

4.8.11 MRAPI_ATOMIC_XOR (ABB Extension)

NAME

mrapi_atomic_xor

SYNOPSIS

```
void mrapi_atomic_xor(
    MRAPI_OUT void* sync, MRAPI_IN void* dest,
    MRAPI_IN void* value, MRAPI_OUT void*
    previous, MRAPI_IN size_t size, MRAPI_OUT
    mrapi_status_t* status
);
```

DESCRIPTION

mrapi_atomic_xor() performs atomic integer bit-wise exclusive or. Atomic bit-wise union is provided by mrapi_atomic_or(), and atomic bit-wise intersection is provided by mrapi_atomic_and(). 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 XOR'ed with value and the new integer result returned if that argument is non-NULL. Different integer widths are supported based on the platform. The desired 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 – uint8_t, uint16_t, uint32_t, uint64_t
Unix - uint8_t, uint16_t, uint32_t, uint64_t

SEE ALSO