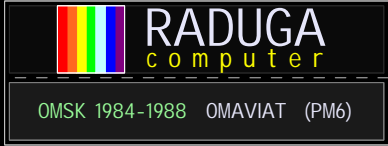
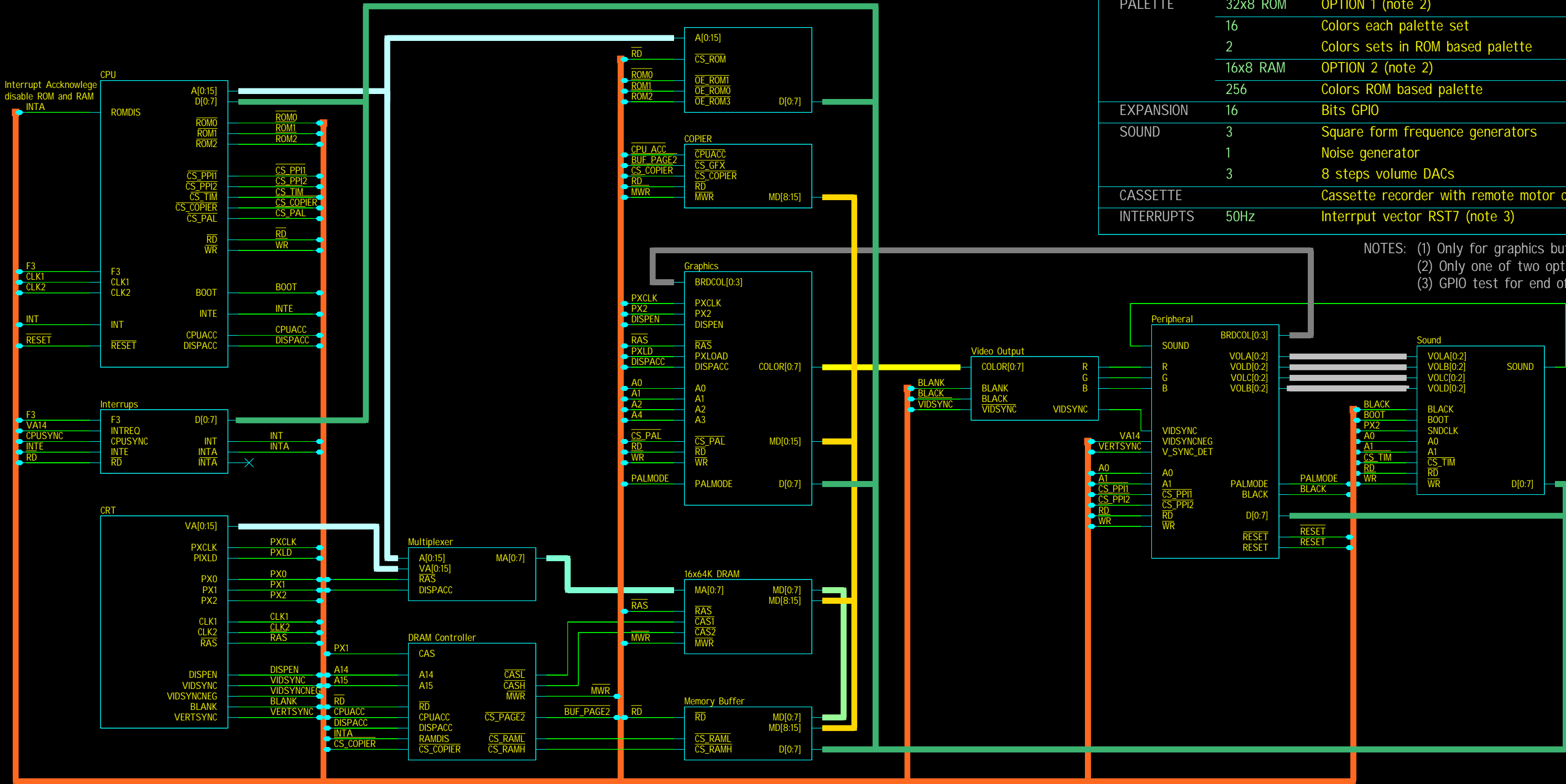
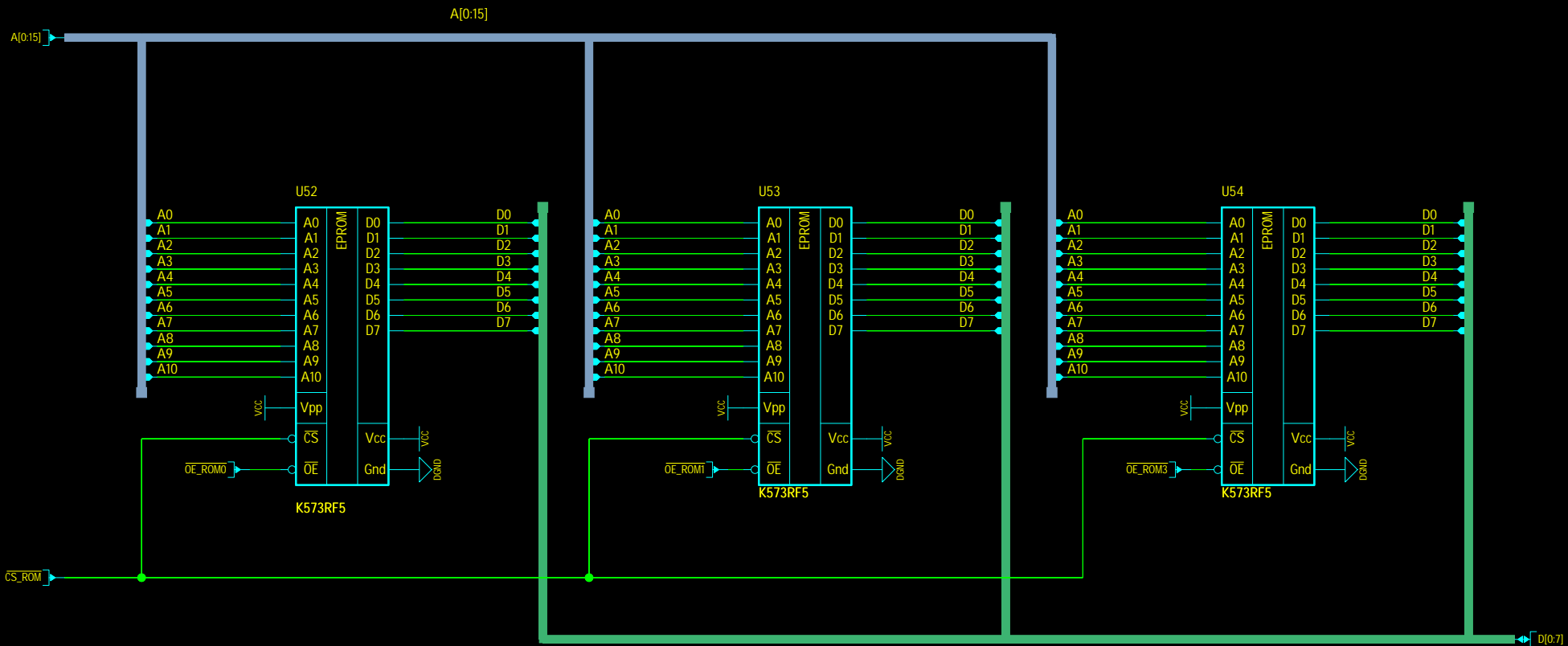


