

ACORN ATOM REWORKED PCB updates

1. Reset circuit added
2. 2114 RAM replaced with 64256 / 6264 chips
3. 4K RAM switchable at #A000
4. RAM from #0000 to #7FFF or #0000 to #03FF & #2000 to #7FFF
5. 27512 64K ROM used giving two OS settings
6. Noise killer circuit added
7. 8304 chips replaced with 74LS245's
8. 81LS95 chips replaced with 74LS244's
9. Separate keyboard using Outemu switches (Cherry MX)
10. Configurable CPU clock. 1, 2 or 4Mhz
11. #B400 chip select added to expansion port
12. Video out connector added
13. CPU clock circuit improved

Link Settings

LK1 EPROM #E000 enable left

LK2 Enable IRQ for IC1

LK3 PL8 IRQ Enable

LK4 CPU, left 1MHz, right 2MHz, up 4MHz

LK5 4MHz clock to IC44

LK6 Left RAM at #0000 - #03FF & #2000 - #7FFF, Right RAM at #0000 - #7FFF

LK7 System ROM left low (#0000 - #7FFF), right high (#8000 - #FFFF)

Mapped to;

#A000 - #AFFF (if selected, Extension ROM)

#C000 - #CFFF BASIC

#D000 - #DFFF Floating Point

#E000 - #EFFF Atommc2 or Floppy disk

#F000 - #FFFF Kernal

LK8 #A000 ROM, RAM select.

ROM selected will enable data at #A000 - #AFFF in system ROM

RAM selected will enable IC12 #A000 - #AFFF

LK9 #A000 RAM enable, required if LK8 is set to RAM

LK10 Expansion port data bus select

Left #0400 - #1FFF, right #0400 - #1FFF and #E000 - #EFFF

Noise Killer

LK11 RAM_OE

LK12 RAM_WE

LK13 LOAD

LK14 VDG delay

Default settings

LK1 Left
LK2 Fitted
LK3 Not Fitted
LK4 Left
LK5 Fitted
LK6 Right
LK7 Left
LK8 Down
LK9 Fitted
LK10 Left
LK11 Right
LK12 Right
LK13 Fitted
LK14 CE-1G

System ROM W27C512 Winbond 64K

Kernal ROM mapping

Lower setting

Maps to;

#0000 - #1FFF	#8000 - #9FFF NOT USED (Video RAM)
#2000 - #2FFF	#A000 - #AFFF Willow 2 Extension ROM (LINK #A000)
#3000 - #3FFF	#B000 - #BFFF NOT USED (I/O)
#4000 - #4FFF	#C000 - #CFFF BASIC ROM
#5000 - #5FFF	#D000 - #DFFF Floating point ROM
#6000 - #6fff	#E000 - #EFFF ATOMMC2 V2.9
#7000 - #7FFF	#F000 - #FFFF Kernal ROM

Upper setting

Maps to;

#8000 - #8FFF	#8000 - #9FFF NOT USED (Video RAM)
#A000 - #AFFF	#A000 - #AFFF AEK Monitor Extension ROM (LINK #A7C7)
#B000 - #BFFF	#B000 - #BFFF NOT USED (I/O)
#C000 - #CFFF	#C000 - #CFFF BASIC ROM
#D000 - D5FFF	#D000 - #DFFF Floating point ROM
#E000 - #Efff	#E000 - #EFFF DOS
#F000 - #FFFF	#F000 - #FFFF Kernal ROM

CREDITS

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