



Canon

High Performance Transport (HPT)

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☆ What is HPT?

- Command Set over SBP-2
 - Full duplex communication
 - Queuing Model
 - Request Based Flow Control
 - 3 command / 2 status
 - DATA TRANSFER
 - READ REQUEST, REQUESTED READ
 - DIRECT STATUS, DIRECT STATUS RESPONSE
 - Primitive Device control / status
 - 4 command / 3 status
 - ACQUIRE, RELEASE, ABDICATE Device Resource
 - BASIC DEVICE STATUS
 - Logical channel
 - 2 command / 2 status
 - OPEN, CLOSE channel

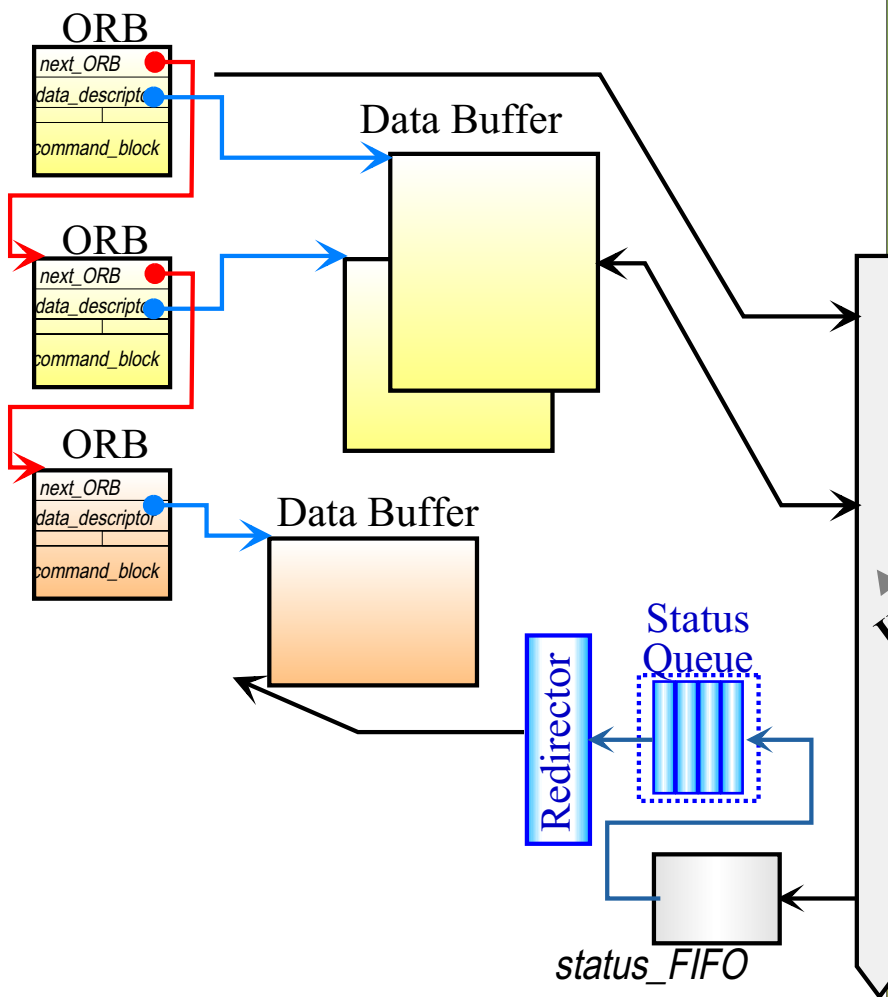


★HPT objectives

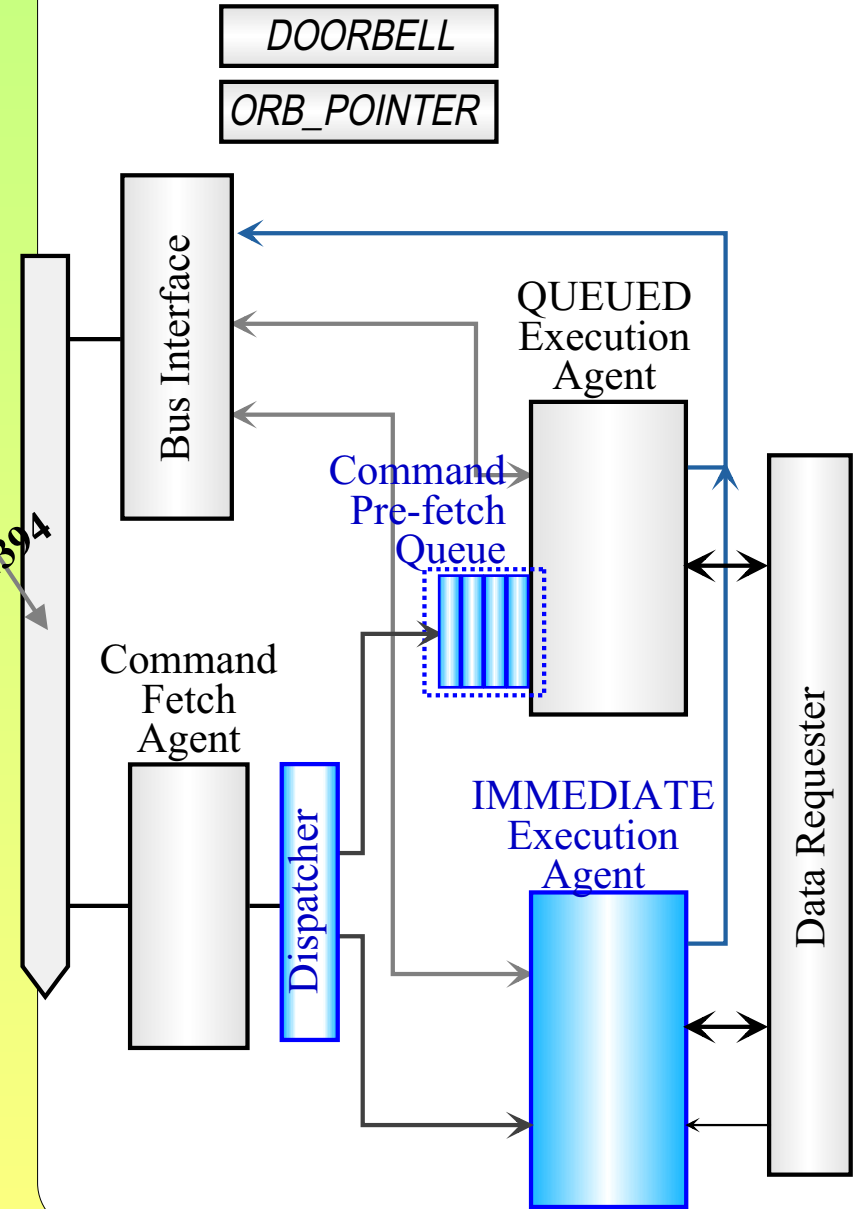
- High performance and low overhead
- Flexible bi-directional data transport
- Multiple service channels
- Application independence
- Backward compatibility with bus environment support
- (Self configurable)