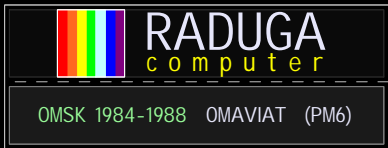
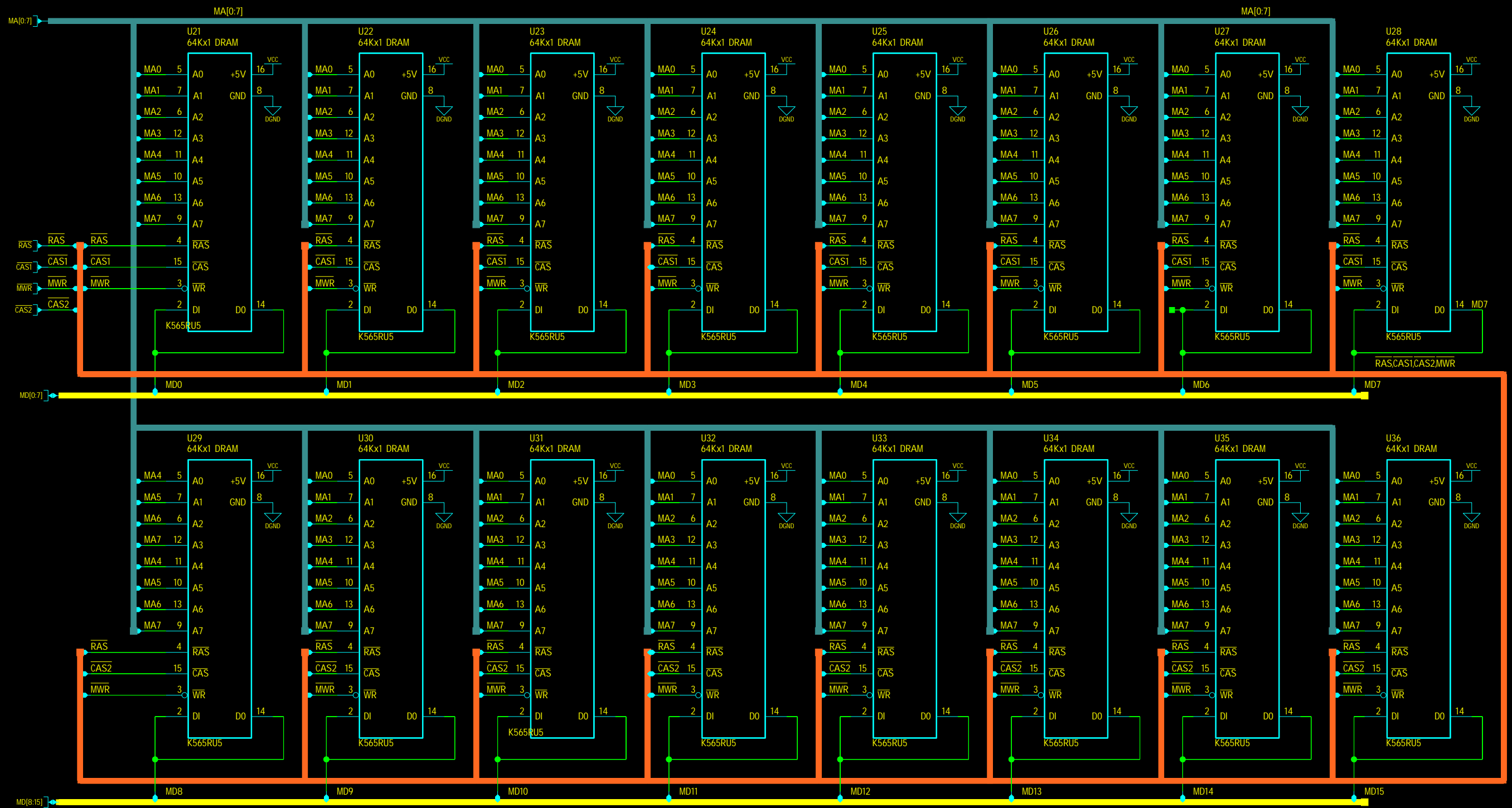
SPECIFICATIONS		
BASED ON		SPECIALIST
CPU		K580IK80
ROM	6KB	3 x K573RF5
RAM	64KB	16 x K565RU5 (manufacturer de-rated)
ADRESSABLE	48KB / 16KB	Directly/Indirectly
ACCELERATOR	COPIER	16 bits per single copy operation (note 1)
GRAPHICS	384x256	Pixels
	2 of 16	Colors per each 8 pixels
	32KB / 24KB	Graphics memory / Frame buffer
PALETTE	32x8 ROM	OPTION 1 (note 2)
	16	Colors each palette set
	2	Colors sets in ROM based palette
	16x8 RAM	OPTION 2 (note 2)
	256	Colors ROM based palette
EXPANSION	16	Bits GPIO
SOUND	3	Square form frequence generators
	1	Noise generator
	3	8 steps volume DACs
CASSETTE		Cassette recorder with remote motor control
INTERRUPTS	50Hz	Interrput vector RST7 (note 3)

