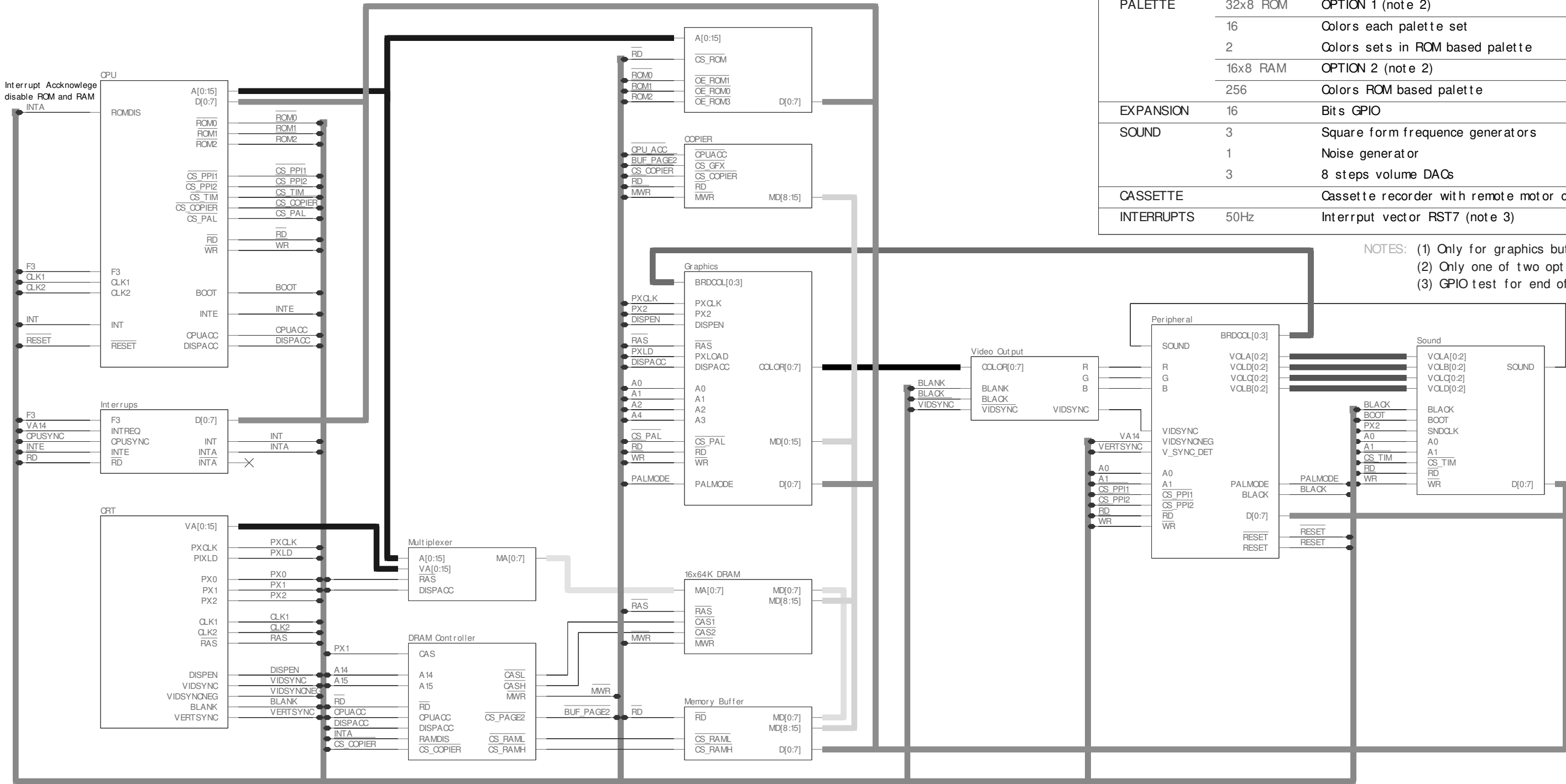
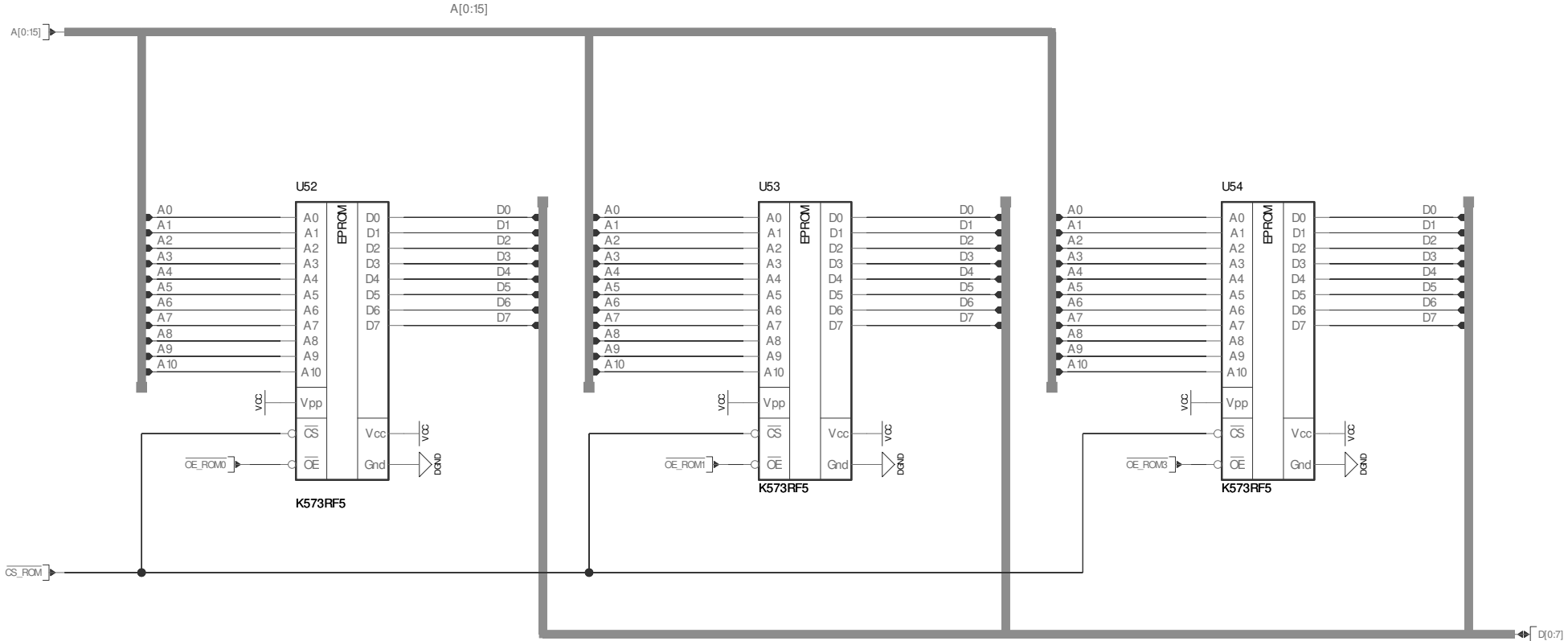
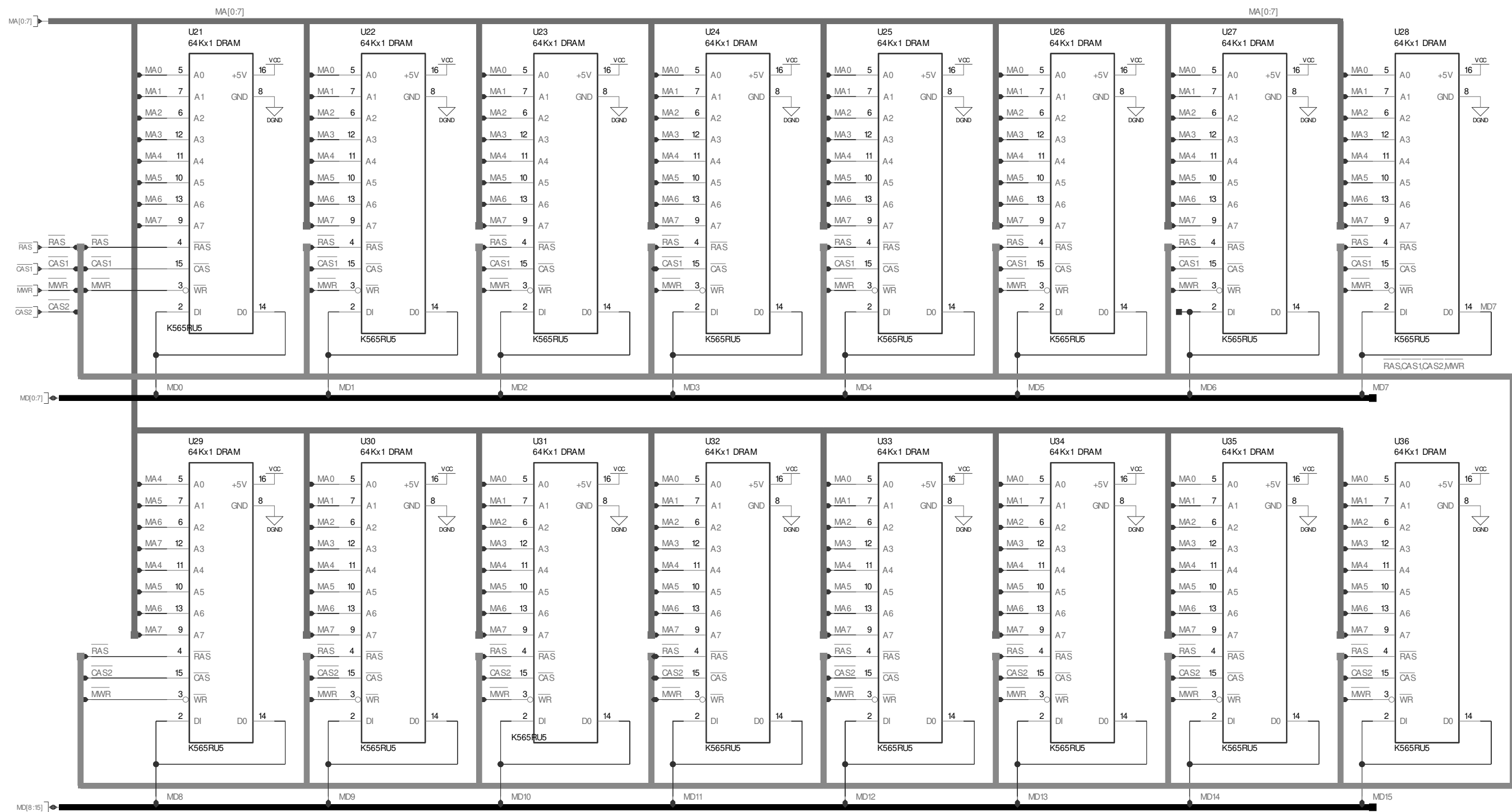


