SN65DSI83/84/85- Single DSI Input to Dual-Link LVDS

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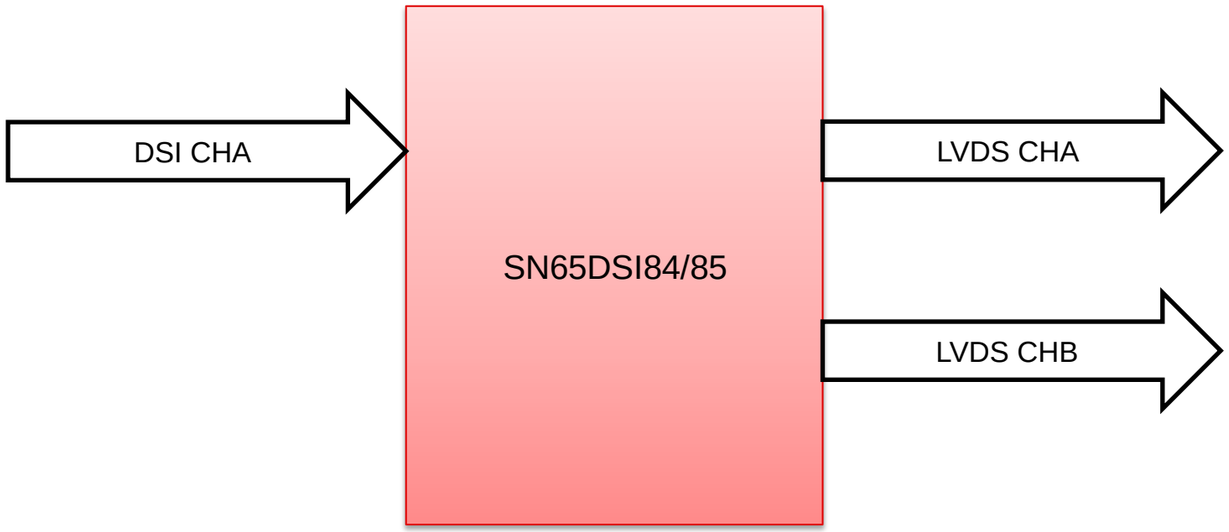
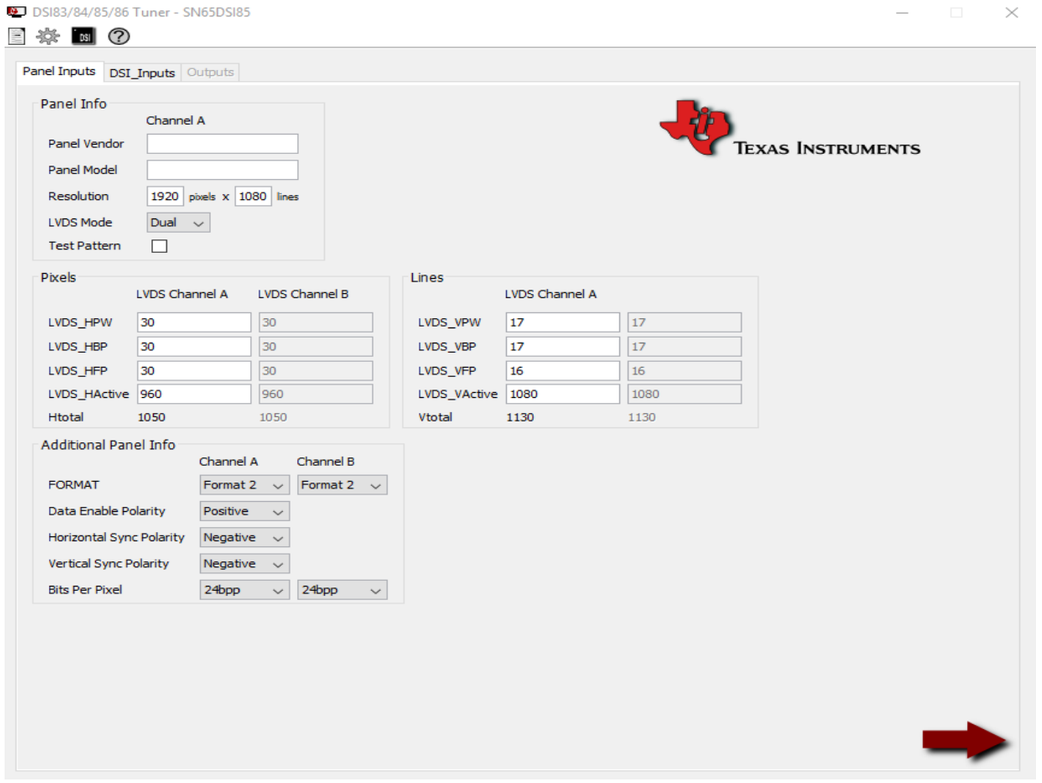
Single to dual