NOTES: (1) Only for graphics buffer  
(2) Only one of two options used  
(3) GPIO test for end of frame



POWER
TIME DIAGRAMS





221B Baker Street  
RETRO COMPUTERS

RADUGA Computer

SIZE  
A3

DWG NO  
Alfa2

Memory 1

REV  
a2

DRAWN BY  
Sherlock

SHEET  
3 of 13

18/04/2019:11:22



**RADUGA**  
computer

OMSK 1984-1988 OMAVIAT (PM6)

221B Baker Street  
RETRO COMPUTERS

TITLE
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# RADUGA Computer

SIZE	A3
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DWG NO	Alfa2
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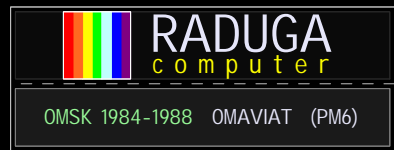
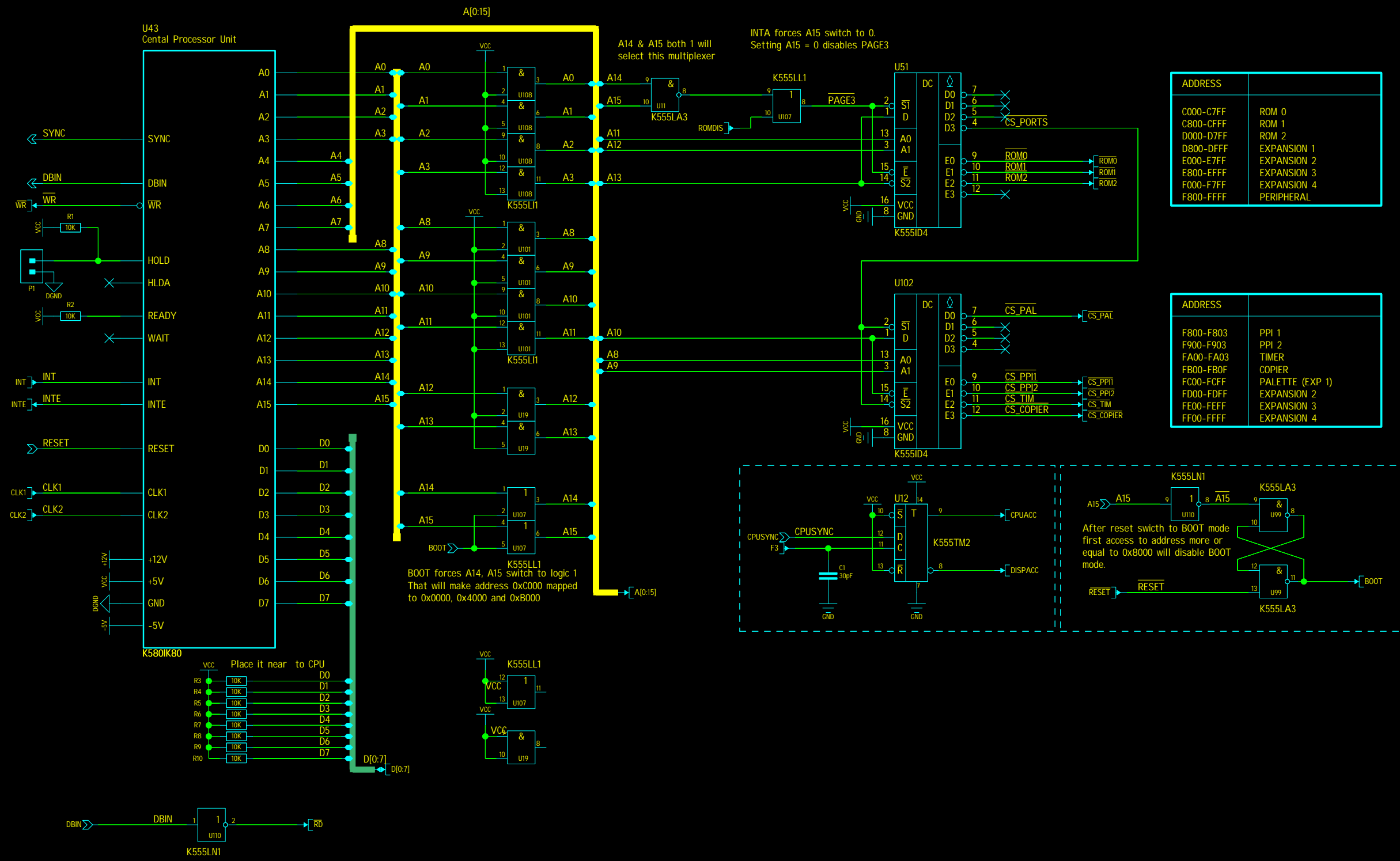
DRAWN BY  
Sherlock