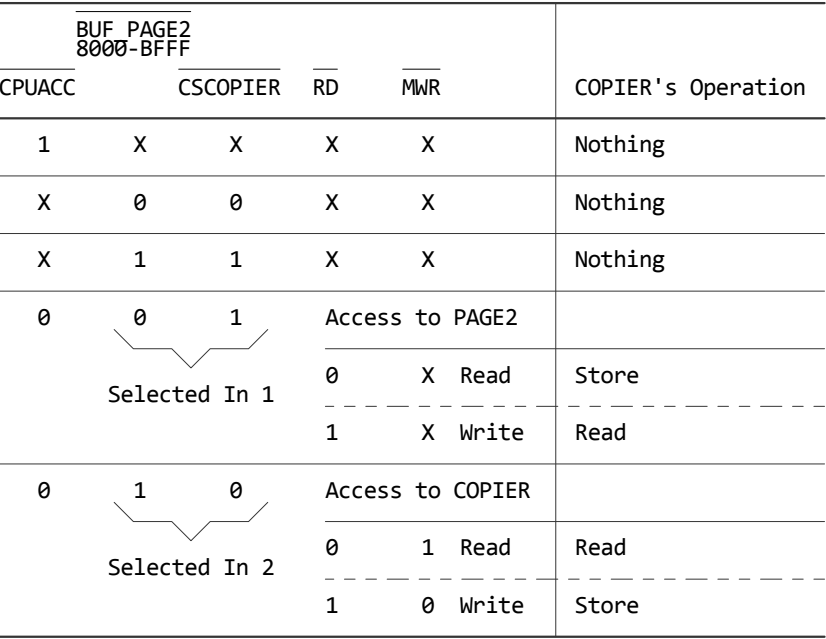
SPECIFICATIONS		
BASED ON		SPECIALIST
CPU		K580IK80
ROM	6KB	3 x K573RF5
RAM	64KB	16 x K565RU5 (manufacturer de-rated)
ADRESSABLE	48KB / 16KB	Directly/ Indirectly
ACCELERATOR	COPIER	16 bits per single copy operation (note 1)
GRAPHICS	384x256	Pixels
	2 of 16	Colors per each 8 pixels
	32KB / 24KB	Graphics 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)

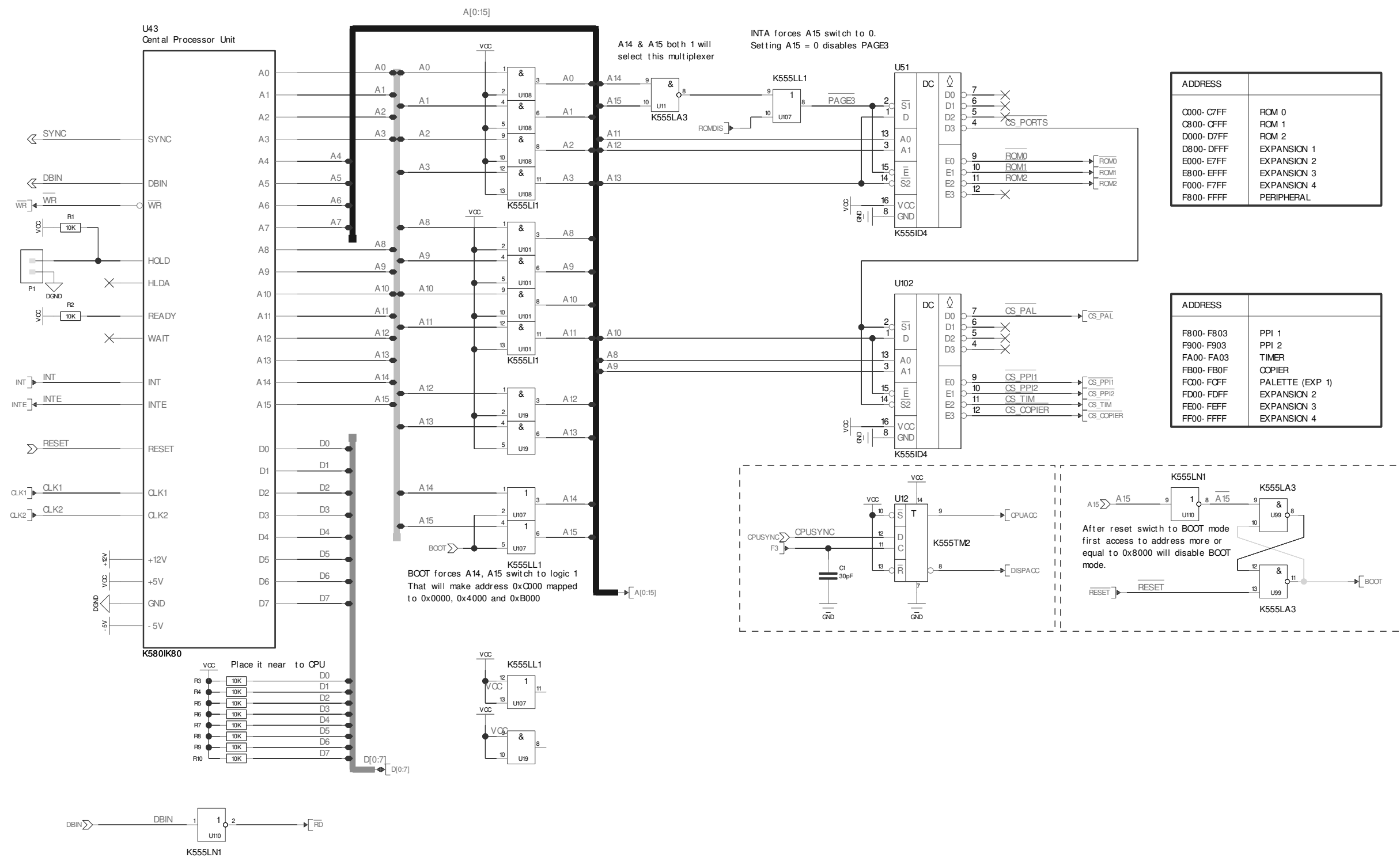
NOTES: (1) Only for graphics buffer
(2) Only one of two options used
(3) GPIO test for end of frame

