

**NAME**

`ibv_open_qp` – open a shareable queue pair (QP)

**SYNOPSIS**

```
#include <infiniband/verbs.h>
```

```
struct ibv_qp *ibv_open_qp(struct ibv_context *context,  
                           struct ibv_qp_open_attr *qp_open_attr);
```

**DESCRIPTION**

**ibv\_open\_qp()** opens an existing queue pair (QP) associated with the extended protection domain *xrcd*. The argument *qp\_open\_attr* is an `ibv_qp_open_attr` struct, as defined in `<infiniband/verbs.h>`.

```
struct ibv_qp_open_attr {  
    uint32_t    comp_mask; /* Identifies valid fields */  
    uint32_t    qp_num;    /* QP number */  
    struct      *ibv_xrcd; /* XRC domain */  
    void        *qp_context; /* User defined opaque value */  
    enum ibv_qp_type qp_type; /* QP transport service type */  
};
```

**ibv\_destroy\_qp()** closes the opened QP and destroys the underlying QP if it has no other references. *qp*.

**RETURN VALUE**

**ibv\_open\_qp()** returns a pointer to the opened QP, or NULL if the request fails. Check the QP number (*qp\_num*) in the returned QP.

**NOTES**

**ibv\_open\_qp()** will fail if it is asked to open a QP that does not exist within the *xrcd* with the specified *qp\_num* and *qp\_type*.

**SEE ALSO**

**ibv\_alloc\_pd(3)**, **ibv\_create\_qp(3)**, **ibv\_create\_qp\_ex(3)**, **ibv\_modify\_qp(3)**, **ibv\_query\_qp(3)**

**AUTHORS**

Sean Hefty <sean.hefty@intel.com>