SHEET	of
4	1

Copier 1

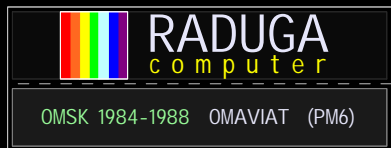
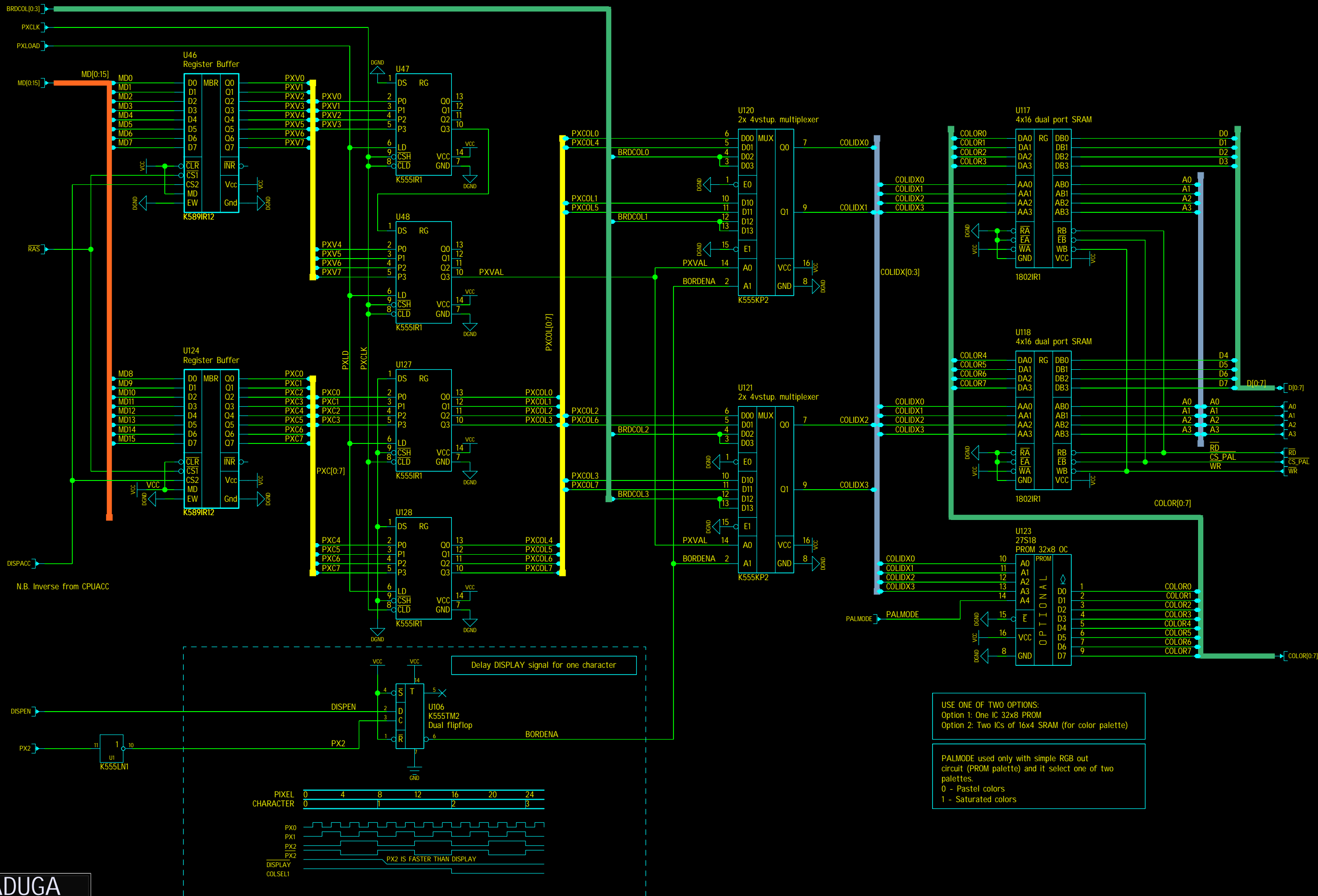
a2

