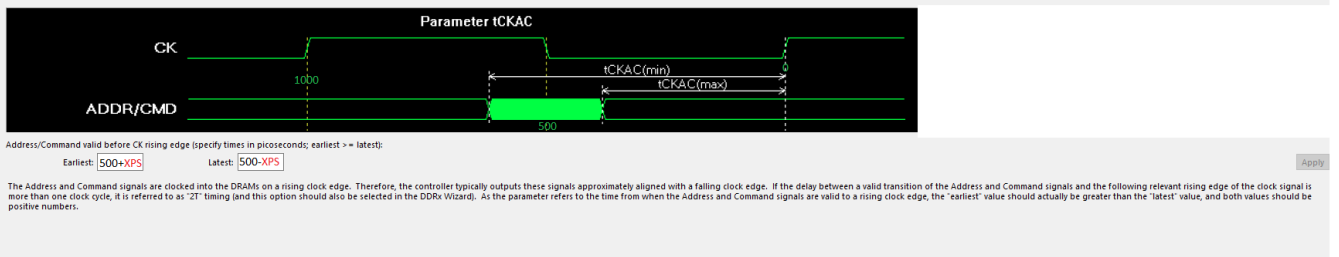# AM6412 1600 MT/s DDR4 Parameters:

1.ADDRESS/COMMAND TIMING

X -> Please share value of X
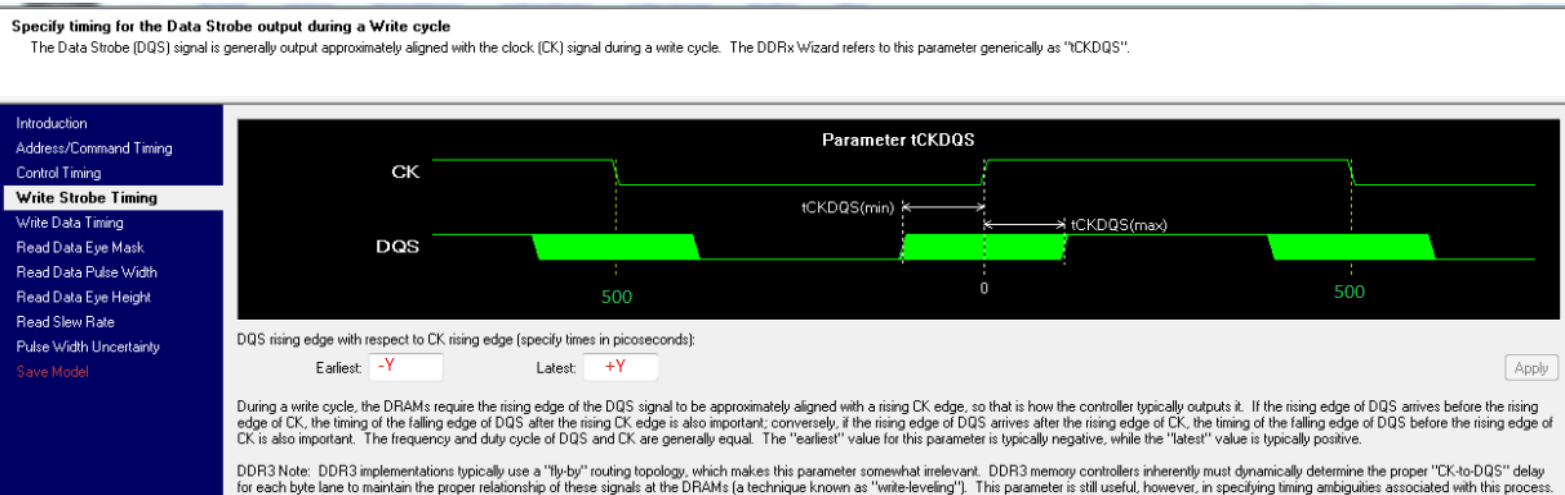

Clock Frequency is 1000ps as per datasheet.