Initiator

Target

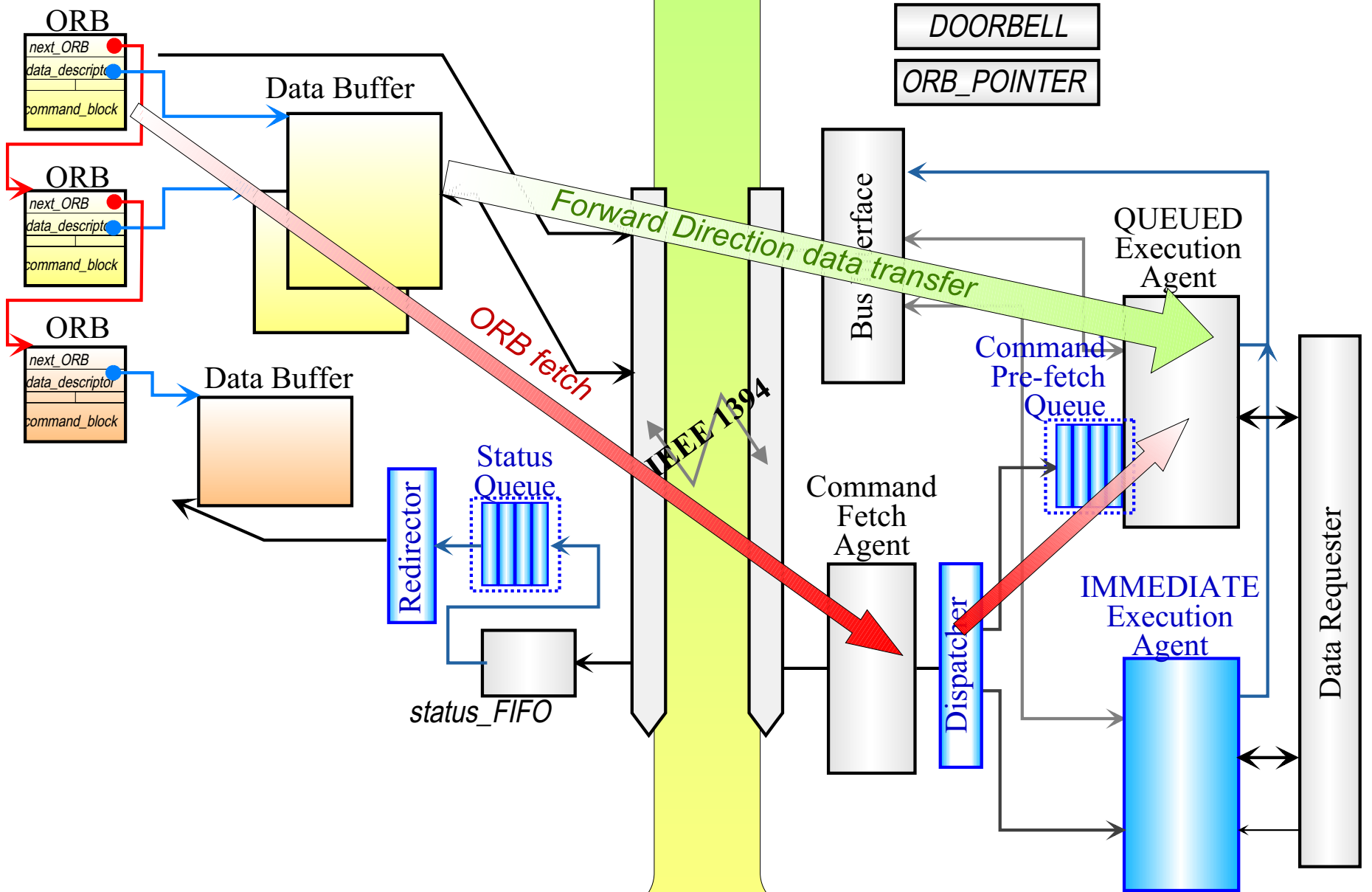


IEEE 1394



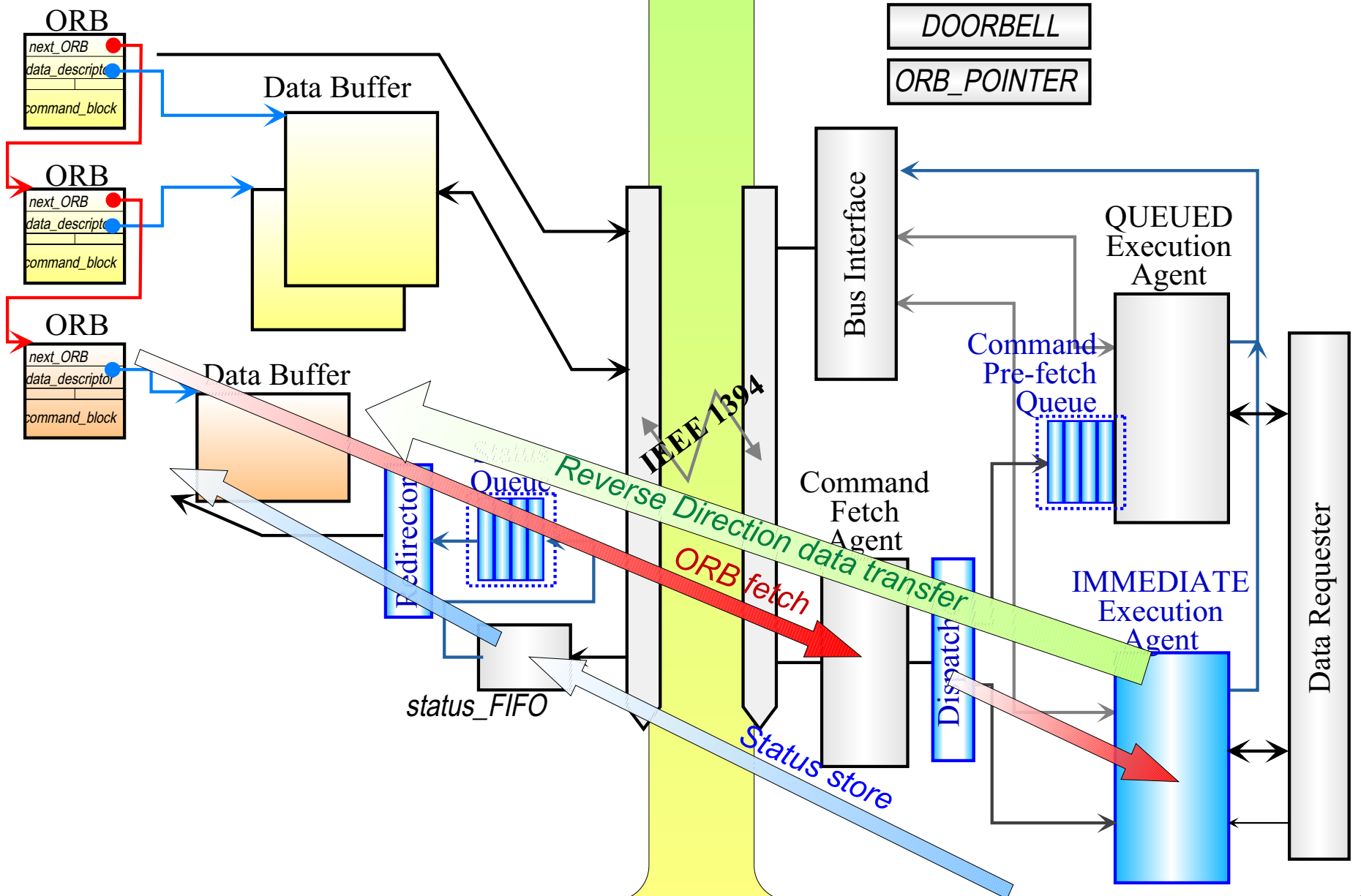
Initiator

Target



Initiator

Target





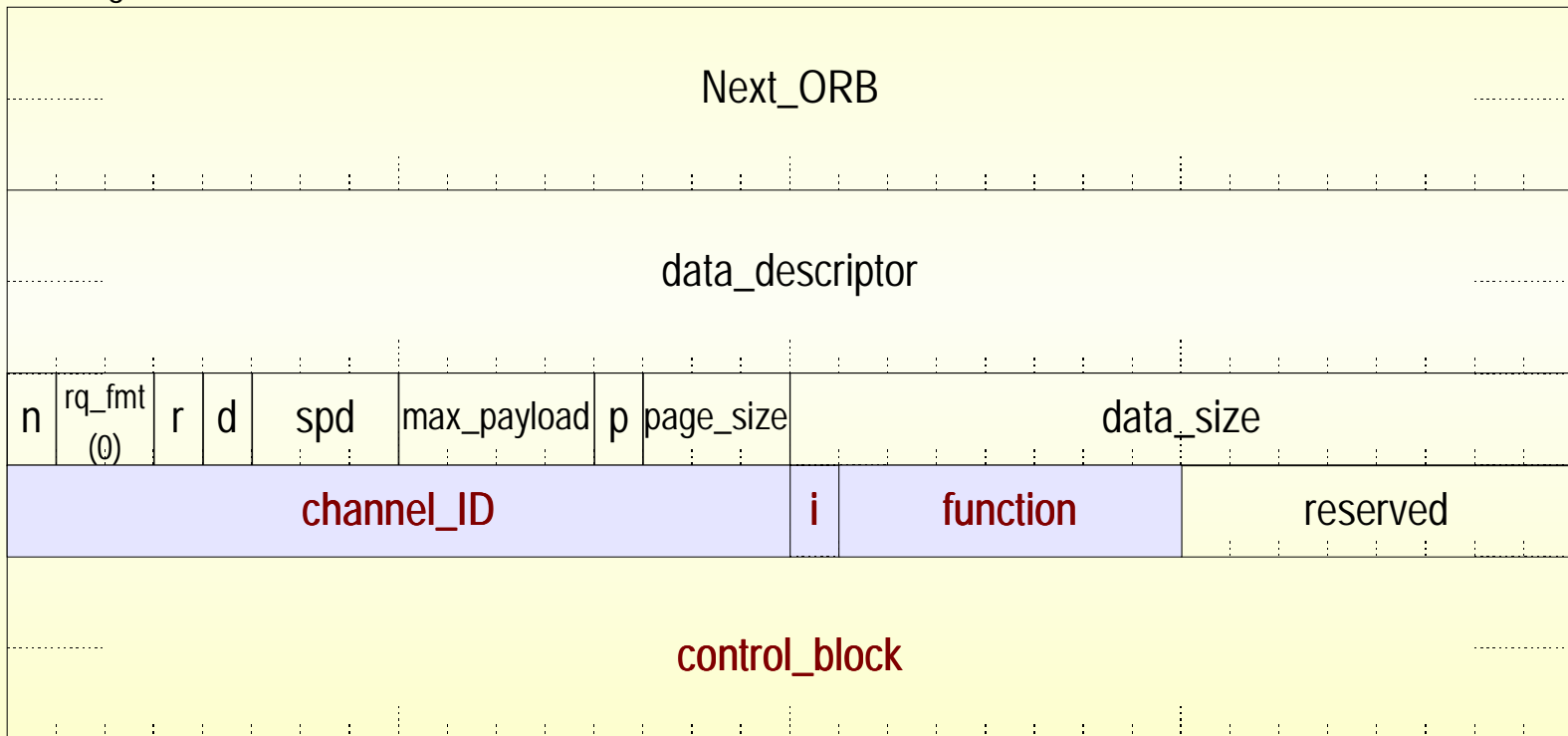
★ Other Functions

- Primitive device control / status
 - Minimum function for sharing
 - ACQUIRE device resource
 - RELEASE device resource
 - ABDICATE device resource
 - Primary device status for legacy driver
 - BASIC DEVICE status
- Logical channel
 - Multiple Logical channel over single login
 - OPEN, CLOSE channel
 - Channel identifier in ORB and status block



