20 Steel

output [15:0] address

inout [7:0] data

input $\overline{RES}$

input DBE ↳ puts data in Hi-Z

output R/W

output ϕ_1

output ϕ_2

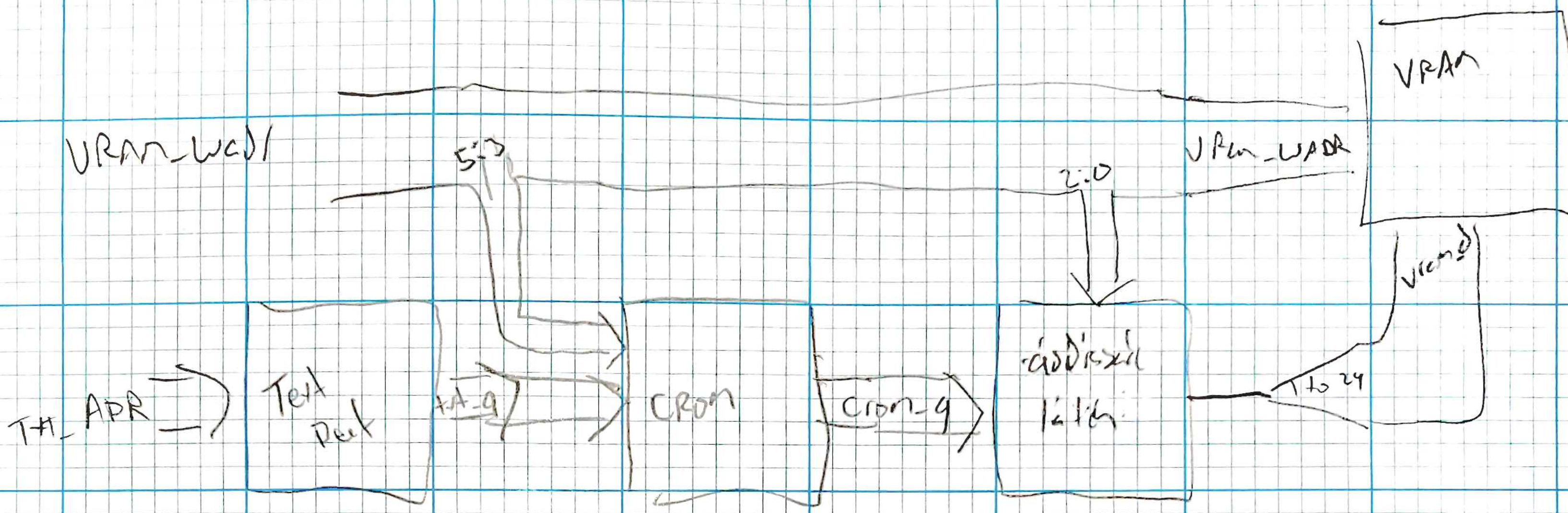
input clock

input RDY

input $\overline{NMI}$ neg edge

input $\overline{IRQ}$

00
01
02
03
04
05
06
07
08
09
0A
0b
0C
0d



7 x 8

L : 4C
010011000000
2 6 0

x 7 x cell
x 40 x line
y 8 y cell
y 24

ASCII
30-20
80-20

30
D0

32

1e0
1e3

1e0

7 6 5 4 3 2 1 0

0000000 DDD

ASCII - 64 char

0 1 0 0 1 0 0 0 0 0 1

2 4 1

00	00	
1	1C	x x x
2	22	x x
3	2a	x x x
4	2e	x x x x
5	2c	x x x
6	20	x
7	1e	x x x x
8	00	
9	08	x
a	14	x x
b	22	x x
c	22	x x
d	3e	x x x x x
e	22	x x
f	22	x x
10 / 00010000	00	
	3C	x x x x
	22	x x
	22	x x
	3C	x x x x
	22	x x
	22	x x
	3C	x x x x
18 / 00011000	00	
	1C	x x x
	22	x x
	20	x
	20	x
	20	x
	22	x x
	1C	x x x

0 0000000000

280 0010001 1000

560 0100011 0000

840 0110100 1000

1120 1000110 0000

x x x x x 000

] = 5D = 0 1 0 1 1 1 0 1 0 0 0 0 1 0 0 1 1 0 0 0 0 0

2 e 8   2 6 0

4C: 00, 20, 20, 20, 20, 20, 20, 3e

0 4F

0100 1111 0000

2 7 8

208

80 x
be x x x x x x
86 x x x
86 x x x
86 x x x
86 x x x
86 x x x
be x x x x x x

1A0

00	
04	x
0C	x x
14	x x
24	x x
3e	x x x x x
04	x
04	x

5D 0 1 0 1 1 0 1 1 0 0 0

2 D 8

208

80 x
be x x x x x x
b0 x x x
b0 x x x
b0 x x x
b0 x x x
b0 x x x
be x x x x x x

01011010

5A

H: A2, A2, A2, BE, A2, A2, A2

E: BE, A0, A0, BC, A0, A0, BE

L: A0, A0, A0, A0, A0, A0, BE

O: 9C, A2, A2, A2, A2, A2, 9C

0 = @A

1 = BC

2 = DE

3 = FG

4 = HI

T = 54   0 1 0 1 0 1 0 0 0 0 0

2 A 0

I = 49   0 1 0 0 1 0 0 1 0 0 0 0

2 4 8

M = 4D   0 1 0 0 1 1 0 1 0 0 0

2 6 8

CROM-addr text

		x_cntr	y pos	
00	00	0 0 0 0 0 0 0 0	0 0 0 1	
01	01	1 0 0 0 0 0 0 1	0 0 1 0	
02	02	2 0 0 0 0 0 1 0	0 0 1 1	
03	03	3 0 0 0 0 0 1 1	0 1 0 0	
04	04	4 0 0 0 0 1 0 0	0 1 0 1	
05		5 0 0 0 0 1 0 1	0 1 1 0	
		6 0 0 0 0 1 1 0	0 1 1 1	
		7 0 0 0 0 1 1 1	1 0 0 0	
		80 7	0 1 0 1 0 0 0 0	0
		81 5	1	1
		82 4	1	2
		83 3	1 1	3
		84 2	1	
		85 1	1 1	
		86 0	1 1	
		87 6	1 1 1	
		88 5	1	
		89 4	1 1	
		90 3	1 1	
		91 2	1 1 1	
		92 1	1 1	
		93 0	1 1 1	
		94 6	1 1 1	
		95 5	1 1 1 1	
		96 4	0 1 1 0 0 0 0 0	
		97 3	1	
		98 2	1	
		99 1	1 1	
		100 0	1	