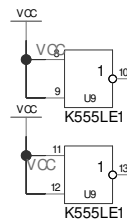


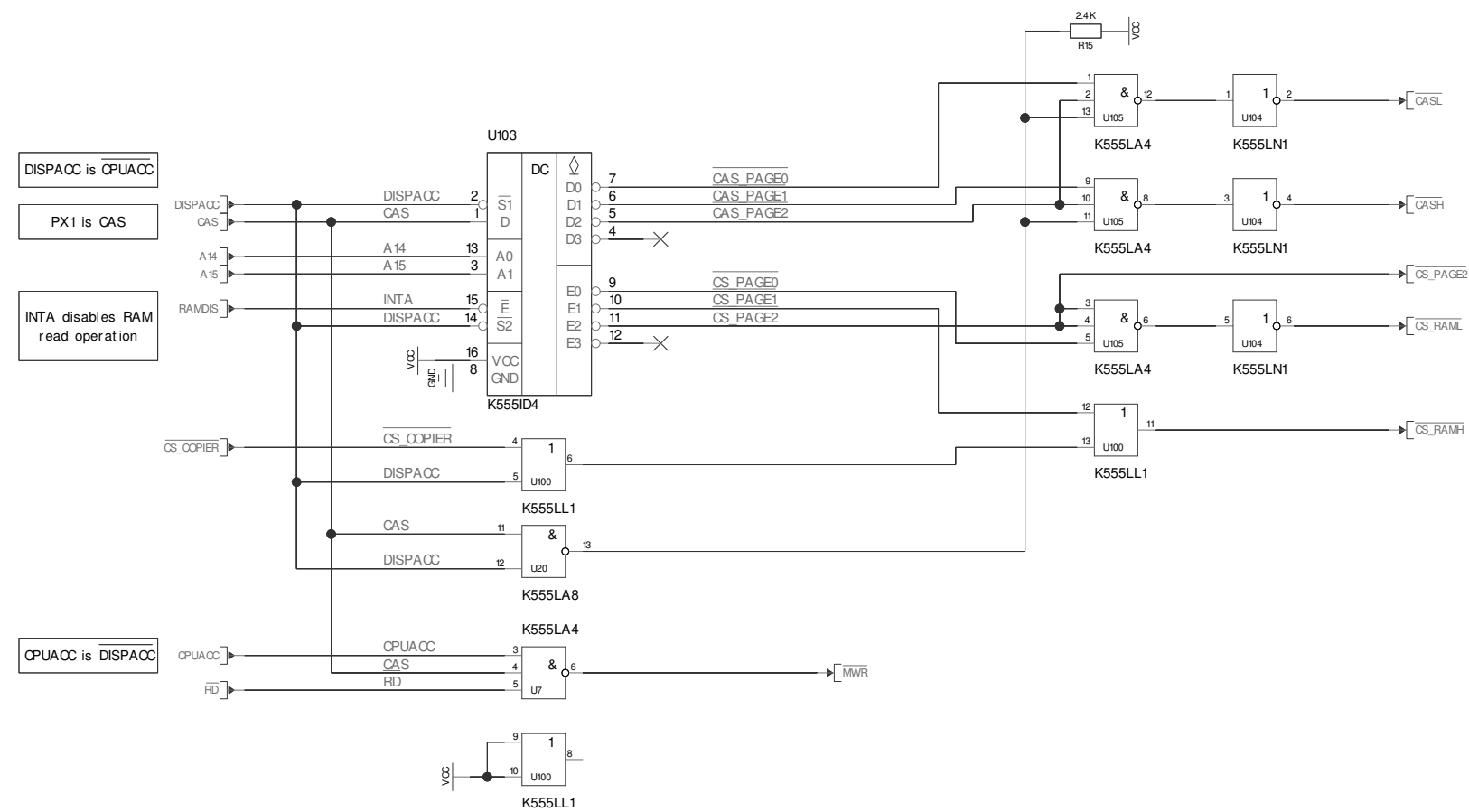


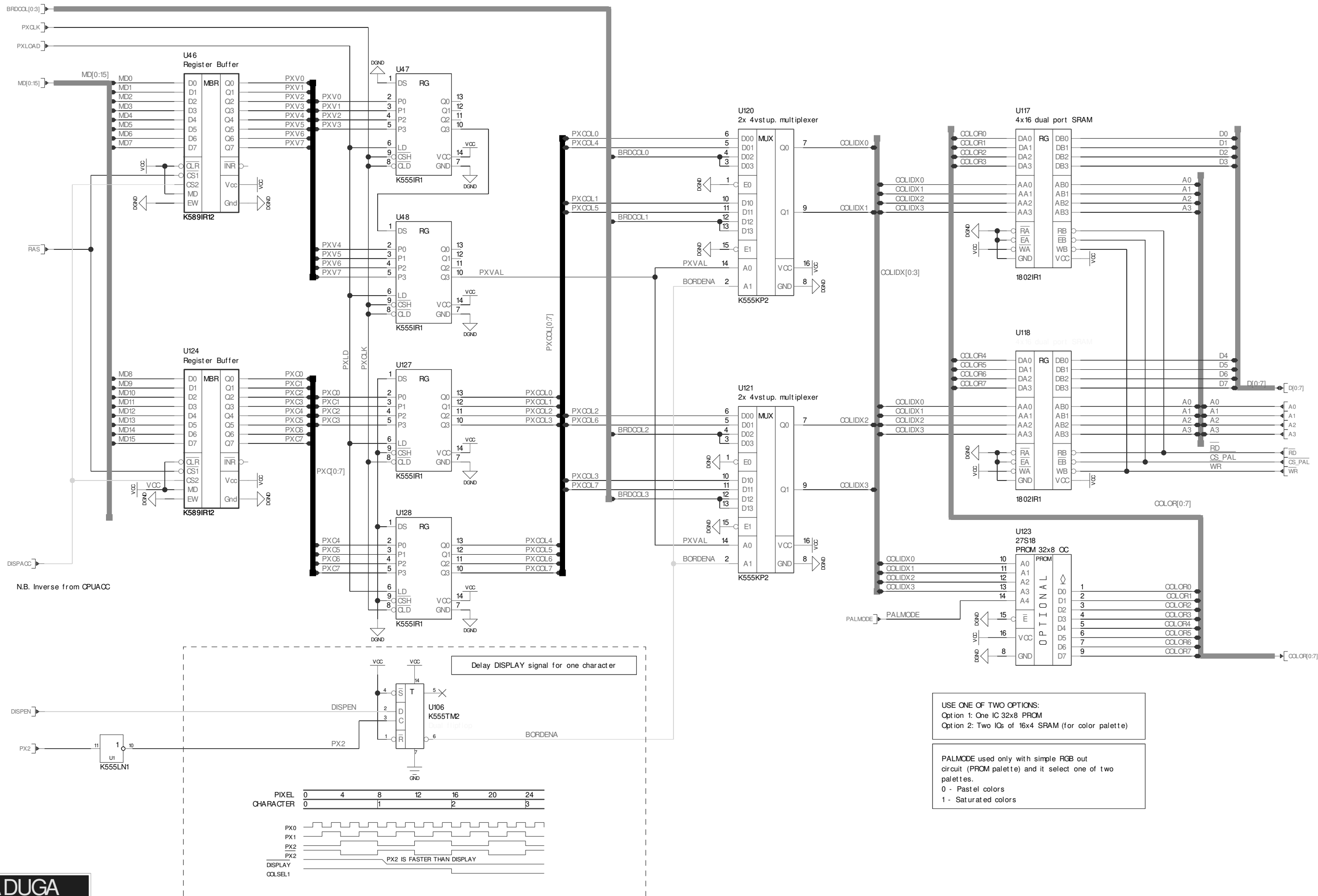


