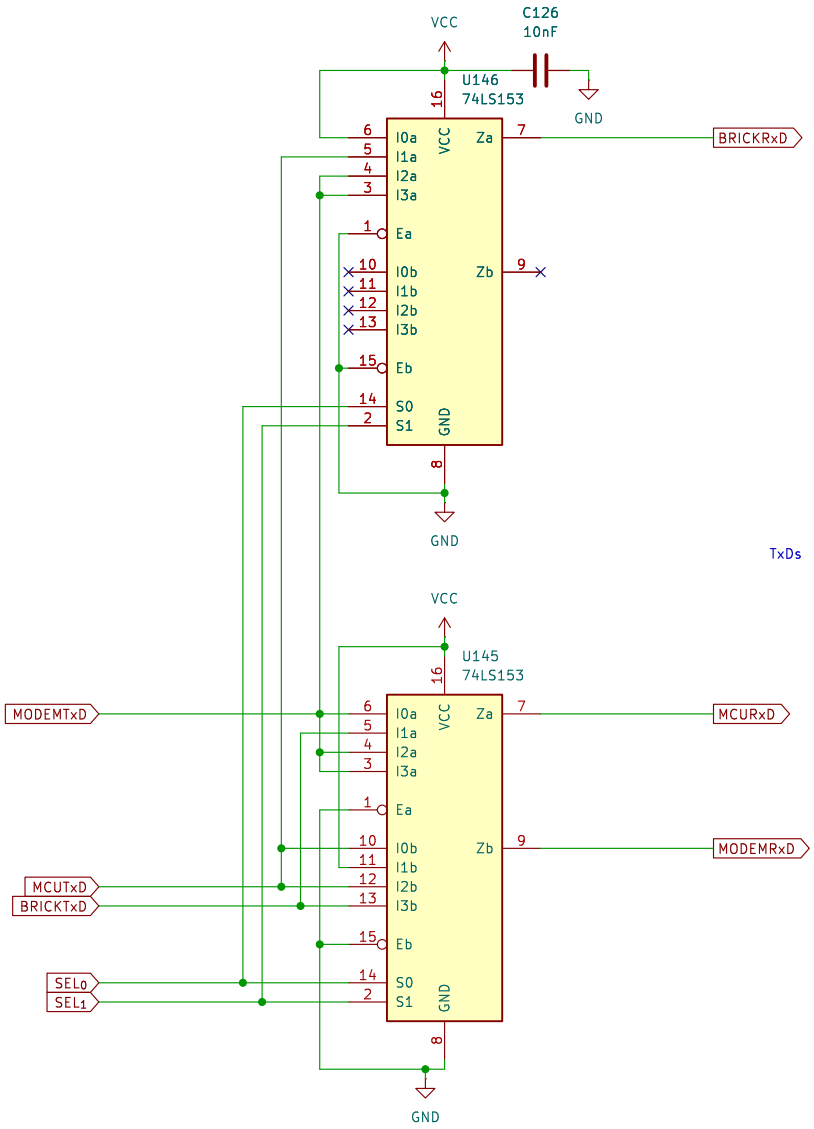

CLK
DRQ
C118
10nF
L102
35uH
VCOM
GND
A6XXX
CRTC_WR
A7XXX
RD1
A0
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
{BUS}
DACK
RD
WR
CS
CCLK
LPEN
DRQ
IRQ
LTEN
HRTC
VRTC
CC6
CC5
CC4
CC3
CC2
CC1
CC0
LC3
LC2
LC1
LC0
RVV
VSP
HLGT
LA1
LA0
GPA1
GPA0
U134
8275
ATTRCLK
CHARCLK
U135
TMS2516
CHAR ROM
C122
10nF
C123
10nF
U141
74LS166
C150
10nF
U137
74LS175
ATTR LATCH
VCOM GND
U147
74LS193
HORIZ SYNC
C116
10nF
U148
74LS193
VERT SYNC
U133D
74LS86GND
U133B
74LS86
U133E
74LS86
C112
10nF
BEEP
PIXEL OUT
P=(PIX^REV)&VSP
U131C
74LS08
U133A
74LS86
U138
74ALS574
PIXEL
DELAY/
ATTR
MIX
U133C
74LS86
U136F
74LS04
L103
35uH
R124
200
R122
120
R123
270
R126
51
R127
68
Q101
2N3904
C120
2.2uF
S104
Composite
U139A
SYNC 7409
U139D
7409
U139C
7409
HIGHLIGHT
U139B
7409
U131D
74LS08
U131A
74LS08
U131E
74LS08
U139E
7409
C113
10nF
C151
10nF
C114
10nF
C138
10nF
U129
74LS93
SPEAKER
OSC
U132B
74LS10
R101
100
D109
1N4149
TD101
BEEPER
Q101 C
S104
SYNC
0V
0V
HGL PIX
1.875V
0.85
NRML PIX
3.3V
1.5
NO PIXEL
5V
2.28
Sheet: /Video/
File: video.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. 9.0.6
Id: 4/9