18/04/2019:11:22









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RETRO COMPUTERS

RADUGA Computer

SIZE  
A3

DWG NO  
Alfa2

Graphics 1

REV  
a2

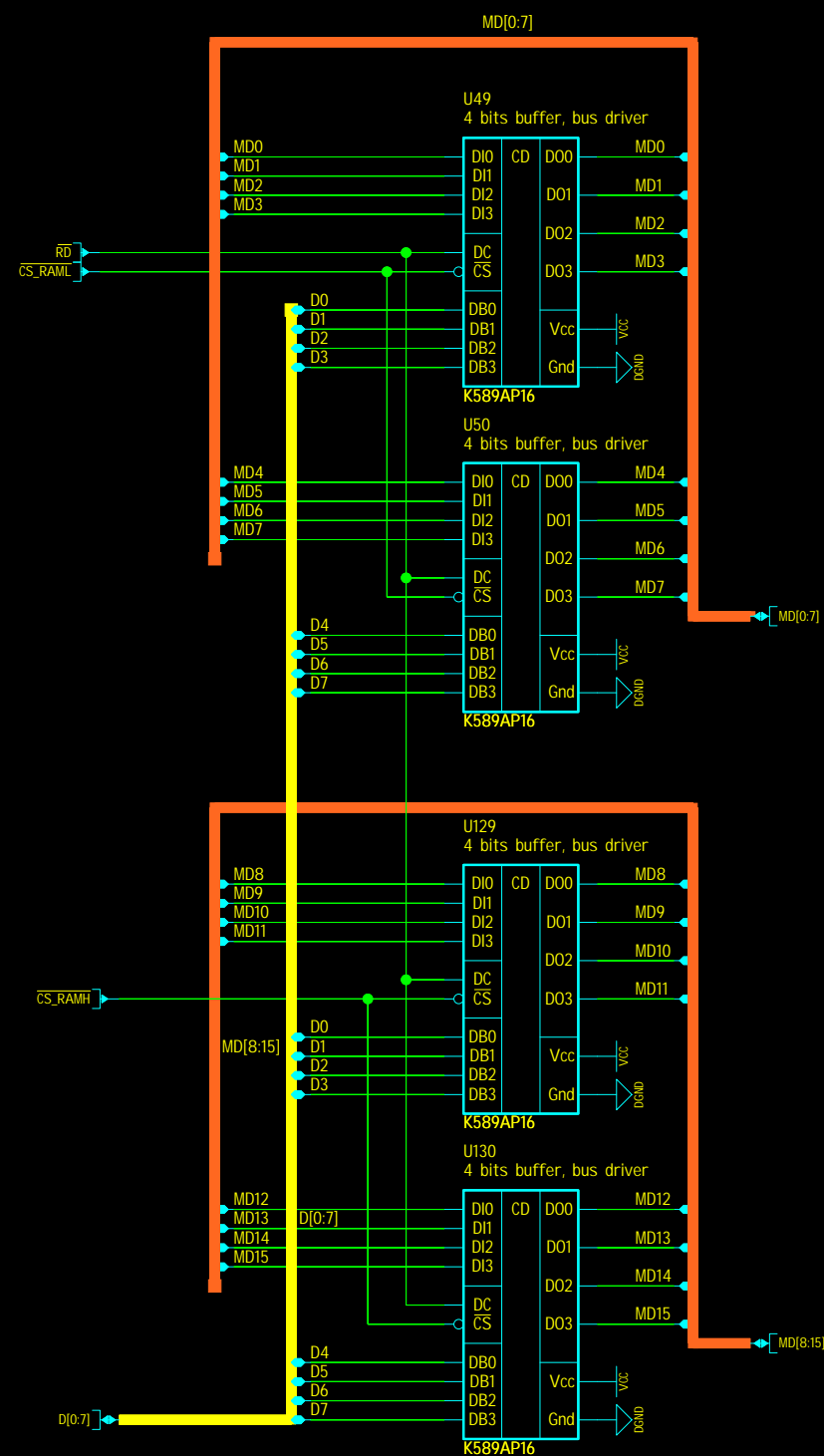
DRAWN BY  
Sherlock


SHEET  
8 of 1

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computer

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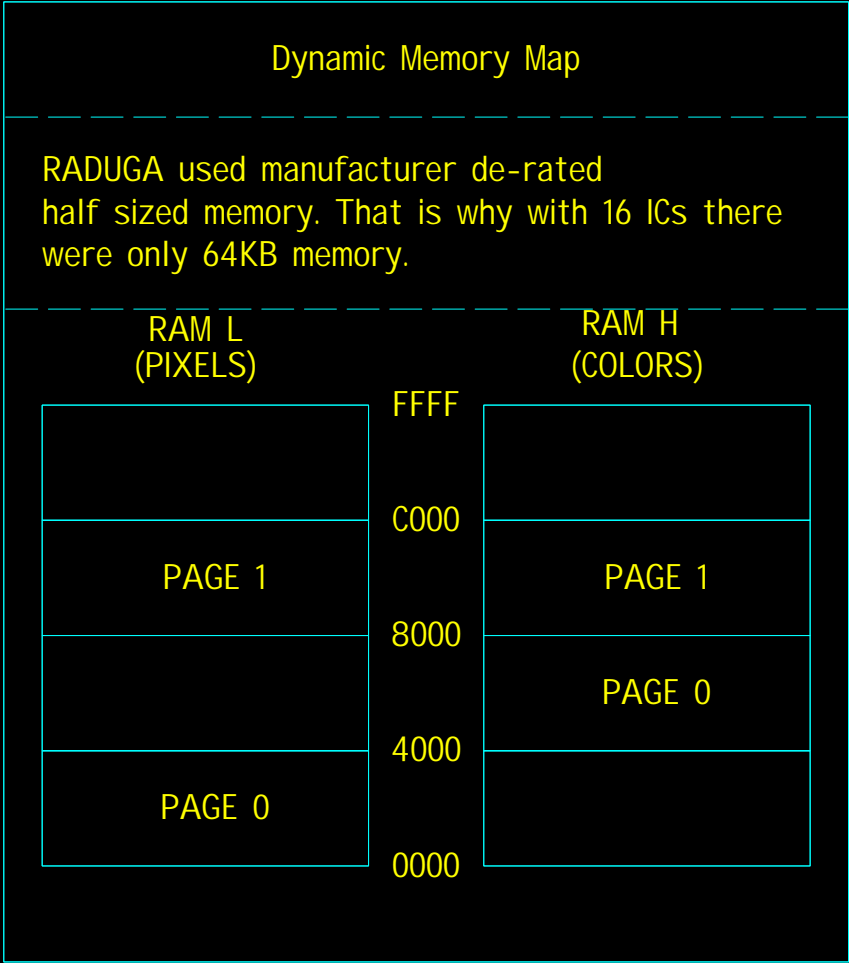
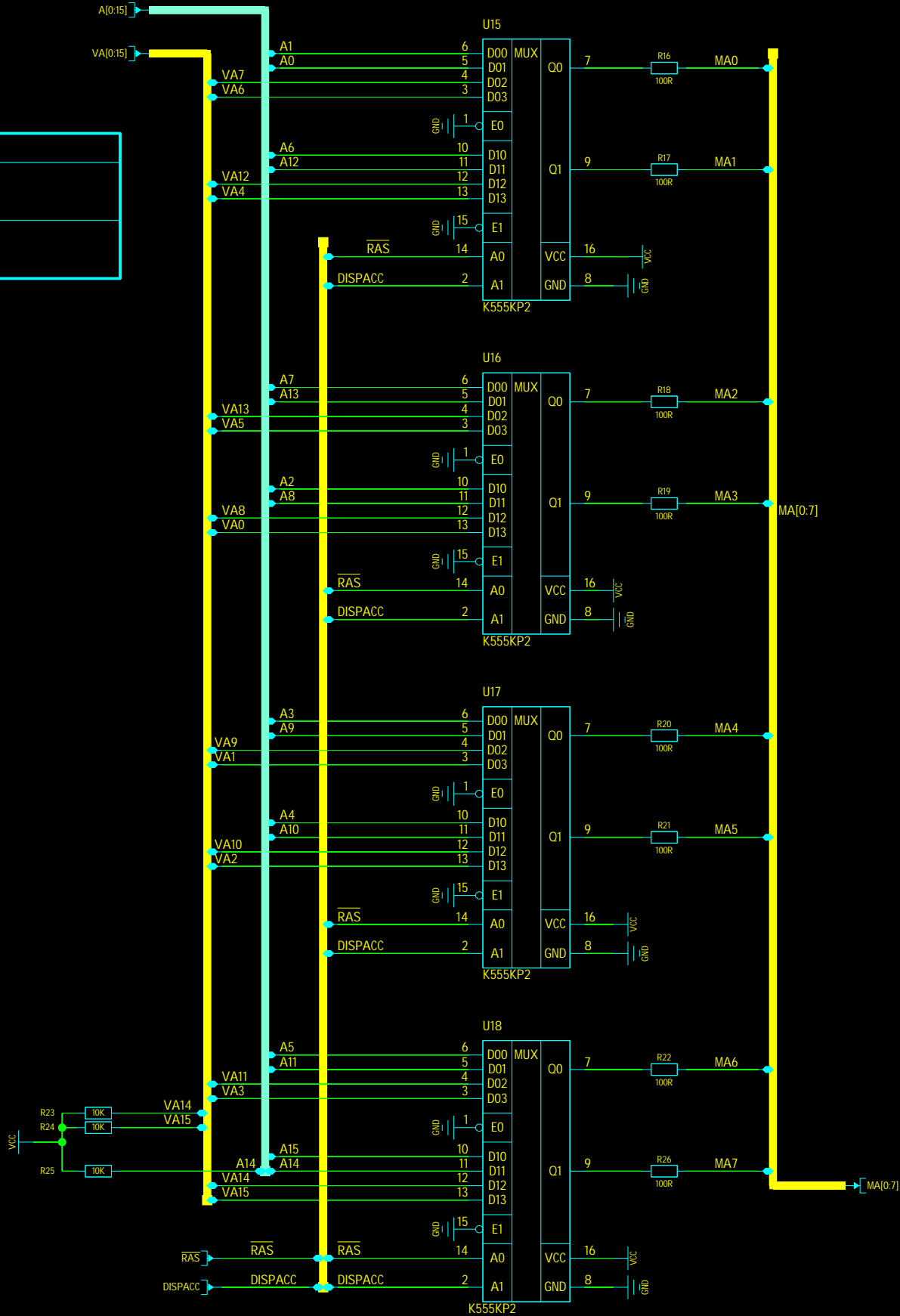
221B Baker Street

