

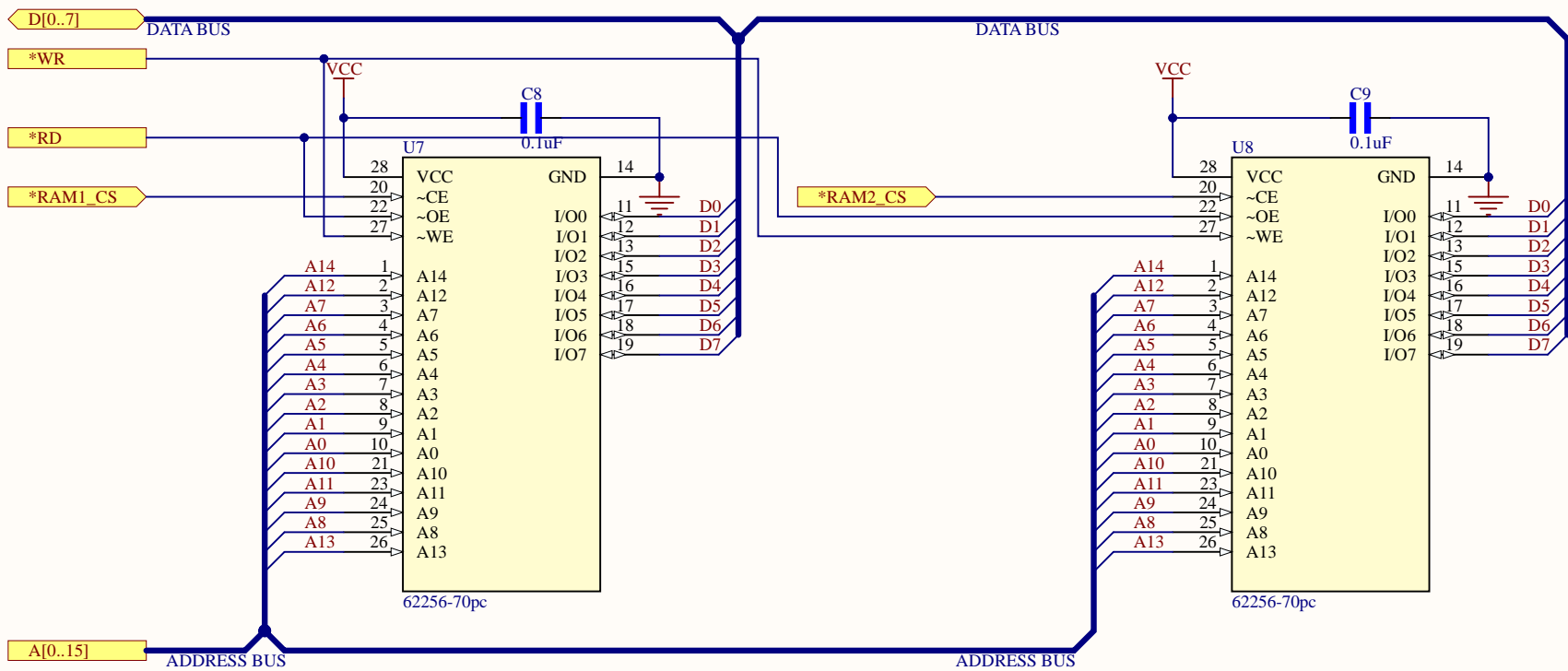
```
/* ROM SPACE */
/* @0x0000H - 0x7FFFH */
/* @0x8000H - 0xFFFFH */

/* RAM SPACE */
/* @0x0000H - 0x7FFFH */
/* @0x8000H - 0xFFFFH */

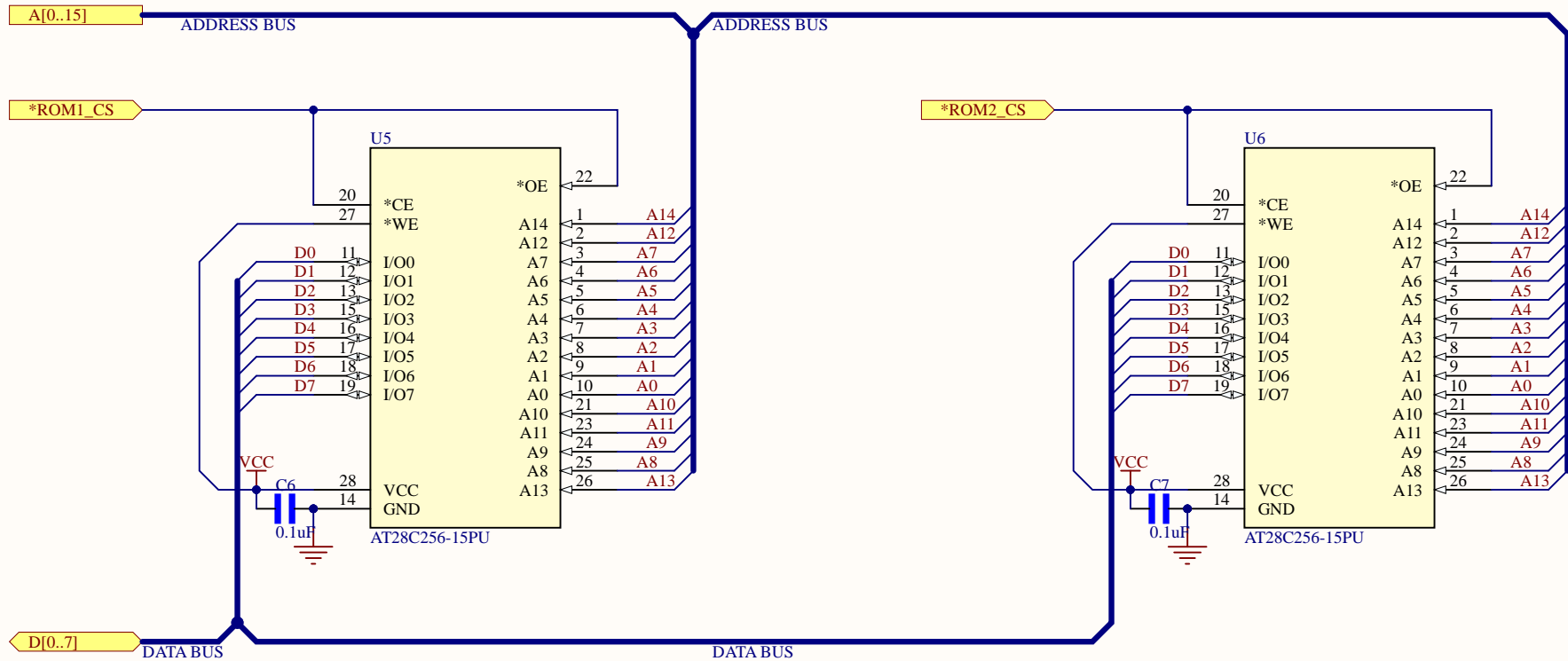
/* IO SPACE */
/* @0x8000H */
/* @0x4000H */
/* RTC_CS <= !(IO_MEM & PSEN & !A15 & !A14 & (!WR # !RD));/* @0x0000H
```

Title		
8051 Core Circuit - ECEN 4330 - Microprocessor Design		
Size	Number	Revision
A		
Date:	4/22/2021	Sheet 1 of 4
File:	C:\Users\...\8051_core.SchDoc	Drawn By: Tyler Zoucha

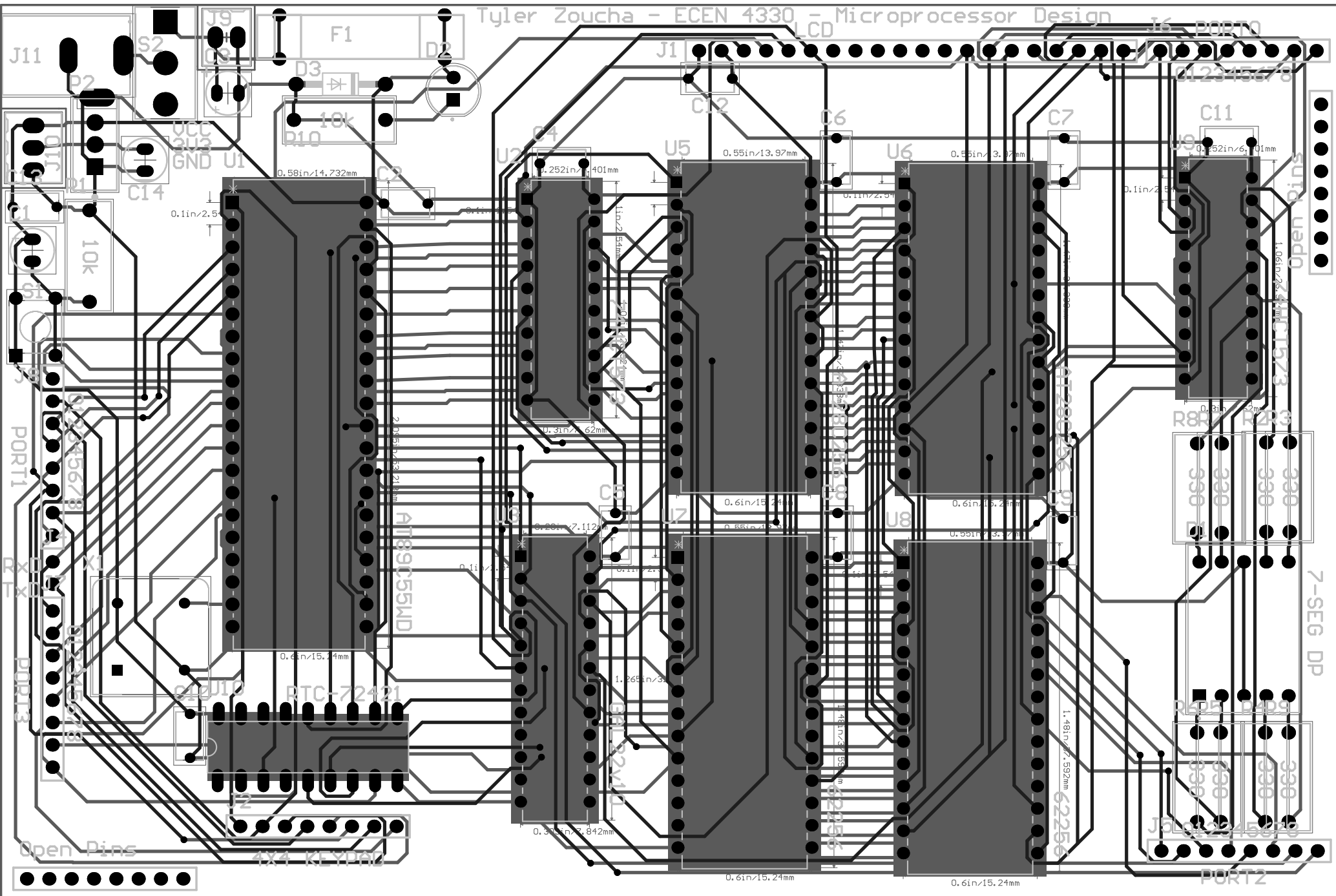




Title		
8051 RAM - ECEN 4330 - Microprocessor Design		
Size	Number	Revision
A		
Date:	4/22/2021	Sheet 3 of 4
File:	C:\Users\...\8051_RAM.SchDoc	Drawn By: Tyler Zoucha



Title		
8051 ROM - ECEN 4330 - Microprocessor Design		
Size	Number	Revision
A		