Total Transmitter Uncertainty **Xps**; 500 ±**Xps**.

2.Write strobe Timing

Y ->Please share value of Y

Total Transmitter Uncertainty : **Yps**
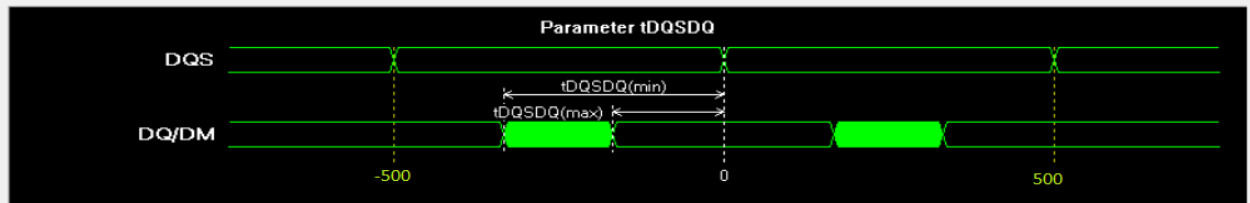
3.Write Data Timing

Z -> Please share the value of Z

Specify timing for the Data and Data Mask outputs during a Write cycle

The Data (DQ) and Data Mask (DM) signals are generally output approximately 1/2 data bit time before the Data Strobe (DQS) signal transitions during a write cycle. The DDRx Wizard refers to this parameter generically as "tDQSDQ". This parameter applies to every DQS edge, not just the rising edge.

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Write Data Timing
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Read Data Pulse Width
Read Data Eye Height
Read Slew Rate
Pulse Width Uncertainty
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Parameter tDQSDQ

DQS

tDQSDQ(min)

tDQSDQ(max)

DQ/DM

-500   0   500

DQ/DM transition window before DQS transitions (specify times in picoseconds):

Earliest: 250+Z   Latest: 250-Z   Apply

During a write cycle, the DRAMs require the edges of the DQS signal to be approximately centered within the "valid" window of the DQ and DM signals. As the parameter refers to the time from when the DQ and DM signals transition to "valid" to the next DQS edge, the "earliest" value should actually be greater than the "latest" value, and both values should be positive numbers less than one data bit period (1/2 clock period).

Note: The parameter applies to both rising and falling edges of DQS.

Total Transmitter Uncertainty=**Zps**

Values should be 500/2±**Zps**
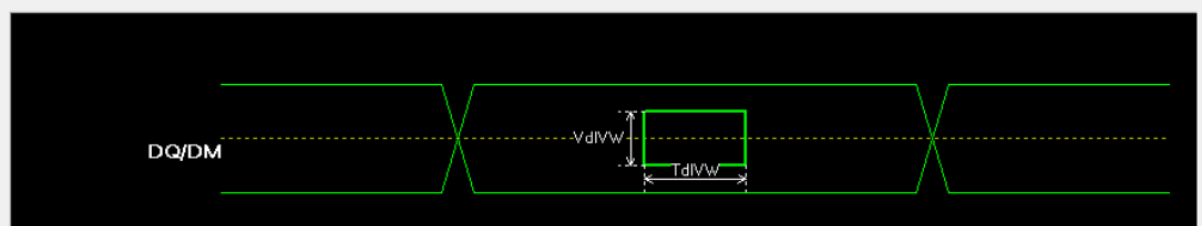
4.Read Data Eye Mask

Specify Read Data Eye Mask parameters

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DQ/DM

VdIVW

TdIVW

Read Data Eye Mask Height and Eye Mask Width:

VdIVW (mV): X   TdIVW (UI): Y   Apply

The Data Eye Mask provides the timing and voltage requirement of the signal. The eye mask is horizontally (time) centered around the corresponding strobe/clock crossing its threshold value. The eye mask is vertically (voltage) centered around the reference voltage assigned to the given signal. If the signal crosses the eyemask at any location, it is considered a failure.

X -> Represents the Value eye mask height

Y-> Represents the Value eye mask width