

MemoryBank

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| | <i>TITLE :</i> MemoryBank | | |
| <i>ACTION</i> | <i>NAME</i> | <i>DATE</i> | <i>SIGNATURE</i> |
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Chapter 1

MemoryBank

1.1 Memory Bank V1.00

Pure Basic MemoryBank library V1.00

With this library you can allocate any number of memory banks. You can put them either into Chip-RAM or into Fast-RAM. It also includes functions to copy and fill memory. When your program ends the allocated memory banks will automatically be freed.

Commands summary:

- AllocateMemoryBank
- AvailableMemory
- CopyMemory
- FillMemory
- FreeMemoryBank
- InitMemoryBank
- MemoryBankAddress
- MemoryBankSize

Example:

MemoryBank example

1.2 allocatememorybank

SYNTAX

*Adresse = AllocateMemoryBank(Bank#, Size.1, MemType.1)

COMMAND

Allocates a memory bank and returns its adress or 0, if the memory bank couldn't be allocated. If you have already allocated a memory bank with the same bank number, that one will be automatically freed.

Bank#: a number to identify the memory bank

Size: the size of the memory bank in bytes

MemType: with this parameter you can define additional properties of the memory bank:

```
#MEMF_FAST    => Fast-RAM
#MEMF_CHIP    => Chip-RAM
#MEMF_CLEAR   => Clear memory
```

Just add these values or use the logical OR.

Example: `MemType = #MEMF_CHIP | #MEMF_CLEAR`

If you neither use `#MEMF_FAST` or `#MEMF_CHIP`, the bank will be in Fast-RAM, or in Chip-RAM, if there's not enough Fast-RAM available.

1.3 availablememory

SYNTAX

```
FreeMemory.l = AvailableMemory(MemType.l)
```

FUNCTION

Returns how much memory is still available.

MemType: With this parameter you can define the properties of the available memory.

```
#MEMF_FAST => Fast-RAM
#MEMF_CHIP => Chip-RAM
```

Just add these values or use the logical OR.

To get the amount of both Fast- and Chip-RAM, set `MemType` to 0.

1.4 copymemory

SYNTAX

```
CopyMemory(*Source, *Dest, Size.l)
```

COMMAND

Copies a memory chunk.

***Source:** The source address

***Dest:** The destination address

Size: The size of the memory chunk in bytes

1.5 fillmemory

SYNTAX

```
FillMemory(*Dest, Size.l, Value.b)
```

COMMAND

Fills a memory chunk with an optional Byte.

*Dest: The destination address

Size: The size of the memory chunk in bytes

Value: The value you want to fill the memory chunk with

1.6 freememorybank

SYNTAX

```
FreeMemoryBank(Bank.l)
```

COMMAND

Frees a memory bank.

1.7 initmemorybank

SYNTAX

```
InitMemoryBank(MaxBanks.l)
```

COMMAND

Allocates a memory chunk for informations about the memory banks. This command must always be called before all other functions of this library.

1.8 memorybankaddress

SYNTAX

```
*MemoryBank = MemoryBankAddress(Bank#)
```

FUNCTION

Returns the address of the specified memory bank.

1.9 memorybanksize

SYNTAX

```
Size.l = MemoryBankSize(Bank#)
```

FUNCTION

Returns the size of the specified memory bank in bytes.
