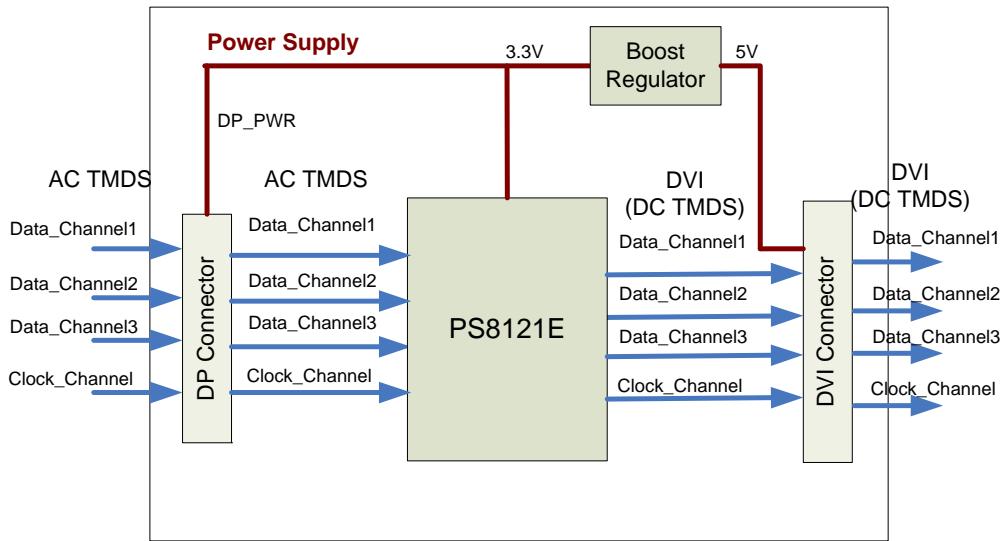


DP2DVI Dongle Circuit Block Diagram and Explanation



From the diagram above, the main PS8121E chip inside the DP2DVI dongle has no crystal input. It is a level shifter IC that just translates the input TMDS signal from AC to DC-coupled signals, but it doesn't change the clock of TMDS signal. The only clock in the system is the input TMDS clock. The TMDS clock is from graphic controller, and the clock varies according to different definition setting from 25MHz(640*480, 60Hz) to 162MHz(1600*1200, 60Hz).

Reference:

Digital Visual Interface, Revision1.0, DDWG

VESA and Industry Standards and Guidelines for Computer Display Monitor Timing (DMT), Version 1.0, Rev. 12, November 17, 2008