Date:	4/22/2021	Sheet 2 of 4
File:	C:\Users\...\8051_ROM.SchDoc	Drawn By: Tyler Zoucha



Comment	Description	Designator	Footprint	LibRef	Quantity
10µF	CAP ALUM 10UF 20% 25V RADIAL	C1, C3, C14	CAP TH ALUM ELEC D5.00mm S2.50mm H12.50mm	UKT1E100MDD1TD	3
0.1uF	Lead capacitor X7R(EIA) with Capacitance 680pF, Rated Voltage 1000Vdc	C2, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13	CAP_RDER73A681K2 M1H03A	RDER73A681K2M1H03 A	11
SA56-11SRWA	Display Modules - LED Character and Numeric Red 7- Segment 1 Character Common Anode 1.85V 20mA 0.750 H x 0.500 W x 0.315 D _19.05mm x 12.70mm x 8.00mm_ 10-DIP _0.600, 15.24mm_	D1	DISPLAY_SA56- 11SRWA	SA56-11SRWA	1
151054RS03000	Red 623nm LED Indication - Discrete 1.9V Radial	D2	LED_151054RS03000	151054RS03000	1
1N4001	Diode, Standard, 1a, 50v	D3	DO41-10	1N4001	1
Fuse		F1	Fuse	Fuse	1
