

4.8.6 MRAPI_ATOMIC_ADD (ABB Extension)

NAME

`mrapi_atomic_add`

SYNOPSIS

```
void mrapi_atomic_add(  
    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_add()` performs atomic integer addition. With a negative addend value, subtraction is also possible. 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 incremented by the specified integer value and the previous integer value 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

<code>MRAPI_ERR_NODE_NOTINIT</code>	The calling node is not initialized
<code>MRAPI_ERR_ATOM_OP_FAILED</code>	The local atomic operation failed

NOTE

Supported integer types:

Windows - `uint32_t`, `uint64_t`

Unix - `uint8_t`, `uint16_t`, `uint32_t`, `uint64_t`

SEE ALSO