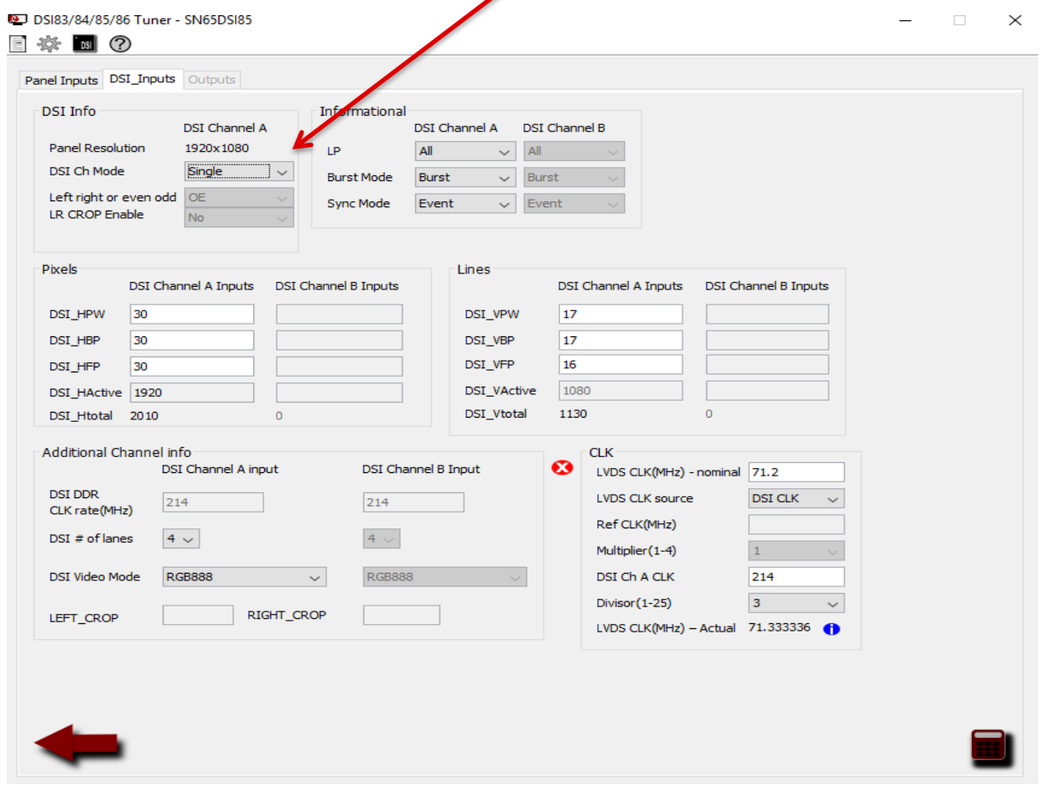
- Please watch the “Dual DSI Input to Dual-Link LVDS” video before watching this video
- The SN65DSI84 or SN65DSI85 can be used for this demo