RETRO COMPUTERS

TITLE

RADUGA Computer

SIGNAL	VALUE	FUNCTION
$\overline{RAS}$	0 1	COLUMNS ROWS (REFRESH)
DISPACC	0 1	CPU CRT





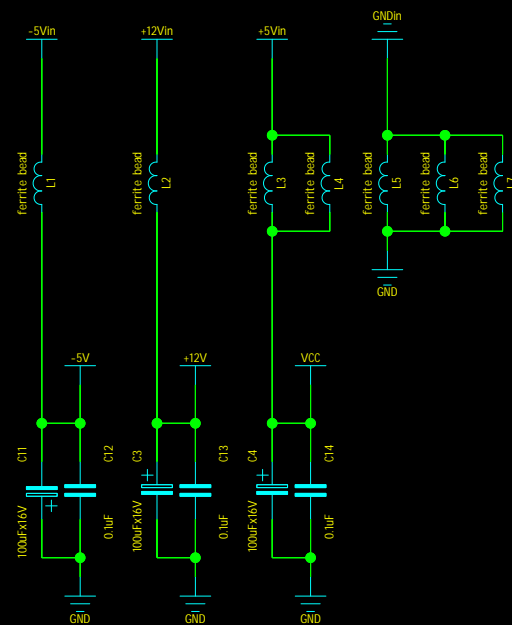
RADUGA

computer

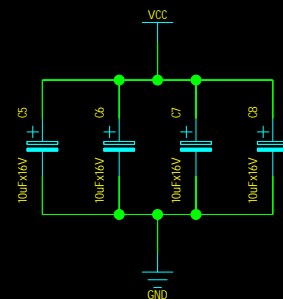
OMSK 1984-1988

OMAVIAT (PM6)

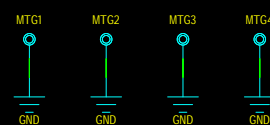
NEAR TO CONNECTOR



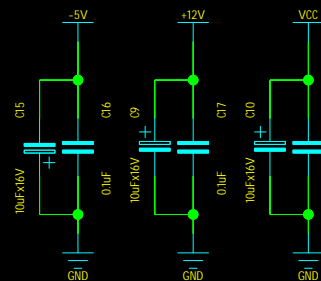
DISTRIBUTE ON THE WHOLE BOARD  
(THANTALIUM)



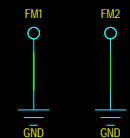
MOUNTING HOLES



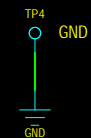
CPU  
(THANTALIUM)