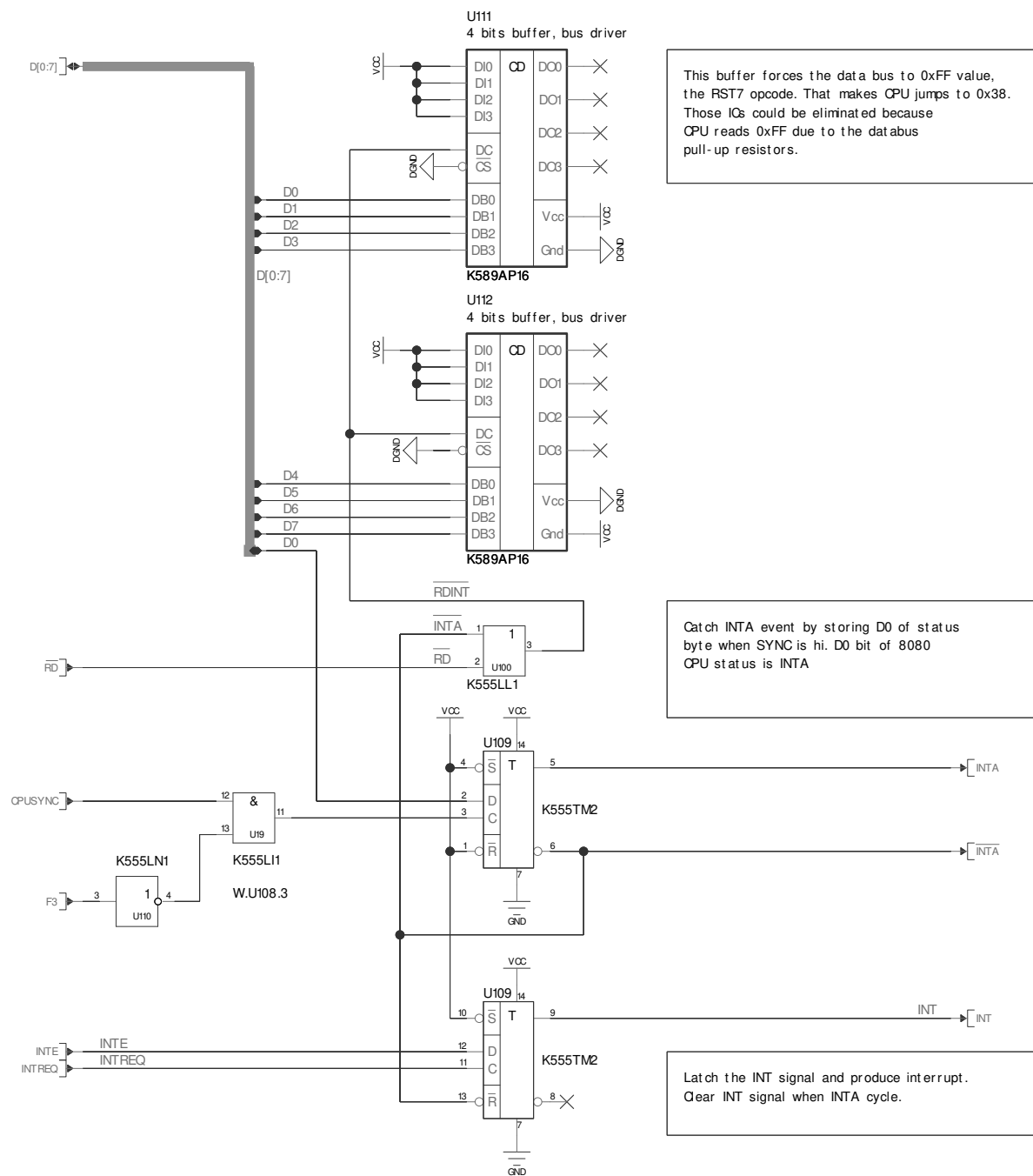


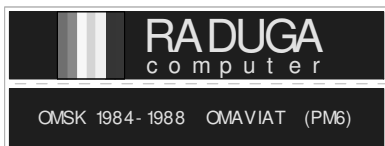
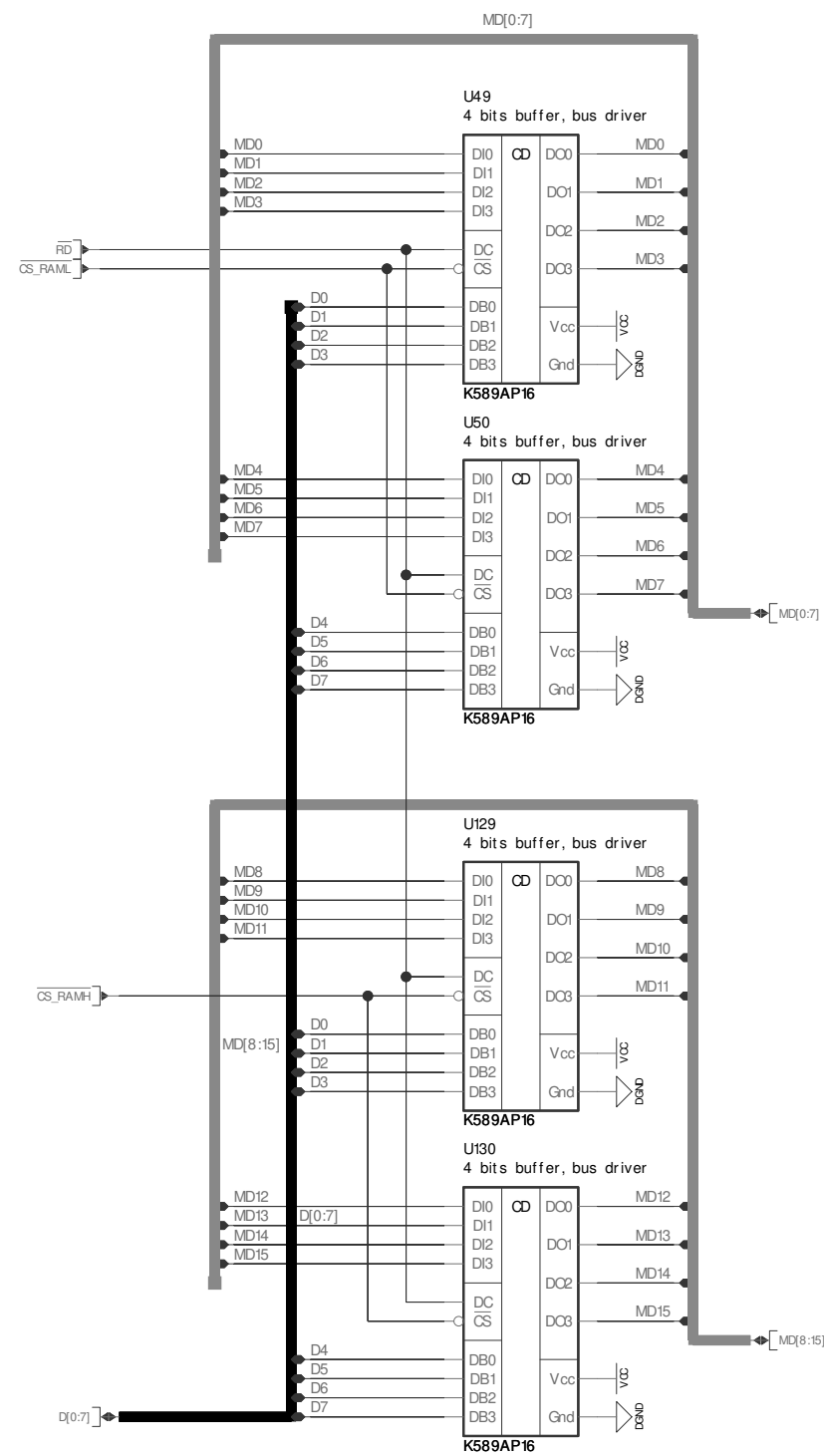