★ Command Block ORB

most significant

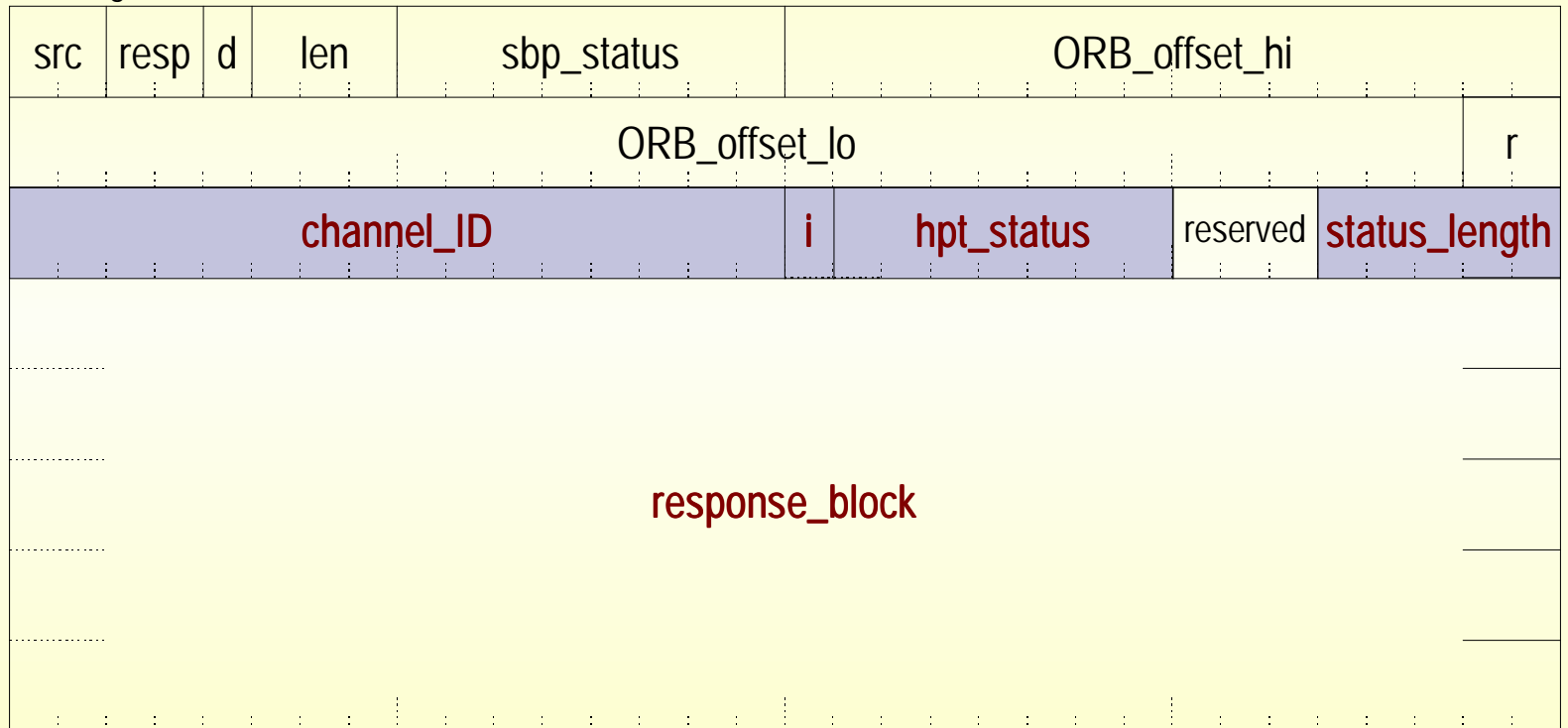


least significant



★ Status Block

most significant



least significant



★ Issue and More Information

- Issue
 - Service Discovery
 -
 -
- Contact E-mail address
 - oid3-1394@pure.cpd.canon.co.jp
- Draft (PWG-C site)
 - <ftp://ftp.tokyoweb.or.jp/pwgc1394/pub/proposals/canon/HPT03E.pdf>