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 */
        uint8_t                flags;          /* Port flags */
        uint16_t               port_cap_flags2;/* Port capabilities */
};
```

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

supported port flags:
IBV_QPF_GRH_REQUIRED - When this flag is set, the applications must create all AH with GRH configured.

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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