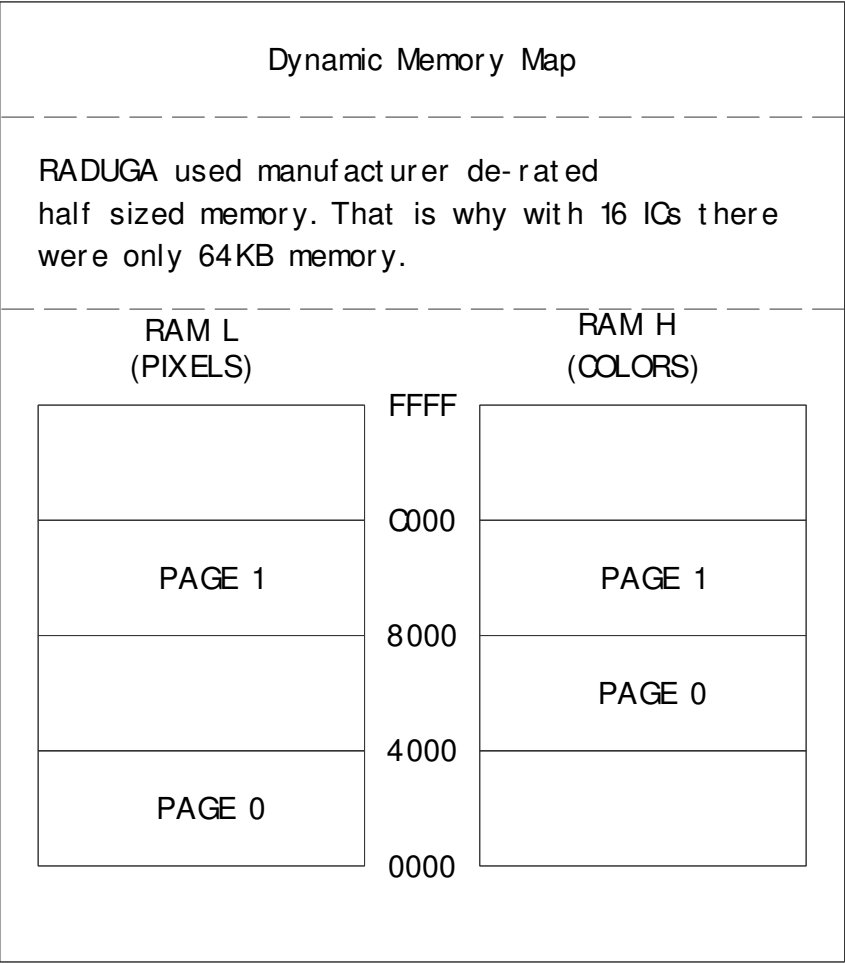
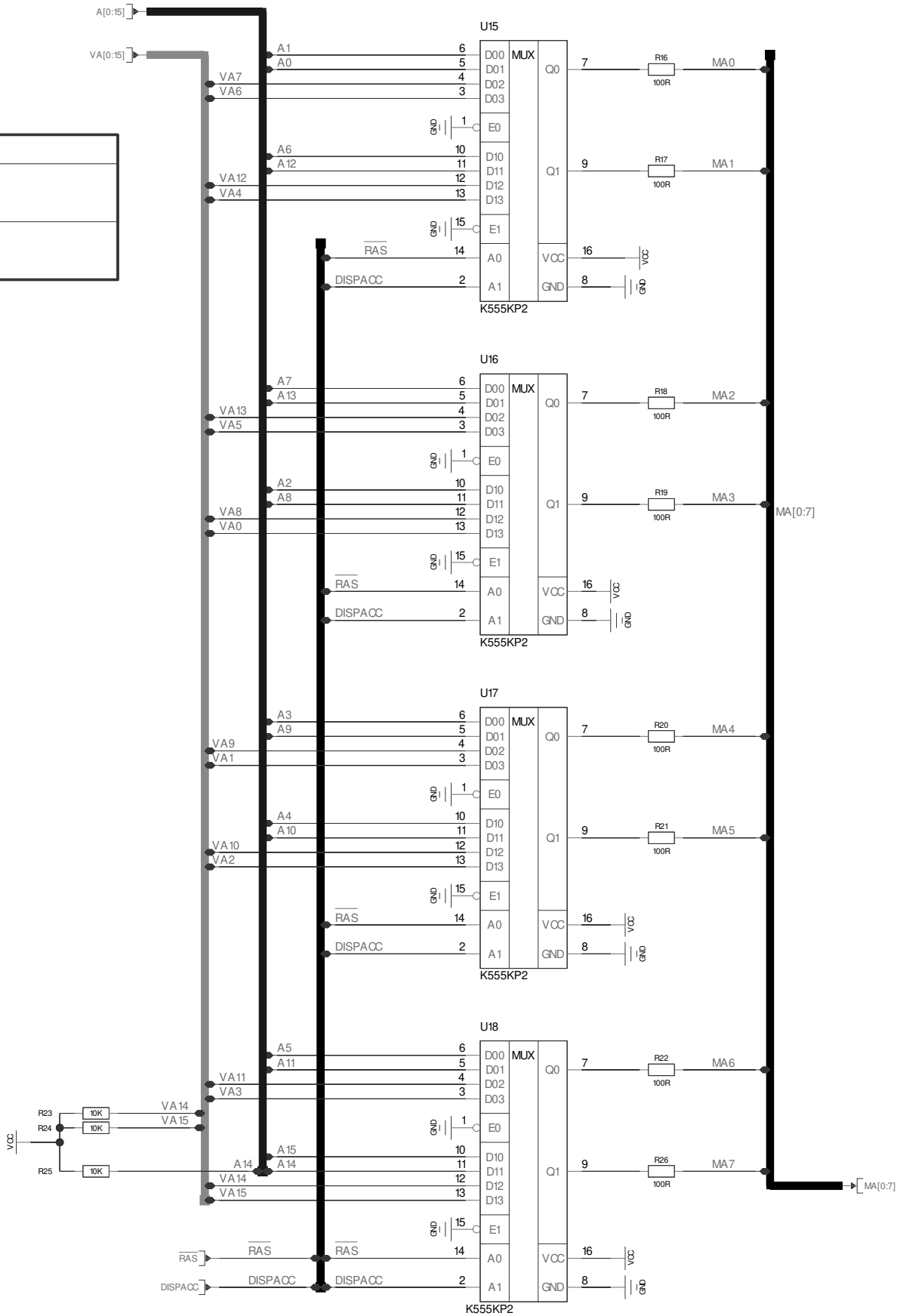


