Replica 1 Quick Reference

For the Replica 1 Third Edition

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General Specifications	
CPU	6502 or 65C02
Clock Speed	1 MHz
RAM	32KB
ROM	8KB
Keyboard	Parallel ASCII or PS/2
Video	Composite
Power Input	7-9 VDC center positive or ATX power supply
Serial Port Settings	2400 bps 8N1, no handshaking, no flow control

Memory Map

Address Range	Comments
$0000 - $00FF	Zero page RAM
$0100 - $01FF	Stack RAM
$0000 - $7FFF	RAM
$D000 - $DFFF	6821 PIA
$E000 - $EFFF	BASIC (ROM)
$F000 - $FEFF	Krusader Assembler (ROM)
$FF00 - $FFFF	Woz Monitor (ROM)

Useful Addresses

Description	Hex	Decimal
CFFA1 start	$9000	-28672
ACI start	$C100	-16128
BASIC cold start	$E000	-8192
BASIC warm start	$E2B3	-7501
Krusader cold start	$F000	-4096
Krusader warm start	$F01C	-4068
Krusader mini-monitor	$FE14	-492
Woz Monitor	$FF00	-256

Note: The decimal addresses can be executed from BASIC using the CALL command.

Hardware Registers

6521 PIA Port A connects to keyboard (parallel or PS/2) via Propeller chip. Port B connects to display (video and serial) via Propeller chip.	$D010 - $D013
Keyboard Data	$D010
Keyboard Strobe (bit 7 goes high on key press)	$D011
Display Data	$D012
Display Control Register (bit 7 goes low when ready)	$D013

Woz Monitor

Commands	
<*Address*><*Enter*>	Display contents of memory
<*Start Address*>**.**<*End Address*><*Enter*>	Display a range of memory
<*Address*>**:**<*Data*> <*Data*>...<*Enter*>	Write data to memory
<*Address*>**R**<*Enter*>	Run from an address

Apple BASIC

Commands: AUTO CALL CLR DEL DIM END FOR GOSUB GOTO HIMEM IF INPUT LET LIST LOMEM NEXT POKE PRINT REM RETURN RUN SCR TAB THEN TO

Operators: # * + - / < <= <> = > >= AND MOD NOT OR

Functions: ABS() LEN() PEEK() RND() SGN()

Krusader Assembler

Commands	
N	New program
I	Insert
L	List
X	Delete
E	Edit
M	Show memory usage
A	Assemble
V	Show value of label
R	Run
D	Disassemble
!	Execute Woz Monitor command
$	Go to Woz Monitor
P	Panic (recover)

Krusader Mini-Monitor

Commands	
A	Set A register
X	Set X register
Y	Set Y register
S	Set S (stack pointer)
P	Set P (processor status)
L	Set PC low
H	Set PC high
R	Resume execution
$	Go to Woz Monitor
!	Execute Woz Monitor command
T	Trace execution

Multi I/O Board

Memory Map	
EPROM/EEPROM	$A000-$BFFF
6522 VIA	$C200-$C20F
6551 ACIA	$C300-$C303

Apple Cassette Interface

To start from Woz Monitor: **C100R**

Write: <*Start Address*>**.**<*End Address*>**W**<*Enter*>
Read: <*Start Address*>**.**<*End Address*>**R**<*Enter*>

Start tape before pressing <*Enter*>.
Returns to Woz Monitor after read or write.
Can specify multiple address ranges and commands on one line, e.g. **100.200W 300.500W**
To save a BASIC program: **004A.00FFW 0800.1000W**<*Enter*>
If LOMEM is changed from default value of 2048 ($0800) use that value instead.
If HIMEM is changed from the default value of 4096 ($1000) use that value instead.

CFFA1 Compact Flash

Memory Map	
RAM	$8000 - $8FFF
EEPROM	$9000 - $AFEF
Hardware Registers	$AFF0 - $AFFF

Commands	
B	Read Block
C	Catalog
D	Delete
^F	Format
L	Load
M	Memory Display
N	New Directory
P	Prefix
Q	Quit
R	Rename
S	Save (BASIC)
T	Terse
W	Write File

Entry Points	
Run and return to Woz Monitor	$9000
Run and return to BASIC warm start	$9003
Run and return to BASIC warm start (Equivalent to $9003 but corresponds to CALL -24000 from BASIC for ease of use)	$A240
Run and return to calling program	$9006