

4.8.20 MRAPI_ATOMIC_CLEAR (ABB Extension)

NAME

`mrapi_atomic_clear`

SYNOPSIS

```
void mrapi_atomic_clear(  
    MRAPI_OUT void* sync, MRAPI_IN void* dest,  
    MRAPI_IN int bit, MRAPI_OUT int* previous,  
    MRAPI_IN size_t size, MRAPI_OUT  
    mrapi_status_t* status  
);
```

DESCRIPTION

`mrapi_atomic_clear()` performs atomic bit clear within an integer. Atomic bit set is provided by `mrapi_atomic_set()`, and atomic bit change is provided by `mrapi_atomic_change()`. The operation is only valid for memory locations within shared memory, where the synchronization can be across real-time processes. The integer value at destination address is modified to clear the specified `bit`, indexed from 0, to be 0 and the `previous` bit value returned if that argument is non-NULL. Different integer widths are supported based on the platform. The desired integer `size` is passed as input and returned `status` indicates if the operation succeeded.

RETURN VALUE

None.

ERRORS

MRAPI_ERR_NODE_NOTINIT	The calling node is not initialized
MRAPI_ERR_ATOM_OP_FAILED	The local atomic operation failed

NOTE

Supported integer types:

Windows – `uint32_t`
Unix – `uint32_t`

SEE ALSO