4.8.10 MRAPI_ATOMIC_AND (ABB Extension)

NAME

mrapi_atomic_and

SYNOPSIS

```
void  mrapi_atomic_and(
  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_and()`performs atomic integer bit-wise intersection. Atomic bit-wise union is provided by `mrapi_atomic_or()`, and atomic bit-wise exclusive or is provided by `mrapi_atomic_xor()`. 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 AND'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