; AltoIIImRT4K.mu

; last modified December 1, 1977 1:14 AM

; This is the part of the Memory Refresh Task which
; is specific to Alto IIIs WITHOUT Extended memory.

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$EngNumber $20000;

$ ALTO 2 WITHOUT EXTENDED MEMORY

MRT:  SINK+ MOUSE, BUS;

MRTA: L= T= -2; TXO;

TXO:  L= T= R37 AND NOT T;

T= 3+T+1, SH=0;

L= REFIMSK ANDT, :DOTIMER;

NOTIMER: R37+ L;

TIMERTN: L= REFZERO AND T;

SH=0;

: NOCLK;

NOCLK: MAR= R37;

L= CURX;

T= 2, SH=0;

MAR= R37 XORT, :DOCUR;

NOCUR: CURDATA= L, TASK;

MRLAST: CURDATA= L, :MRT;

DOTIMER: R37+ L;

MAR= EIALOC;

L= L2 AND T;

SH=0, L=T=REFZERO.T;

CURDATA= L, :SPCHK;

CURDATA= CURRENT TIME WITHOUT CONTROL BITS

SPCHK: SINK+ MD, BUS=0, TASK;

CHECK FOR EIA LINE SPACING

SPIA: : NOTIMERINT, CLOCKTEMP= L;

NOSPCHK: L= MD;

CHECK FOR TIME=NOW

MAR= TRAPDISP-1;

CONTAINS TIME AT WHICH INTERRUPT SHOULD HAPPEN

MTEMP+ I;

IF INTERRUPT IS CAUSED,

L= MD- T;

LINE STATE WILL BE STORED

SH=0, TASK, L=MTEMP, :SPIA;

TIMERINT: MAR= ITQAN;

STORE THE THING IN CLOCKTEMP AT ITQAN

L= CURDATA;

R37= L;

T= NW= 0;

AND CAUSE AN INTERRUPT ON THE CHANNELS

MD= CLOCKTEMP;

SPECIFIED BY ITQAN+1

L= MD OR T, TASK;

NW= L;

NOTIMERINT: T= R37, :TIMERTN;

; The rest of MRT, starting at the label CLOCK is unchanged