Macintosh LC: VRAM Memory Map Correction

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TOPIC -----

The memory map in the "Macintosh LC Computer Developer Note" shows the VRAM space as $FC 0000-$FF FFFF. This gives 256K of memory. How does the 512K VRAM SIMM map into this smaller area?

DISCUSSION -----

The "Macintosh LC Computer Developer Note" is wrong.

The memory spaced used by VRAM is in the following ranges:

24-bit mode	32-bit mode
$F4 0000 to $FB FFFF	$50F4 0000 to $50FB FFFF

With the 512K VRAM SIMM installed, the entire range from $F4 0000 to $FB FFFF (24-bit mode) or $50F4 0000 to $50FB FFFF (32-bit mode) is used. ($FB FFFF minus $F4 0000 is $07 FFFF, which equals 512K.)

With the 256K VRAM SIMM installed, the range from $F4 0000 to $F7 FFFF (24-bit mode) or $50F4 0000 to $50F7 FFFF (32-bit mode) is used; $FB FFFF minus $F7 0000 is $03 FFFF, which equals 128K.

Note: The range from $F8 0000 to $FB FFFF (24-bit mode) or $50F8 0000 to $50FB FFFF (32-bit mode) maps to the range from $F4 0000 to $F7 FFFF (24-bit mode) or $50F4 0000 to $50F7 FFFF (32-bit mode). In other words, if a change is made to $F8 0000, the same change will be made to $F4 0000. The reverse holds true as well: a change to $F4 0000 will reflect in $F8 0000.

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