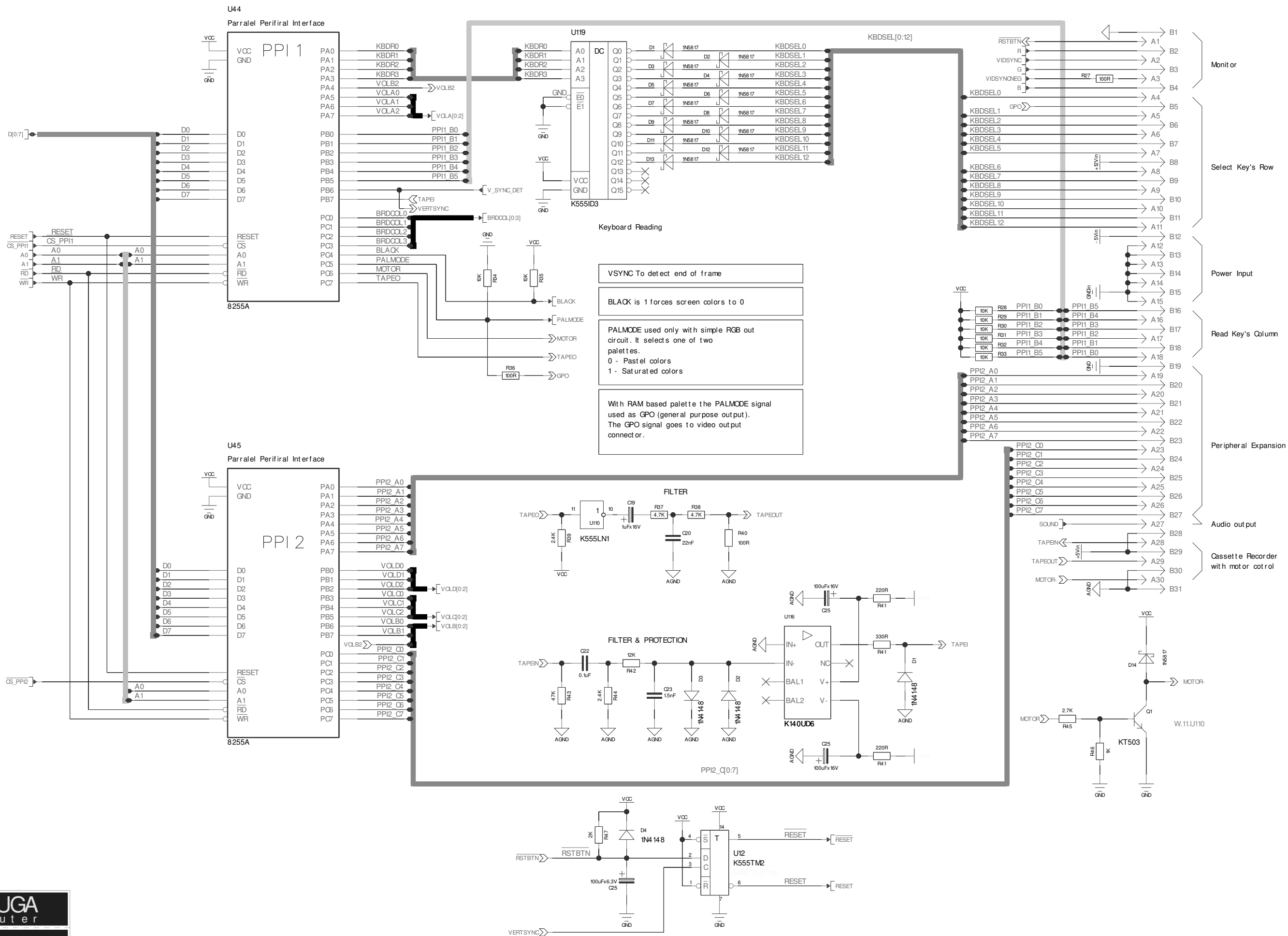


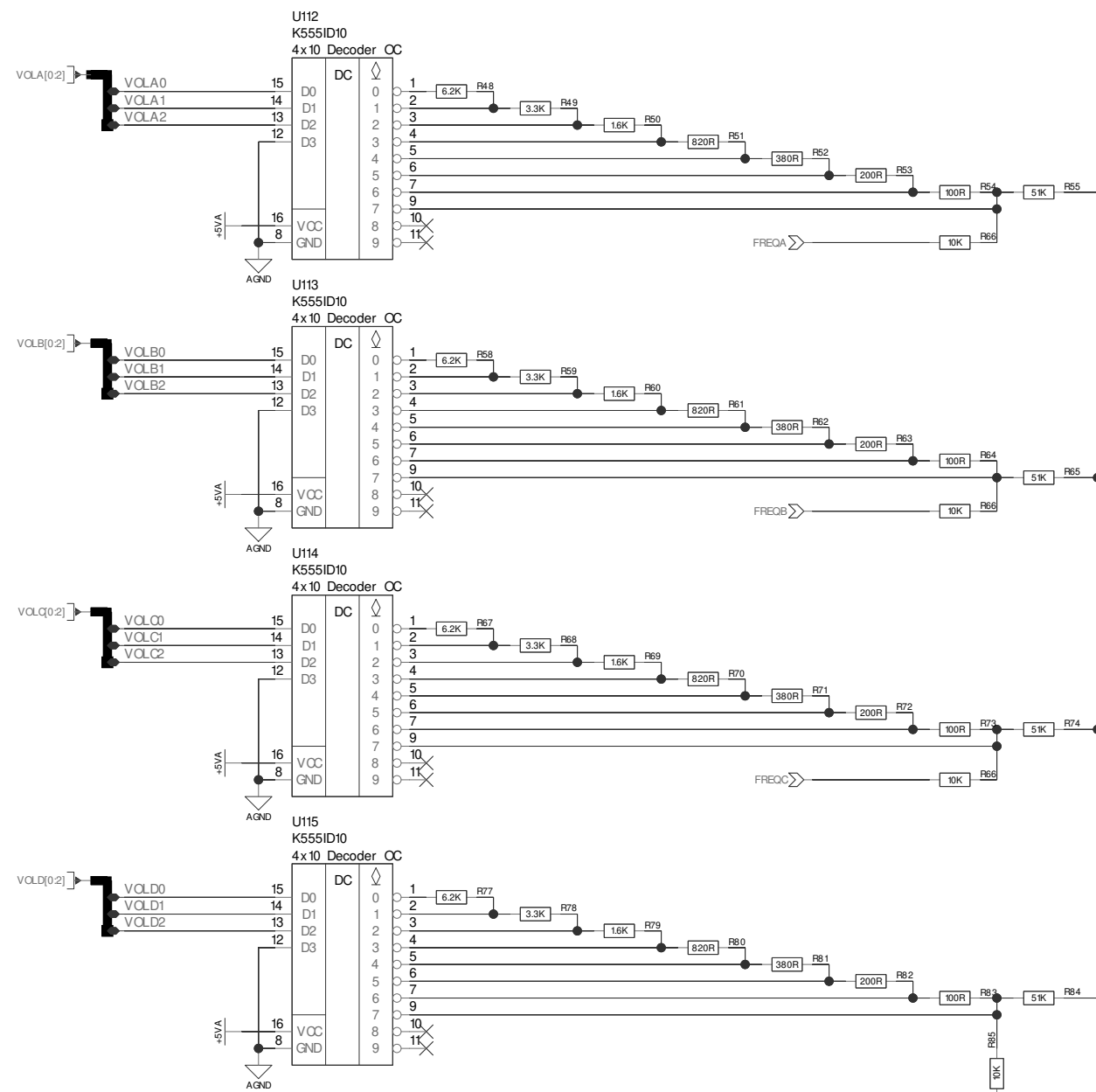
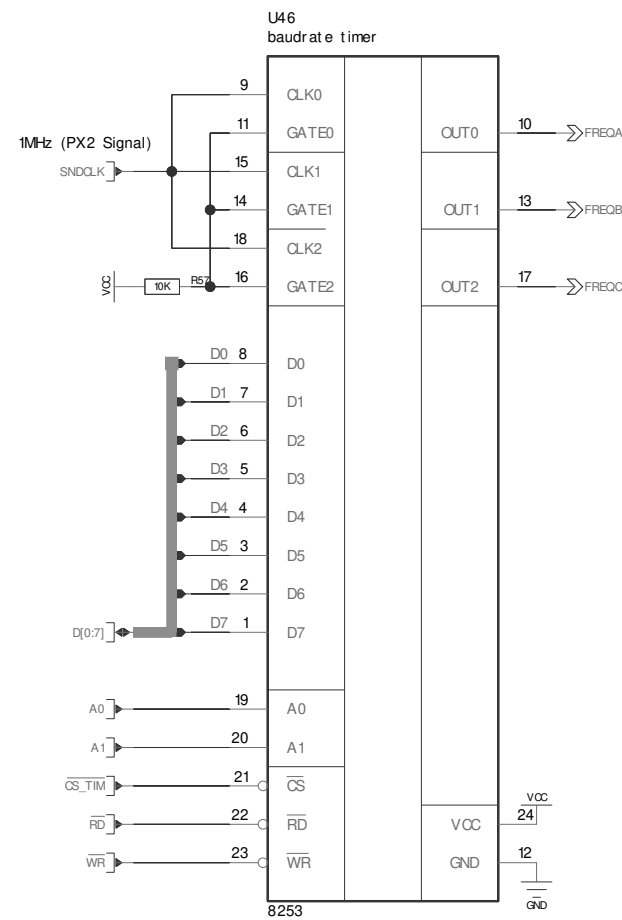