LCD Jumper		J1	20pinfemale_SIP	LCD Jumper	1
4x4 Matrix Keypad		J2	8pinheader_female	8pinheader_female	1
UART		J4	2pinheader_male	2pin_header	1
P2.0-P2.7		J5	8pinheader_female	8pinheader_female	1
P0.0-P0.7		J6	8pinheader_female	8pinheader_female	1
P3.0-P3.7		J7	8pinheader_female	8pinheader_female	1
P1.0-P1.7		J8	8pinheader_female	8pinheader_female	1
PWR	TERM BLK 2P SIDE ENT 2.54MM PCB	J9	TE 282834-2	282834-2	1
282834-3	TERM BLK 3P SIDE ENT 2.54MM PCB	J10	TE 282834-3	282834-3	1
5V DC PWR	Power Barrel Connector Jack 2.50mm ID (0.098"), 5.50mm OD (0.217") Through Hole, Right Angle	J11	SWITCHCRAFT_RAPC 712X	RAPC712X	1
PMIC-LD1117V33(TO-220)	Linear Voltage Regulator IC 1 Output 800mA TO-220AB	P2	TO-220-3	PMIC-LD1117V33(TO-220)	1
10K	MPR20C 22R 5%	R1, R10	TO508P1060X500X190 0-2	1-1623809-3	2
330	MPR20C 22R 5%	R2, R3, R4, R5, R6, R7, R8, R9	TO508P1060X500X190 0-2	1-1623809-3	8
1825910-6	Switch Push Button OFF_ON_SPST Round Button 0.05A 24VDC Momentary Contact PC Pins Thru- Hole	S1	SW_1825910-6-4	1825910-6	1
100SP1T1B4M2QE	Toggle Switch SPDT Through Hole	S2	SW_100SP1T1B4M2Q E	100SP1T1B4M2QE	1
AT89C55WD-24PI	No Description Available	U1	PDIP40_600MC_MCH	AT89C55WD-24PI	1
74HCT573N	No Description Available	U2, U9	SOT146-1_NEX	74HCT573N	2
ATF22V10CQZ-20PU	No Description Available	U3	24P3_ATM	ATF22V10CQZ-20PU	1
AT28C256-15PU	No Description Available	U5, U6	28P6_ATM	AT28C256-15PU	2
62256-70pc	No Description Available	U7, U8	P15	cy62256-70pc	2
RTC72421	<b>Real Time Clock</b><p> <a href="http://www.foxonline.com/72421.htm">http://www.foxonline.com/72421.htm</a>	U10	DIL18	RTC72421	1
ECS-2200B-120	TL Oscillator 8-DIP, 4 Leads	X1	OSC_ECS-2200B-120	ECS-2200B-120	1