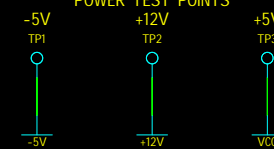
FIDUCIA MARKS



OSCILLOSCOPE



POWER TEST POINTS



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RETRO COMPUTERS

TITLE

**RADUGA Computer**

SIZE  
**A3**

DWG NO  
**Alfa2**

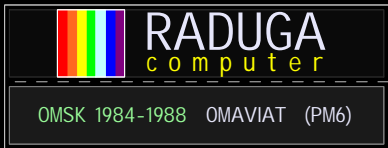
Power 1

REV  
**a2**

DRAWN BY  
**Sherlock**

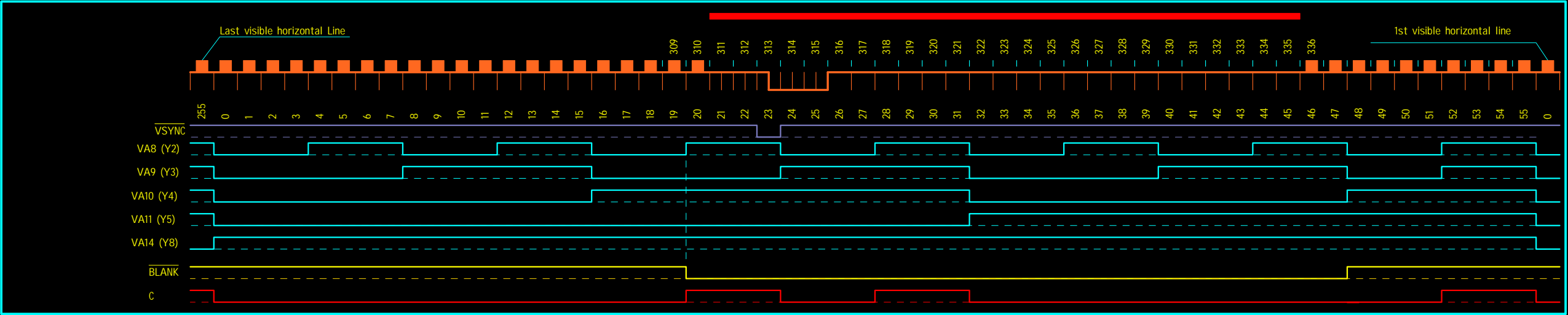
SHEET  
**12** of  
**1**

18/04/2019:11:22

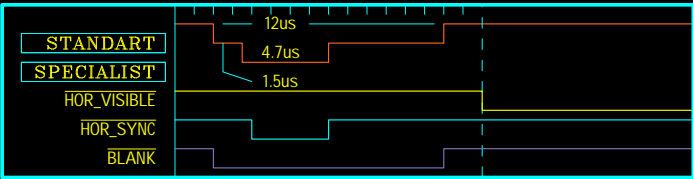




Required vertical timing



Required horizontal timing (only for composed video)

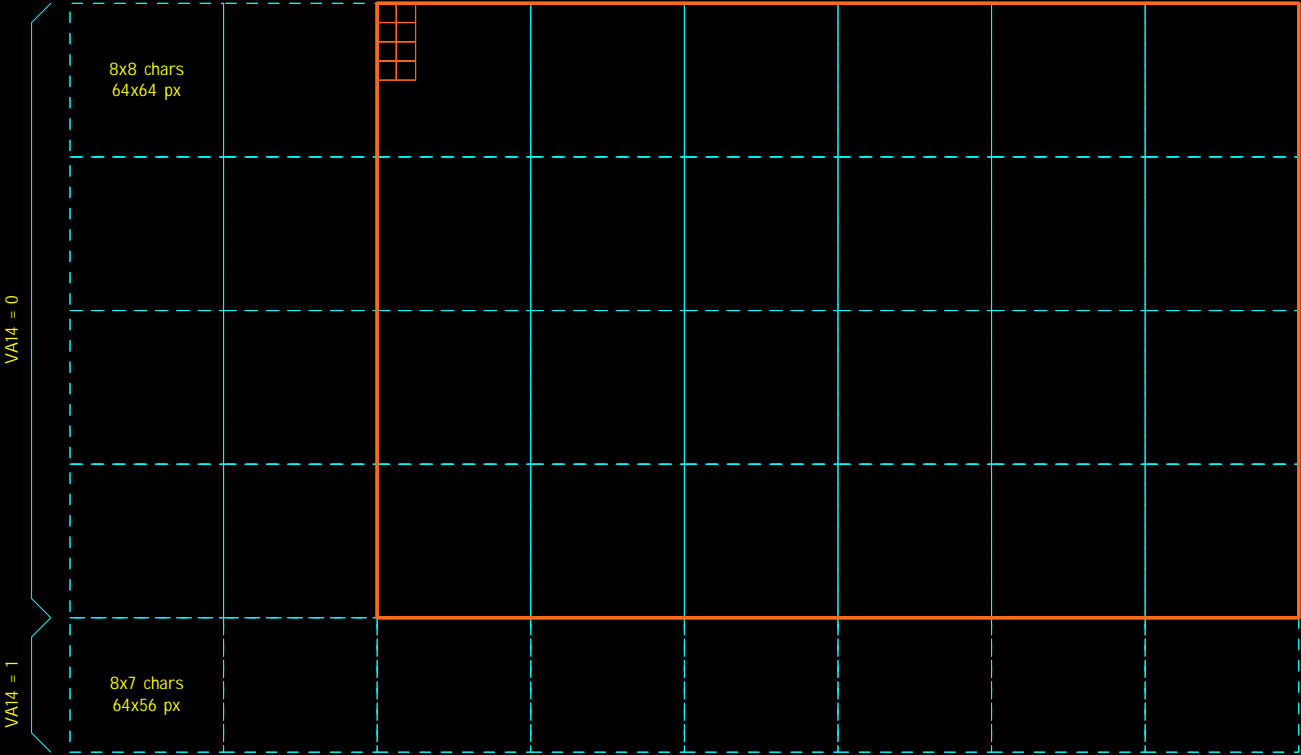
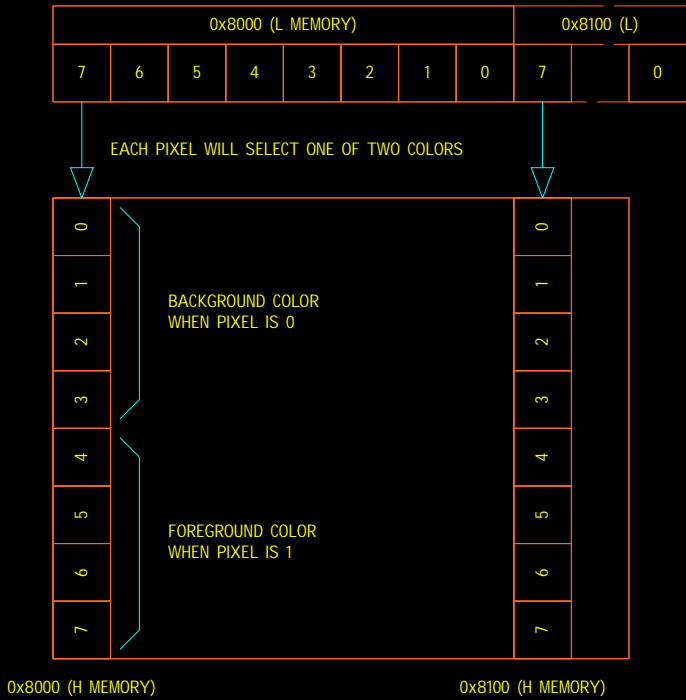


