

Commodore VIC-20 Memory Blocks Illustrated

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Dec	Hex	Block#	Usage	Dec	Hex	Unexpanded	3K Expansion	8K+ Expansion
57344	E000	Block 7	KERNAL	38912	9800	I/O	I/O	I/O
49152	C000	Block 6	BASIC	38400	9600	Screen Color Memory	Screen Color Memory	-
40960	A000	Block 5	(1), (2)	37888	9400	-	-	Screen Color Memory
32768	8000	Block 4		36864	9000	VIC/VIA	VIC/VIA	VIC/VIA
24576	6000	Block 3		32768	8000	Character ROM	Character ROM	Character ROM
16384	4000	Block 2						
8192	2000	Block 1						
0	0000	Block 0		7680	1E00	Screen Memory	Screen Memory	User Basic Area ⁽³⁾
				4608	1200	User BASIC Area	User BASIC Area	Screen Memory
				4096	1000			
				1024	0400	3K Available		3K Available
				0	0000	BASIC Working Memory	BASIC Working Memory	BASIC Working Memory

Legend:

ROM	
RAM	Built-in RAM
EXP	Available for external expansion
I/O	Used by Kernal, BASIC, or I/O
SCRN	RAM Used for screen display

BASIC starts at 4097

BASIC starts at 1025

BASIC starts at 4609

- Notes:** (1) 8K Cartridges normally here (Autostart).
 (2) SYS64802 performs a soft-reset which usually starts Autostart cartridge images.
 (3) User BASIC Area continues beyond \$2000 with 8K+ Expansion.

- Tips:**
- To find where BASIC Area starts: PEEK(43) + 256*PEEK(44)
 - To find where BASIC Area ends: PEEK(55) + 256*PEEK(56) (These can also be changed to protect memory from BASIC)
 - To find which "page" screen memory starts: PEEK(648)
 - 30 = \$1E, meaning \$1E00 (Unexpanded or 3K expanded VIC)
 - 16 = \$10, meaning \$1000 (8K or more expansion)