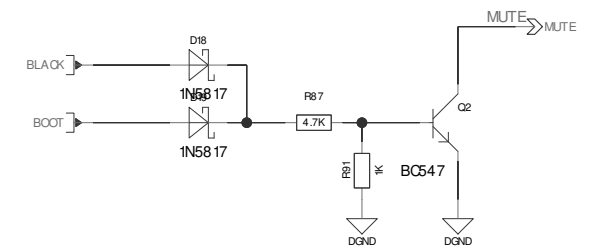
SIGNAL	VALUE	FUNCTION
$\overline{\text{RAS}}$	0 1	COLUMNS ROWS (REFRESH)
DISPACC	0 1	CPU CRT



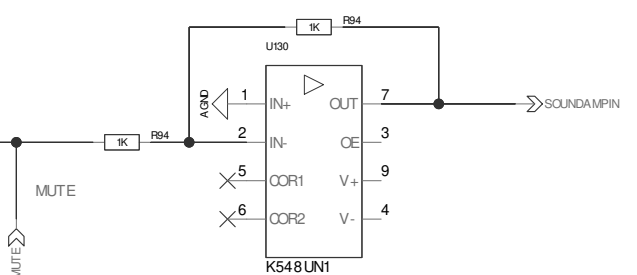




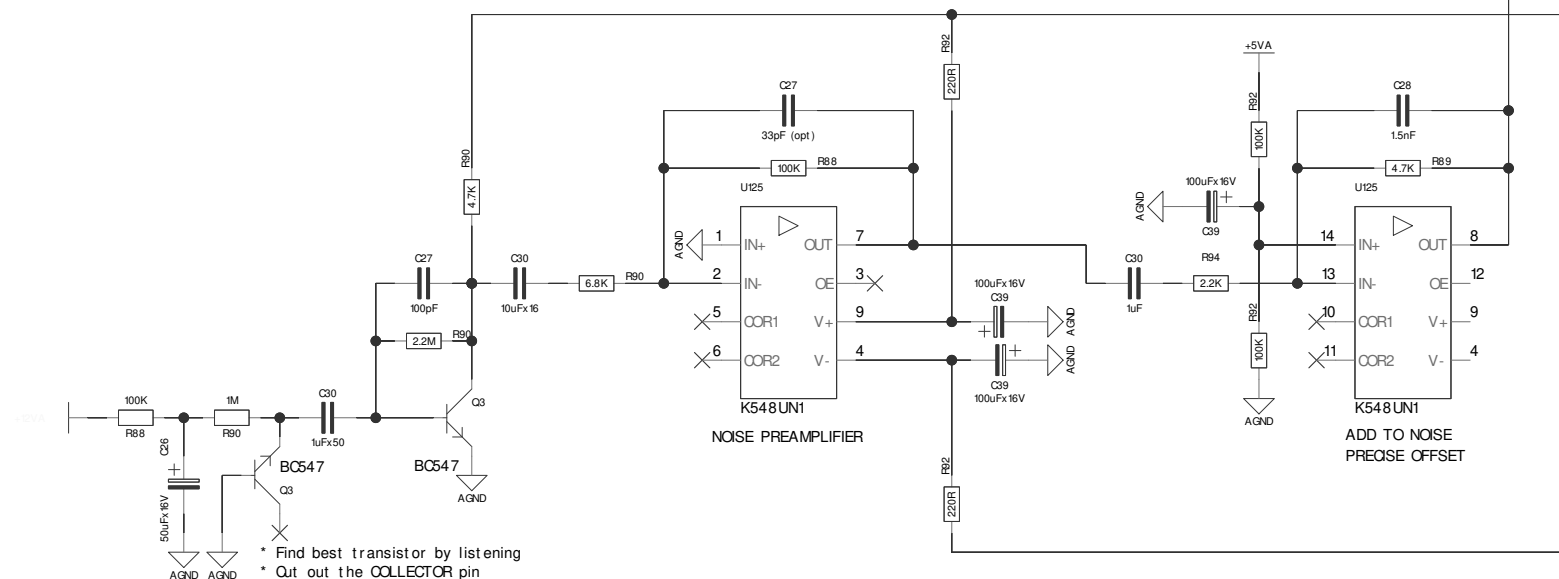
MUTE SOUND



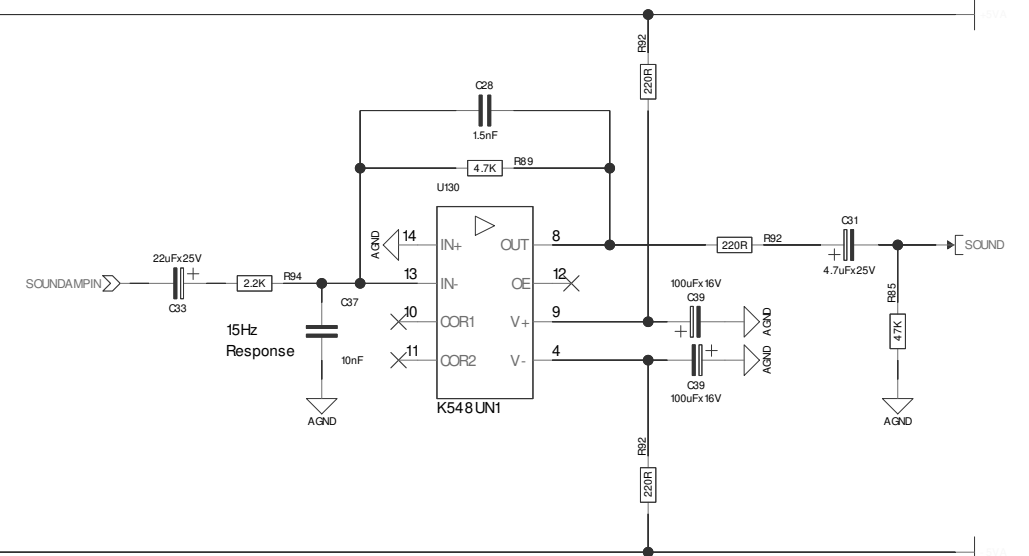
PREAMP



NOISE GENERATOR



AMPLIFIER



221B Baker Street
RETRO COMPUTERS

TITLE

RADUGA Comput er

SIZE
A3

DWG NO
Alf a3

Sound 1

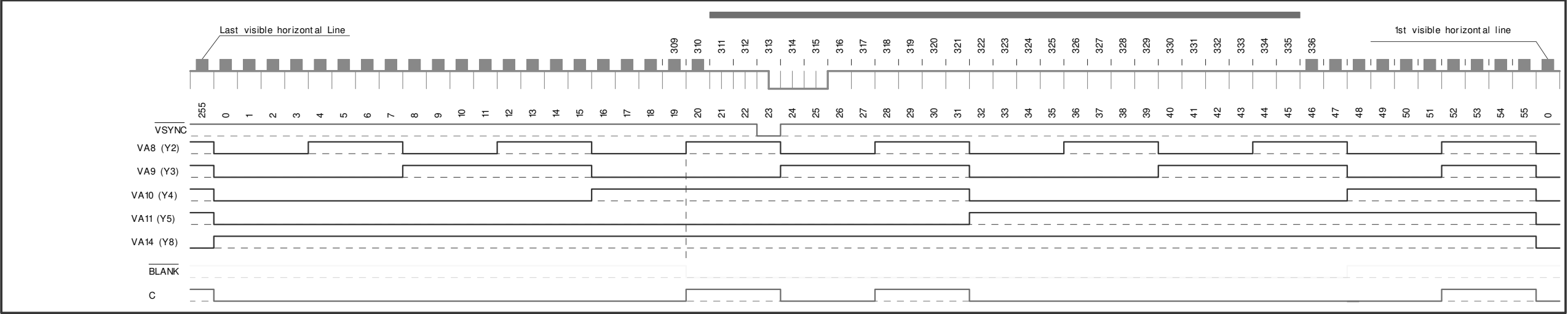
REV
a3

