

LEO-1 Homebrew Computer

Memory Map

Rev 1.0, 10th January 2018, John Croudy

Address	Size	Read-only memory	Signal
\$000000-\$01FFFF	128kW	ROM 0	/ROMSEL0
\$020000-\$03FFFF	128kW	ROM 1	/ROMSEL1
\$040000-\$05FFFF	128kW	ROM 2	/ROMSEL2
\$060000-\$07FFFF	128kW	ROM 3	/ROMSEL3
\$080000-\$09FFFF	128kW	ROM 4	/ROMSEL4
\$0A0000-\$0BFFFF	128kW	ROM 5	/ROMSEL5
\$0C0000-\$0DFFFF	128kW	ROM 6	/ROMSEL6
\$0E0000-\$0FFFFFF	128kW	ROM 7	/ROMSEL7

Address	Size	Device	Signal
\$400000-\$4007FF	2048 words	Video memory	/VRAM
\$410000-\$410000	1 word	Video control	/VCTRL
\$420000-\$420000	1 word	Video sense	/VSENS
\$430000-\$43FFFF	-	Not used	-
\$440000-\$440001	2 words	Digits	/DIGSEL
\$450000-\$45000F	16 words	Real time clock	/RTCSEL
\$460000-\$460000	1 word	DIP switches	/DIPSEL
\$470000-\$470003	4 words	I/O ports	/IOPSEL
\$480000-\$48FFFF	64kW	Device expansion 0 (slot 1)	/DEVSEL0
\$490000-\$49FFFF	64kW	Device expansion 1 (slot 1)	/DEVSEL1
\$4A0000-\$4AFFFF	64kW	Device expansion 2 (slot 2)	/DEVSEL2
\$4B0000-\$4BFFFF	64kW	Device expansion 3 (slot 2)	/DEVSEL3
\$4C0000-\$4CFFFF	64kW	Device expansion 4 (slot 3)	/DEVSEL4
\$4D0000-\$4DFFFF	64kW	Device expansion 5 (slot 3)	/DEVSEL5
\$4E0000-\$4EFFFF	64kW	Device expansion 6 (slot 4)	/DEVSEL6
\$4F0000-\$4FFFFFF	64kW	Device expansion 7 (slot 4)	/DEVSEL7

Address	Size	Read-write memory	Signal
\$800000-\$87FFFF	512kW	RAM 0	/RAMSEL0
\$880000-\$8FFFFFF	512kW	RAM 1	/RAMSEL1
\$900000-\$97FFFF	512kW	RAM 2	/RAMSEL2
\$980000-\$9FFFFFF	512kW	RAM 3	/RAMSEL3
\$A00000-\$A7FFFF	512kW	RAM 4	/RAMSEL4
\$A80000-\$AFFFFFF	512kW	RAM 5	/RAMSEL5
\$B00000-\$B7FFFF	512kW	RAM 6 (expansion)	/RAMSEL6
\$B80000-\$BFFFFFF	512kW	RAM 7 (expansion)	/RAMSEL7
\$C00000-\$C7FFFF	512kW	RAM 8 (expansion)	/RAMSEL8
\$C80000-\$CFFFFFF	512kW	RAM 9 (expansion)	/RAMSEL9
\$D00000-\$D7FFFF	512kW	RAM 10 (expansion)	/RAMSEL10
\$D80000-\$DFFFFFF	512kW	RAM 11 (expansion)	/RAMSEL11
\$E00000-\$E7FFFF	512kW	RAM 12 (expansion)	/RAMSEL12
\$E80000-\$EFFFFFF	512kW	RAM 13 (expansion)	/RAMSEL13
\$F00000-\$F7FFFF	512kW	RAM 14 (expansion)	/RAMSEL14
\$F80000-\$FFFFFF	512kW	RAM 15 (expansion)	/RAMSEL15