

## Commander X 16 Map of select Pages

This document contains detailed information about five crucial memory pages of the Commander X 16 (X16) computer. These pages represent requirements of I/O devices, the CPU, the Kernal, the Basic Language, and other X16 facilities.

Information contained herein is gathered from many sources in that project and is presented here to give an overview of what is used, what is available for use, and what is not currently known.

E&OE.

### IO Page (9Fxx) Map

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
	Audio ?		VERA		RFU ?		VIA1	VIA2	RTC ?		User 1		User 2		User 3	
0			VERALO	L0HSCROLL_L			D1PRB	D2PRB								
1			VERAMID	L0HSCROLL_H			D1PRA	D2PRA								
2			VERAHI	L0VSCROLL_L			D1DDRB	D2DDRB								
3			VERADAT	L0VSCROLL_H			D1DDRA	D2DDRA								
4			VERADAT2	L1_CONFIG			D1T1L	D2T1L								
5			VERACTL	L1_MAPBASE			D1T1H	D2T1H								
6			VERAIEN	L1_TILEBASE			D1T1LL	D2T1LL								
7			VERAISR	L1_HSCROLL_L			D1T1LH	D2T1LH								
8			IRQLINE_L	L1_HSCROLL_H			D1T2L	D2T2L								
9			DC_VIDEO DC_HSTART	L1_VSCROLL_L			D1T2H	D2T2H								
A			DC_HSCALE DC_HSTOP	L1_VSCROLL_H			D1SR	D2SR								
B			DC_BORDER DC_VSTART	AUDIO_CTRL			D1ACR	D2ACR								
C			DC_BORDER DC_VSTOP	AUDIO_RATE			D1PCR	D2PCR								
D			L0_CONFIG	AUDIO_DATA			D1IFR	D2IFR								
E			L0_MSPBASE	SPI_DATA			D1IER	D2IER								
F			L0_TILEBASE	SPI_CTRL			D1ORA	D2ORA								

	Specified/Used
	Unknown/Unspecified
	User Defined

## Page Zero (00xx) Map

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0																
1																
2																
3																
4																
5																
6																
7																
8																
9																
A																
B																
C																
D																
E																
F																

	User/Application
	Registers for 16 bit libraries.
	Kernal
	CBDOS
	rfu
	FPLIB
	BASIC

## Page One (01xx) Map

Page One is reserved for the W65C02S System Stack.

Page Two (02xx) Map

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0																
1																
2																
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4																
5																
6																
7																
8																
9																
A																
B																
C																
D																
E																
F																

	Kernal
	rfu
	Kernal Code
	Framebuffer Driver Vectors

## Page Three (03xx) Map

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0																
1																
2																
3																
4																
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6																
7																
8																
9																
A																
B																
C																
D																
E																
F																

	Basic Vectors
	Kernal Vectors
	Kernal
	rfu
	FPLIB
	BASIC

## Other Pages

At this time pages 4 through 7 should be available for application use. However, this too may change before the X16 is released.