DRAWN BY
Sherlock

SHEET
14 of 16

21/ 04/ 2019:11:22

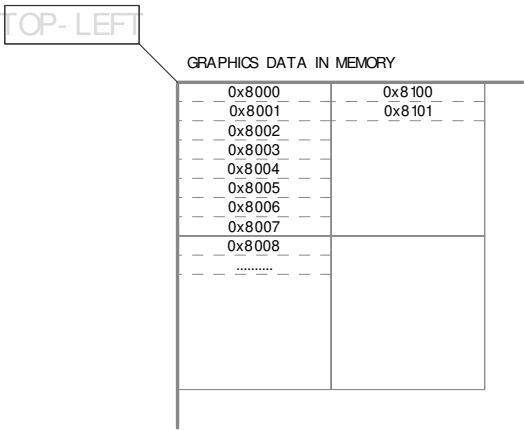
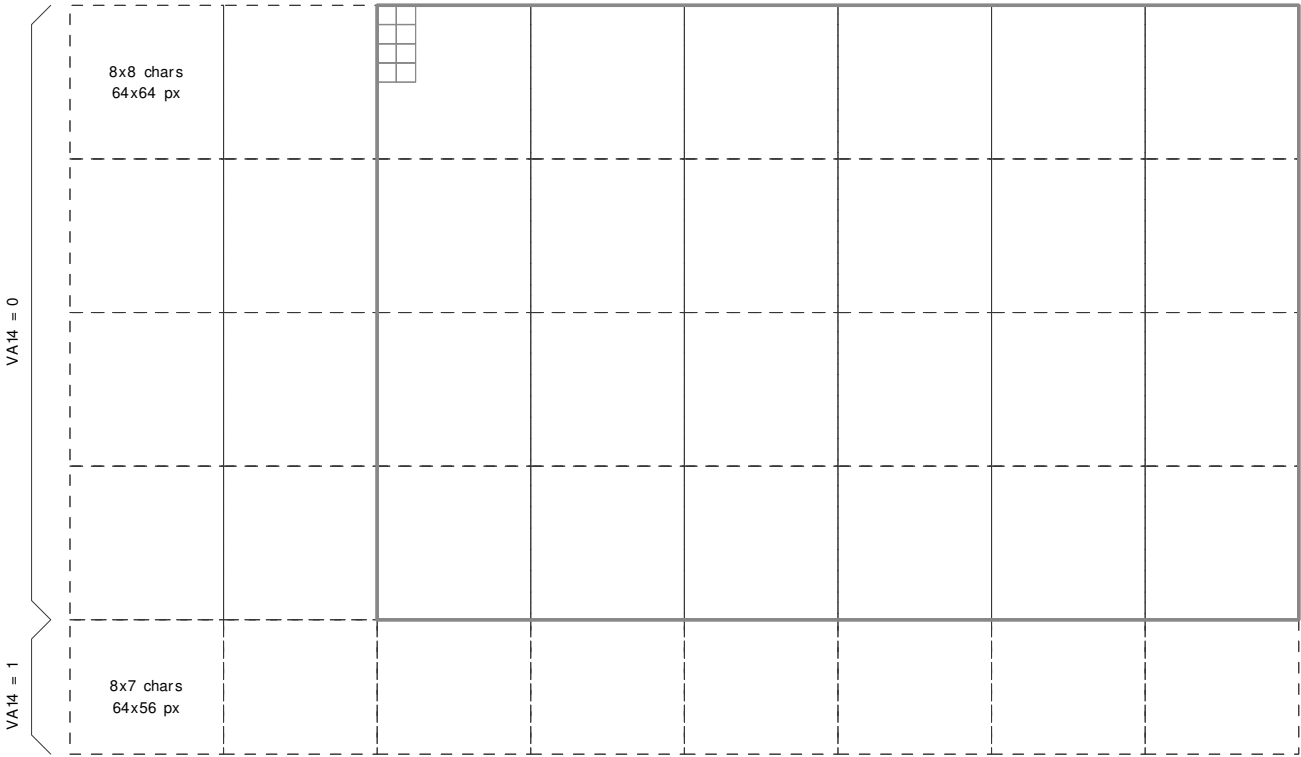
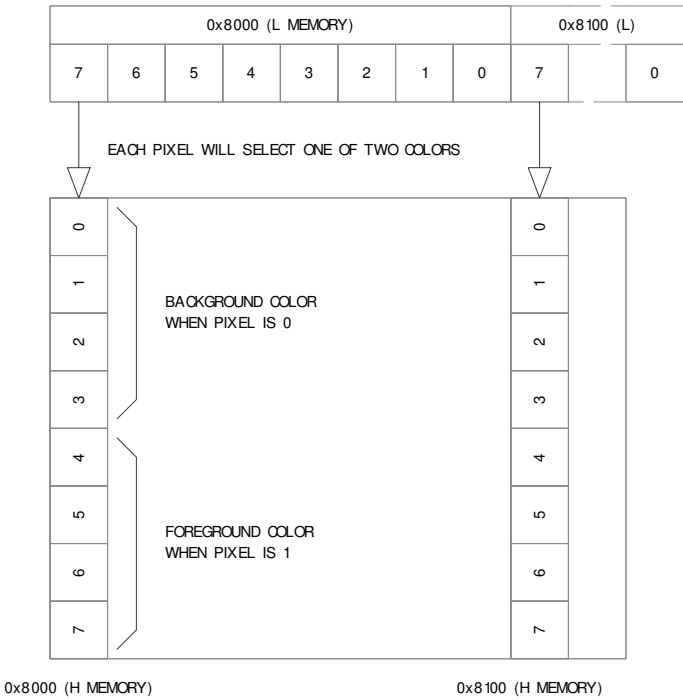
Required vertical timing



Required horizontal timing (only for composed video)



VISIBLE AREA
48x32 CHARACTERS
384x256 PIXELS



221B Baker Street
RETRO COMPUTERS

TITLE
RADUGA Comput er

SIZE A3	DWG NO Alf a3	CRT_TimeDiagrams 1	REV a3
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