4.8.21 MRAPI_ATOMIC_CHANGE (ABB Extension)

NAME

mrapi_atomic_change

SYNOPSIS

```
void  mrapi_atomic_change(
  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_change()`performs atomic bit change within an integer. Atomic bit set is provided by `mrapi_atomic_set()`, and atomic bit clear is provided by `mrapi_atomic_clear()`. 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 flip the specified `bit`, indexed from 0, to be it complement 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