Sheet: /VRAM/		
File: VRAM.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.6		Id: 5/9



Sheet: /DMA/	
File: DMA.kicad_sch	
Title:	
Size: A4	Date:
KiCad E.D.A. 9.0.6	Id: 6/9



SELECT TABLE

		RxDs MCU	MODEM	BRICK
	0	MODEM	MCU	+5
	1	BRICK	+5	MCU
TxDs	2	MODEM	MCU	MODEM
	3	MODEM	BRICK	MODEM

Sheet: /Modem Interface/
File: modem.kicad_sch

Title:

Size: A4 | Date: | **Rev:**

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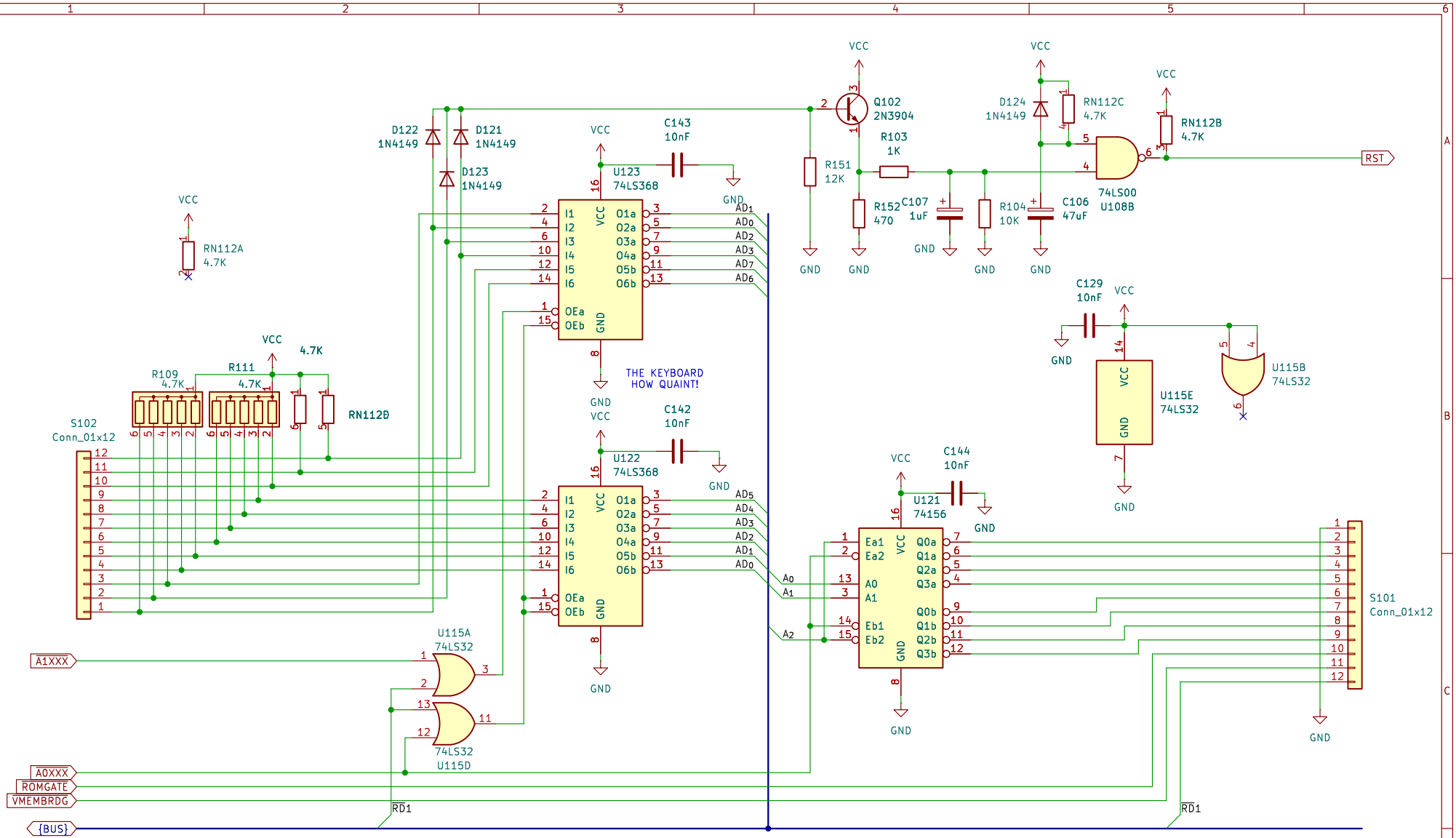
