# **Memory Commands**

Instructions and functions to handle memory access

#### Poke ADDRESS, VALUE

Change a one-byte word at a memory address

Parameters:

ADDRESS: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

VALUE: The value to set

## **Doke ADDRESS, VALUE**

Change a two-byte word at a memory address. Value is set in little-endian in PC mode and big-endian in Amiga mode *Parameters:* 

ADDRESS: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

VALUE: The value to set

## Loke ADDRESS, VALUE

Change a four-byte word at a memory address. Value is set in little-endian in PC mode and big-endian in Amiga mode *Parameters:* 

ADDRESS: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

VALUE: The value to set

## Poke\$ ADDRESS, TEXT\$

Write the ascii values of a string in memory

Parameters:

ADDRESS: The address to write to, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

TEXT\$: The string to write

## Peek\$ ADDRESS, LENGTH, STOP

Read a string from memory

Parameters:

ADDRESS: The address to read, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

LENGTH: The number of bytes to read.

STOP: The ascii code of the character signifying the end of the string. Default is 0

Value returned:

string: The string contained at the address

#### **Peek ADDRESS**

read a byte from an address

Parameters:

ADDRESS: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

Value returned:

integer: The value contained at the address

## **Deek ADDRESS**

Read a two-bytes value from an address. Value is read in little-endian in PC mode and big-endian in Amiga mode *Parameters:* 

ADDRESS: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

Value returned:

integer: The value contained at the address

#### Leek ADDRESS

Read a four-bytes value from an address. Value is read in little-endian in PC mode and big-endian in Amiga mode Parameters:

ADDRESS: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

Value returned:

integer: The value contained at the address

#### Free

Return the amount of free memory on the machine. Warnign, not tested and maybe deprecated in the future./ The original AMOS instruction reported the amount of free memory in the variable buffer area *Value returned:* 

integer: The amount of free memory

#### **Chip Free**

Return the amount of free memory on the machine. Warnign, not tested and maybe deprecated in the future./ The original AMOS instruction reported the amount of free chip memory of the machine, which has no meaning tocay *Value returned:* 

integer: The amount of free memory

#### **Fast Free**

Return the amount of free memory on the machine. Warnign, not tested and maybe deprecated in the future./ The original AMOS instruction reported the amount of free fast memory of the machine, which has no meaning tocay *Value returned:* 

integer: The amount of free memory

## Fill ... To ... START, FINISH, PATTERN

fill memory block with the contents of a variable.

Parameters:

START: The address to change, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

FINISH: The address of the end of the area to fill

PATTERN: The four-byte pattern that will be repeated when filling

## Copy ... To ... START, FINISH, DESTINATION

Copy a memory block

Parameters:

START: The address of the block to copy, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

FINISH: The address of the end of the area to copy

DESTINATION: The destination address, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

## **Hunt ... To ... START, FINISH, TEXT\$**

Find a string of characters in memory

Parameters:

START: The address of the block to copy, should be resolved in AOZ by using the "Start" function to get the address of a bank (magical number) and adding the offset to the address. Normal computer memory is inaccessible.

FINISH: The address of the end of the area to copy

TEXT\$: The string to look for

Value returned:

integer: The position of the first character if found, zero if not found

#### **BSet VARIABLE, POSITION**

Set a bit of a variable to 1

Parameters:

VARIABLE: The integer variable to change POSITION: The number of the bit to set

## **BCIr VARIABLE, POSITION**

Set a bit of a variable to 0

Parameters:

VARIABLE: The integer variable to change POSITION: The number of the bit to clear

## **BChg VARIABLE, POSITION**

Toggle a bit of a variable

Parameters:

VARIABLE: The integer variable to change POSITION: The number of the bit to toggle

#### **BTst POSITION, VALUE**

Test a bit in an interger number

Parameters:

POSITION: The number of the bit to test

VALUE: The number to test

Value returned:

integer: True if the bit is set to one, False if not

## Ror.b NUMBER, VARIABLE

Rotate the content of an integer variable to the right on the first 8 bits

Parameters:

NUMBER: The number or shifts

VARIABLE: The integer variable to rotate

## **Ror.w NUMBER, VARIABLE**

Rotate the content of an integer variable to the right on the first 16 bits

Parameters:

NUMBER: The number or shifts

VARIABLE: The integer variable to rotate

## **Ror.I NUMBER, VARIABLE**

Rotate the content of an integer variable to the right on 32 bits

Parameters:

NUMBER: The number or shifts

VARIABLE: The integer variable to rotate

#### Rol.b NUMBER, VARIABLE

Rotate the content of an integer variable to the left on the first 8 bits

Parameters:

NUMBER: The number or shifts

VARIABLE: The integer variable to rotate

#### Rol.w NUMBER, VARIABLE

Rotate the content of an integer variable to the left on the first 16 bits

Parameters:

NUMBER: The number or shifts

VARIABLE: The integer variable to rotate

## **Rol.I NUMBER, VARIABLE**

Rotate the content of an integer variable to the left on 32 bits

Parameters:

NUMBER: The number or shifts

VARIABLE: The integer variable to rotate

## **Exec COMMAND\$, OUTPUT\$**

Execute a system command. This instruction will be implemented in executable and node.js transpiled applications *Parameters:* 

COMMAND\$: The command with it parameters OUTPUT\$: The DOS-like output, like "StdOut"

## **Set Stack SPACE**

Deprecated, wa used to set the stack space on the Amiga

Parameters:

SPACE: The length opf the stack

## Set Equate Bank BANK\_NUMBER

Deprecated, was used on the Amiga

Parameters:

BANK\_NUMBER:

## **Call ADDRESS, PARAMETER**

Deprecated, was used on the Amiga

Parameters:

ADDRESS:

PARAMETER:

#### **ExeCall OFFSET**

Deprecated, was used on the Amiga

Parameters:

OFFSET:

#### **GfxCall OFFSET**

Deprecated, was used on the Amiga

Parameters:	
OFFSET:	

# **DosCall OFFSET**

Deprecated, was used on the Amiga

Parameters: OFFSET:

# IntCall OFFSET

Deprecated, was used on the Amiga

Parameters:

OFFSET: