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# Traffic Specification (TSPEC) for Audio Video Bridging

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# Revision History

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❑ avb-jeong-ts-spec-0607-v0.0: 6/07/07 call

# TSPEC for AVB

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TSPEC (Mandatory/ Optional)	Default value	Field
Traffic class	Class 4 or 5	3 bits
MaxPacketSize	2047 (bytes)	11 bits
MinPacketSize	2047 (bytes)	11 bits
MaxPacketCount	1023 (packets)	10 bits
MinPacketCount	1023 (packets)	10 bits
MaxDataRate	131072 or 1048576 (Kbps)	17 or 20 bits
MinDataRate	131072 or 1048576 (Kbps)	17 or 20 bits
MaxJitter	TBD	
BurstWindow	TBD	
TimeUnit	msec (or else?)	
Others?		

# TSPEC for AVB

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## □ Traffic Class

- Class 5: 125 usec observation interval/ 2ms delay bound guarantee
- Class 4: 1 msec observation interval/ 8~16 ms delay bound guarantee

## □ Max/MinPacketSize

- Up to 2000 byte, so need to allocate 11 bits

## □ Max/MinPacketCount

- Worst case: minimum frame size (72byte), 1 msec observation interval
  - ◆ 100 Mbps link:  $(100\text{Mbit} * 0.75) / ((72*8) * 1000) = 130.2$
  - ◆ 1Gbps link:  $(1\text{Gbit} * 0.75) / ((72*8) * 1000) = 1302$
- Thus, 1024 count value will be quite reasonable

## □ Max/MinDataRate

- Unit rate is 1Kbps
- 100Mbps link: up to 131072 (17 bits)
- 1Gbps link: up to 1048576 (20 bits)

# TSPEC for AVB

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## MaxJitter

- TBD

## BurstWindow

- TBD

## TimeUnit

- msec ?

## Others?

- Possibly some parameters for scheduling and/or queueing