

NAME

`ibv_query_port` - query an RDMA port's attributes

SYNOPSIS

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

```
int ibv_query_port(struct ibv_context *context, uint8_t port_num,
                  struct ibv_port_attr *port_attr);
```

DESCRIPTION

`ibv_query_port()` returns the attributes of port `port_num` for device context `context` through the pointer `port_attr`. The argument `port_attr` is an `ibv_port_attr` struct, as defined in `<infiniband/verbs.h>`.

```
struct ibv_port_attr {
    enum ibv_port_state  state;      /* Logical port state */
    enum ibv_mtu         max_mtu;    /* Max MTU supported by port */
    enum ibv_mtu         active_mtu; /* Actual MTU */
    int                  gid_tbl_len; /* Length of source GID table */
    uint32_t             port_cap_flags; /* Port capabilities */
    uint32_t             max_msg_sz;  /* Maximum message size */
    uint32_t             bad_pkey_cntr; /* Bad P_Key counter */
    uint32_t             qkey_viol_cntr; /* Q_Key violation counter */
    uint16_t             pkey_tbl_len; /* Length of partition table */
    uint16_t             lid;         /* Base port LID */
    uint16_t             sm_lid;     /* SM LID */
    uint8_t              lmc;        /* LMC of LID */
    uint8_t              max_vl_num; /* Maximum number of VLs */
    uint8_t              sm_sl;     /* SM service level */
    uint8_t              subnet_timeout; /* Subnet propagation delay */
    uint8_t              init_type_reply; /* Type of initialization performed by SM */
    uint8_t              active_width; /* Currently active link width */
    uint8_t              active_speed; /* Currently active link speed */
    uint8_t              phys_state; /* Physical port state */
    uint8_t              link_layer; /* link layer protocol of the port */
};
```

possible values for the link layer field are `IBV_LINK_LAYER_INFINIBAND`, `IBV_LINK_LAYER_ETHERNET`, or `IBV_LINK_LAYER_UNSPECIFIED`.

RETURN VALUE

ibv_query_port() returns 0 on success, or the value of errno on failure (which indicates the failure reason).

SEE ALSO

ibv_create_qp(3), **ibv_destroy_qp(3)**, **ibv_query_qp(3)**, **ibv_create_ah(3)**

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