Single to dual

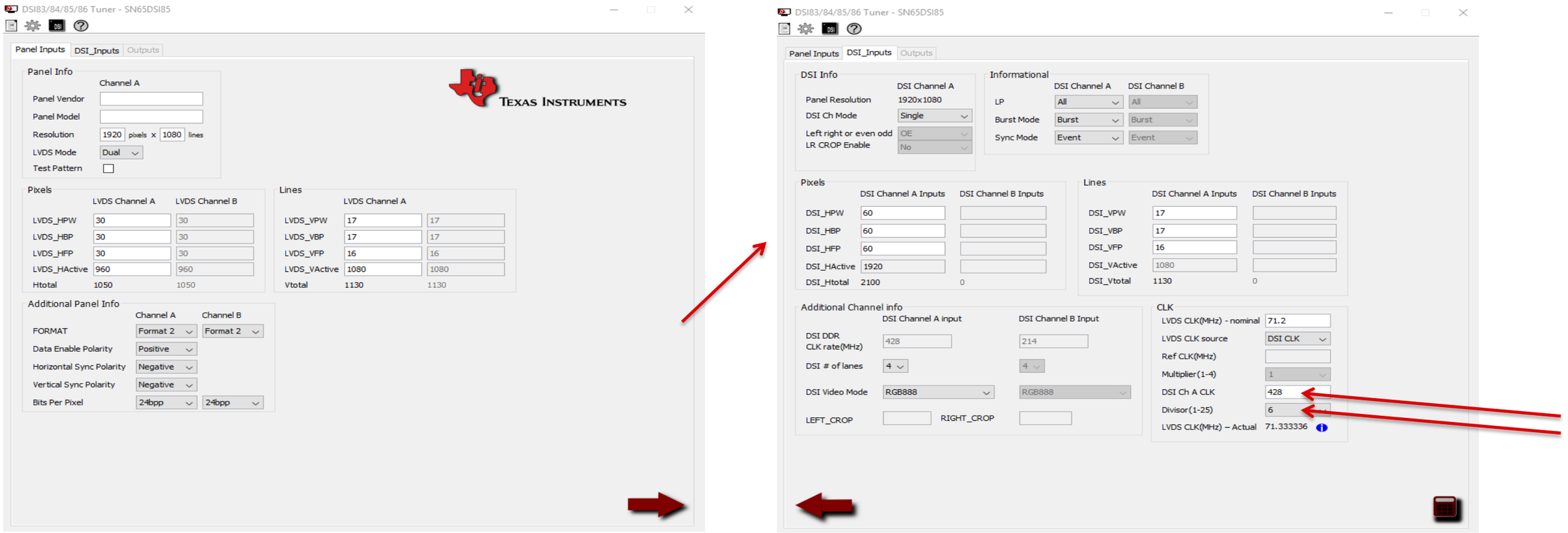
- The same display and settings used for the display in the “Dual DSI Input to Dual-Link LVDS” will be used here
- Change the “DSI Ch Mode” to “Single” in the “DSI_Inputs” window





Single to dual

- Double all of the horizontal parameters (HPW, HBP, HFP, HActive) and the DSI CLK frequency from what they were before in the “Dual DSI Input to Dual-Link LVDS”



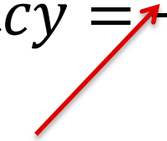
Single to dual

- To calculate the minimum required DSI CLK frequency, use the below equation:

- $$Minimum\ DSICLK\ frequency = \frac{Throughput}{2 \times \#\ of DSI\ Lanes} = \frac{LVDS\ CLK \times bpp}{2 \times \#\ of\ DSI\ Lanes}$$