VISIBLE AREA  
48x32 CHARACTERS  
384x256 PIXELS

TOP-LEFT

GRAPHICS DATA IN MEMORY

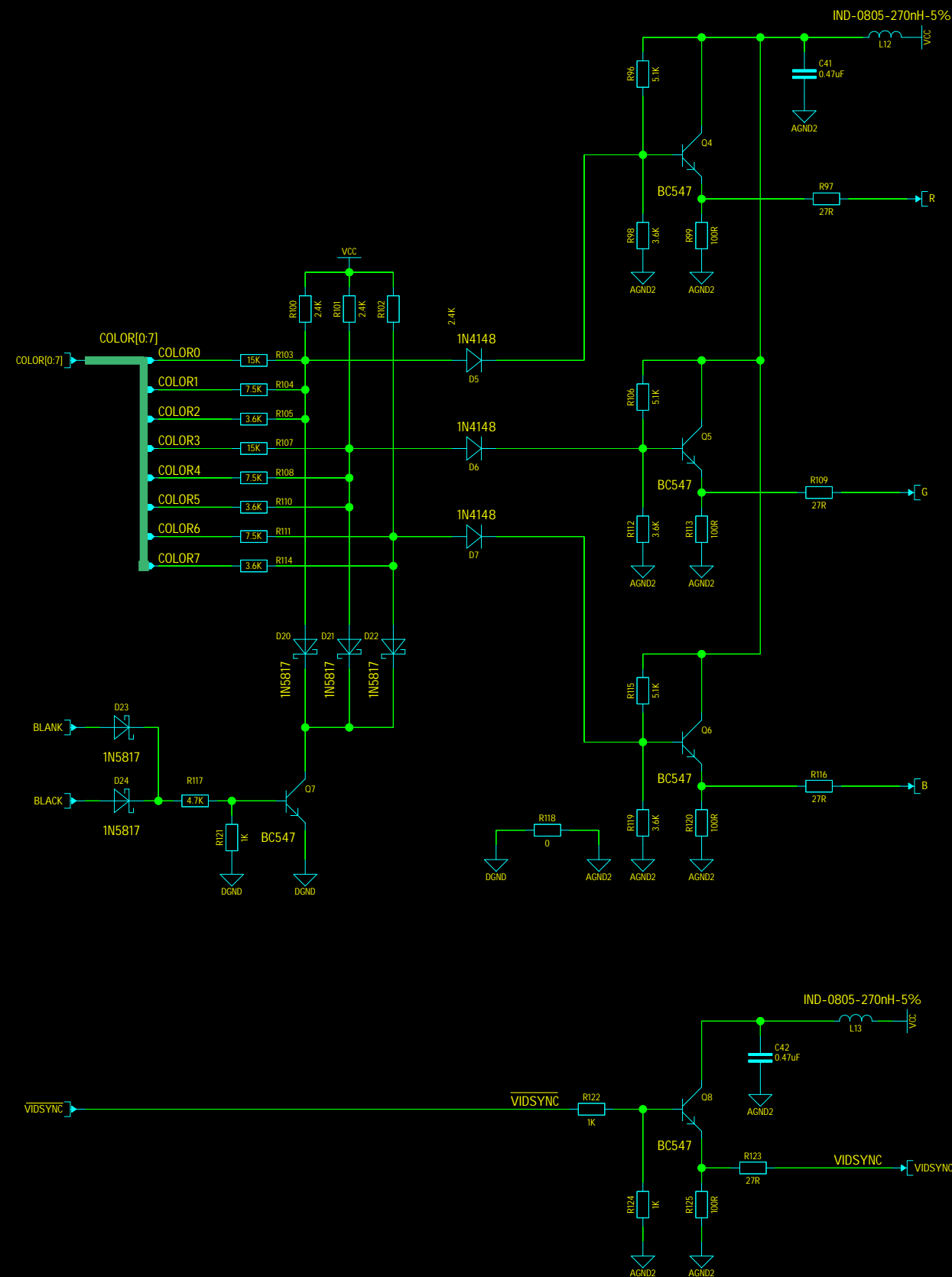
0x8000	0x8100
0x8001	0x8101
0x8002	
0x8003	
0x8004	
0x8005	
0x8006	
0x8007	
0x8008	
.....	





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BLANK forces black picture during SYNC

BLACK forces black picture after boot or by programming PPI1 port