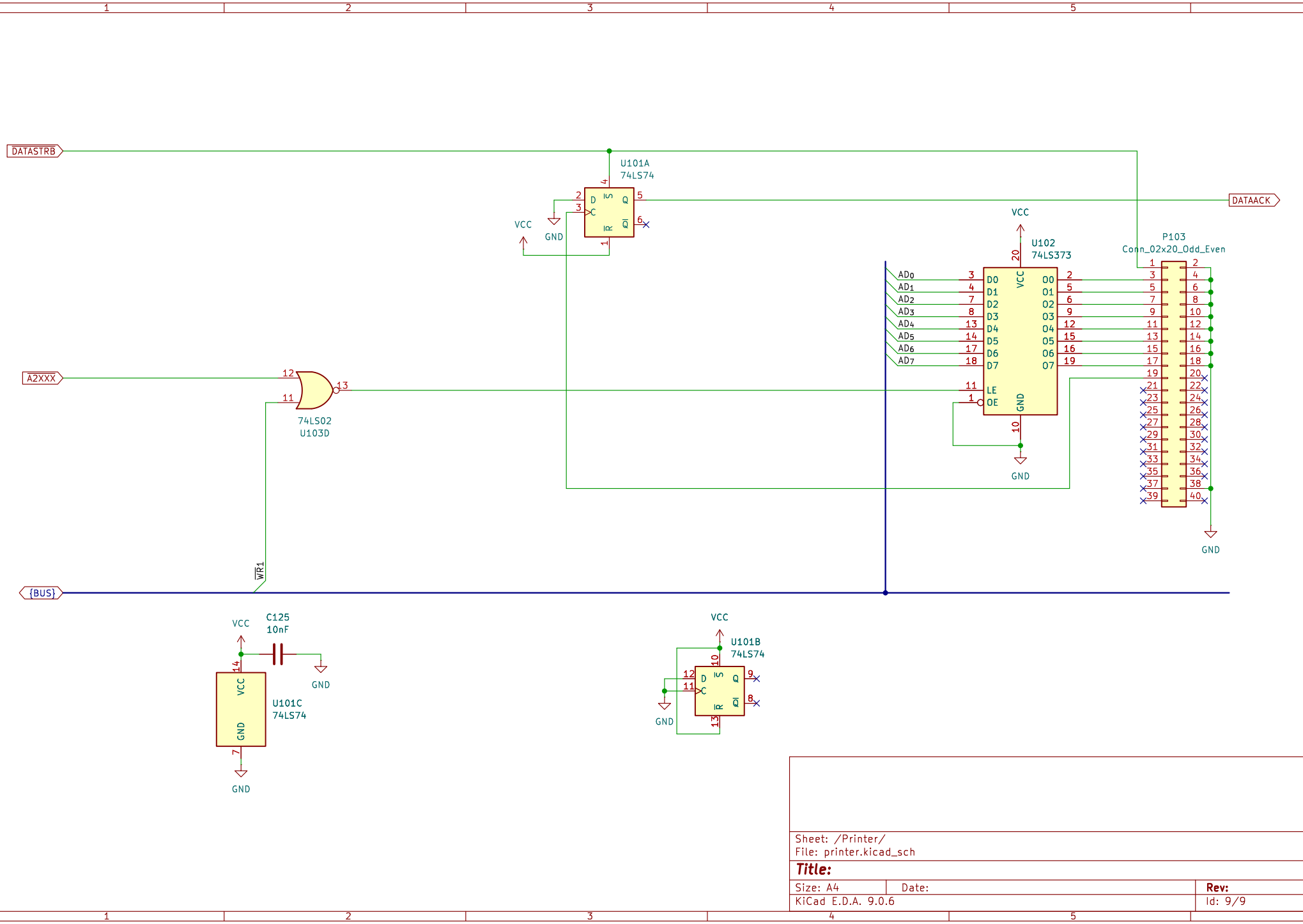


Sheet: /Keyboard/		
File: keyboard.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. 9.0.6		Id: 8/9


DATASTRB
U101A
74LS74
VCC
GND
DATAACK
VCC
U102
74LS373
P103
Conn_02x20_Odd_Even
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
D0
D1
D2
D3
D4
D5
D6
D7
LE
OE
VCC
GND
O0
O1
O2
O3
O4
O5
O6
O7
GND
A2XXX
74LS02
U103D
WR1
{BUS}
C125
10nF
U101C
74LS74
U101B
74LS74
Sheet: /Printer/
File: printer.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. 9.0.6
Id: 9/9