

1)

$$m_{\text{comp}} = \frac{S}{2^{n_{\text{address comp}}} \cdot \frac{n_{\text{data comp}}}{8}} = \frac{2^{23}}{2^{20} \cdot \frac{4}{8}} = \frac{2^3}{\frac{1}{2}} = 2^4 = \underline{\underline{16 \text{ kapslar}}}$$

$$m_{\text{kpb}} = \frac{n_{\text{data bus}}}{n_{\text{data comp}}} = \frac{16}{4} = \underline{\underline{4 \text{ kapslar/bank}}}$$

$$m_{\text{bank}} = m_{\text{comp}} / m_{\text{kpb}} = \frac{16}{4} = \underline{\underline{4 \text{ banker}}}$$

3)

	Adressbitar som omfattas av komp	Storlek
ROM 1	A ₁₅ - A ₀	2 ¹⁶ = 64 kbyte
ROM 2	A ₁₅ - A ₀	2 ¹⁶ = 64 kbyte
RAM	A ₁₇ - A ₀	2 ¹⁸ = 256 kbyte
KOMP 1	A ₇ - A ₀	2 ⁸ = 256 byte
KOMP 2	A ₇ - A ₀	2 ⁸ = 256 byte
KOMP 3	A ₃ - A ₀	2 ⁴ = 16 byte
KOMP 4	A ₃ - A ₀	2 ⁴ = 16 byte

1

A_1-A_{20}

7652

451H

7652

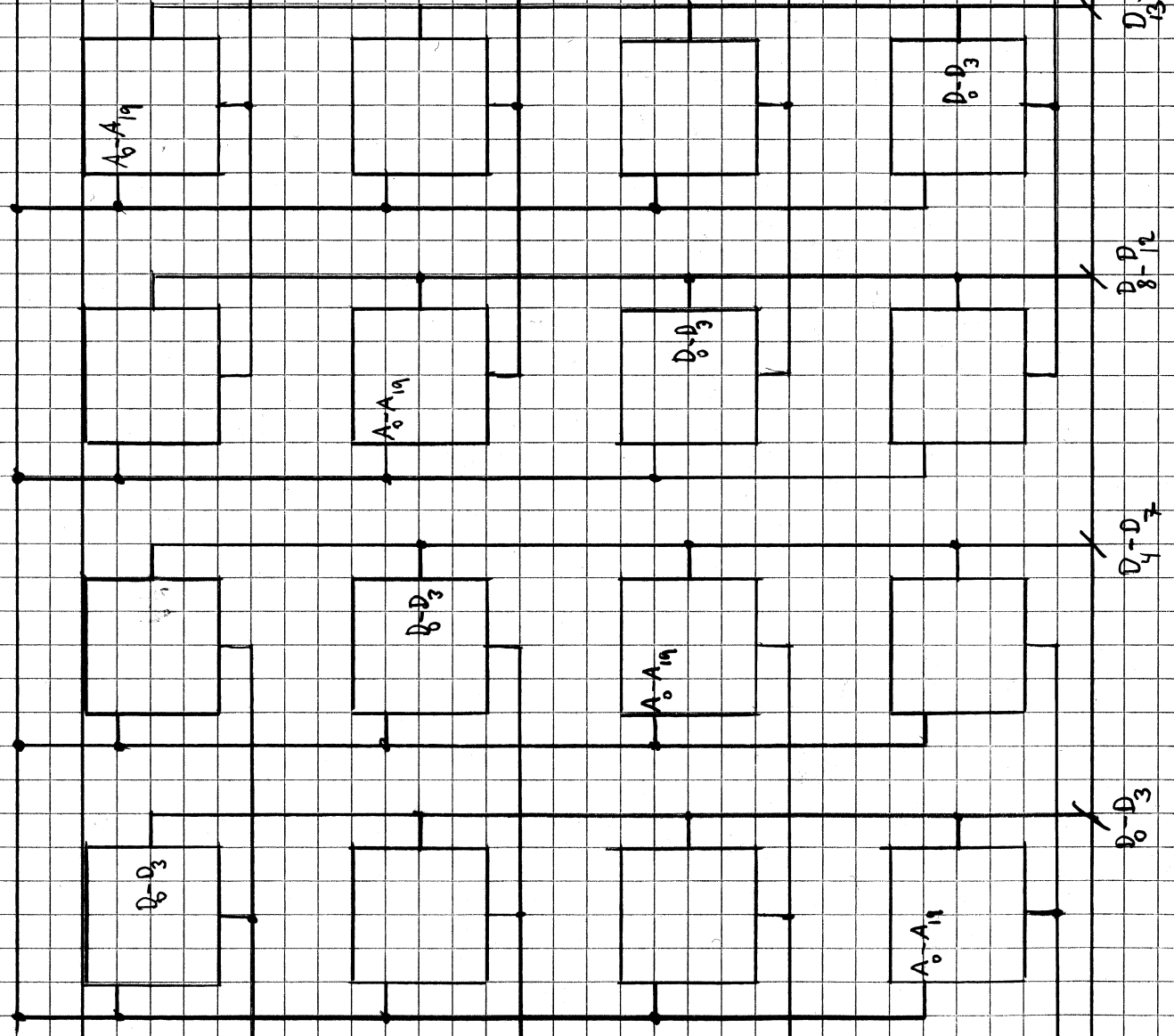
452H

7652

453H

7652

454H



2)

	A ₂₃	A ₂₂	A ₂₁	A ₂₀	A ₁₉	A ₁₈	A ₁₇	A ₁₆	A ₁₅	A ₁₄	A ₁₃	A ₁₂	A ₁₁	A ₁₀	A ₉	A ₈	A ₇	A ₆	A ₅	A ₄	A ₃	A ₂	A ₁	A ₀
ROM1 {	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ROM2 {	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RAM {	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KOMP1 {	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
KOMP2 {	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
KOMP3 {	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
KOMP4 {	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1

2)

	A_{23}	A_{22}	A_{21}	A_{20}	A_{19}	A_{18}	A_{17}	A_{16}	A_{15}	A_{14}	A_{13}	A_{12}	A_{11}	A_{10}	A_9	A_8	A_7	A_6	A_5	A_4	A_3	A_2	A_1	A_0
ROM1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ROM2	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RAM	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KOMP1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
KOMP2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
KOMP3	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
KOMP4	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1

2)