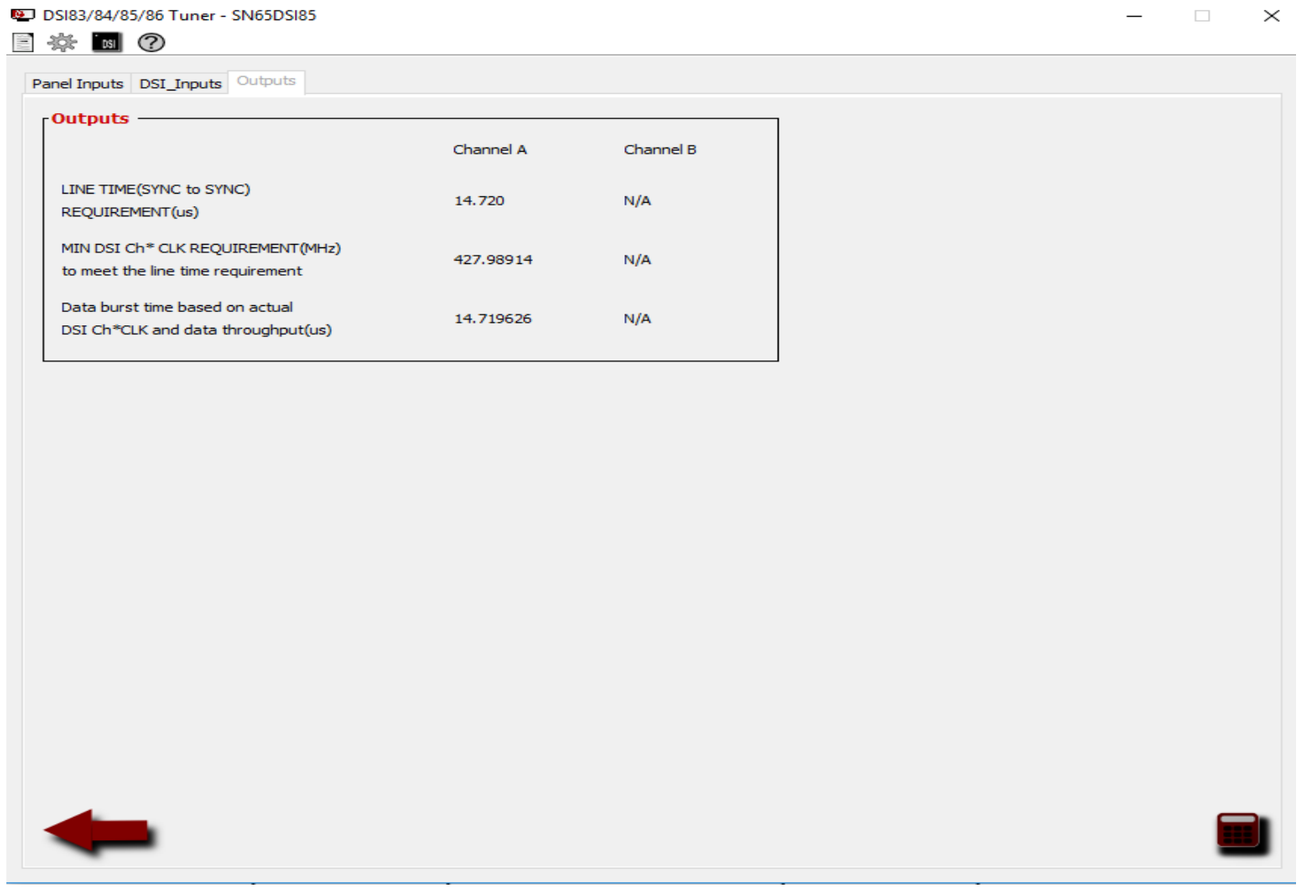
- For this example:

- $$Minimum\ DSICLK\ frequency = \frac{2 \times 71.2\ MHz \times 24\ bpp}{2 \times 4} = \frac{1708.8\ Mbps}{2 \times 4} = 428\ MHz$$



Single to dual

- Observe the “Outputs” window, and follow the same procedure as in the previous videos to generate the CSR settings



Thanks for your time!