**KG6524**

TSN命令配置

版本：V1.0

时间：2023/11/21

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# 1 前言

## 1.1简介

该文档介绍了kg6524 tsn相关功能

## 1.2 适用人群

该文档适用于需要理解和掌握 芯片参考设计平台操作的软件开发工程师。

## 1.3 历史版本

|  |  |  |
| --- | --- | --- |
| 发布日期 | 版本号 | 描述 |
| 2023-11-21 | V1.0 | 初始版本 |

# 2 Qbv

## 2.1 show tsn qbv flow {PORTID|}

Interface |Flow ID| Source MAC| Destination MAC |VLAN |priority

//tsn\_flow\_info\_t查询

tsn\_flow\_info\_t {

Uint8\_t port\_num; //0-27

Uint8\_t port\_bind; //0 null 1 qbv 2 qci 3qch

Uint8\_t priority; //0-7

Uint16\_t flow\_id //0-2047

Uint16\_t vlan\_id //1-4094

Mac\_t src\_mac;

Mac\_t des\_mac;

}

## 2.2 show tsn qbv info PORTID

Qbv: enable //enqueuepriority

//Gate-states://缺省gate-state 这个没法实现

Quque-time-en:到达base-time后生效的门控队列

Current-time:

Cycle-time:

Cfg\_cycle-time:

Base-time:

Cfg-base-time

Supportedlistmax:32

Control list:

Index gatestates interval(us)

Struct control\_list\_info{

Uint8\_t gate\_state[32]

Uint32\_t gate\_internal[32]

Uint8\_t gate\_length;

Uint32\_t base\_time;

Uin32\_t cycle\_time;

}

Tsn\_control\_state\_info{

control\_list\_info adm\_list\_info[27]

control\_list\_info sch\_list\_info[27]

}

## 2.3 tsn enable

Tsn port PORTID (enable|disable)

//CtlEnqPriority

## 2.4 tsn qbv base-time

Tsn port PORTID qbv base-time seconds SEC nanoseconds NAN

## 2.5 tsn qbv cycle-time

Tsn port PORTID qbv cycle-time seconds SEC Microseconds MICRO

## 2.6 tsn flow

Tsn flow FLOWID { des-mac DESMAC | src-mac SRCMAC | vlan VLANID | priority PRI }

Undo Tsn flow FLOWID

//tsn\_flow\_info\_t 软表实现，增删改查

## 2.7 tsn qbv bind flow

Tsn port PORTID qbv bind flow FLOWID priority PRI

Undo Tsn port PORTID qbv bind flow FLOWID

//acl install entry flowid group 0

//tsn 流转发逻辑

//acl unistall entry flowid

//移除tsn流转发逻辑

## 2.8 tsn qbv control-list

## 2.8 tsn qbv config-change

Tsn port PORTID qbv config-change

//set timectl change

Undo Tsn port PORTID qbv config-change

//set all state open

2.8 tsn qbv guard-band