

illustration only and not limitation: microprocessor, embedded controller, PLA, PAL, FPGA, ASIC, computer, smart card, networking equipment, or any other machine, apparatus, system, or the like which is adapted to perform functionality defined by such instructions or the like. Such drawings, written descriptions, and corresponding claims may variously be understood as representing the instructions etc. taken alone, the instructions etc. as organized in their particular packet/serial/parallel/etc. form, and/or the instructions etc. together with their storage or carrier media. The reader will further appreciate that such instructions etc. may be recorded or carried in compressed, encrypted, or otherwise encoded format without departing from the scope of this patent, even if the instructions etc. must be decrypted, decompressed, compiled, interpreted, or otherwise manipulated prior to their execution or other utilization by the machine.

[0059] Reference in the specification to “an embodiment,” “one embodiment,” “some embodiments,” or “other embodiments” means that a particular feature, structure, or characteristic described in connection with the embodiments is included in at least some embodiments, but not necessarily all embodiments, of the invention. The various appearances “an embodiment,” “one embodiment,” or “some embodiments” are not necessarily all referring to the same embodiments.

[0060] If the specification states a component, feature, structure, or characteristic “may”, “might”, or “could” be included, that particular component, feature, structure, or characteristic is not required to be included. If the specification or claim refers to “a” or “an” element, that does not mean there is only one of the element. If the specification or claims refer to “an additional” element, that does not preclude there being more than one of the additional element.

[0061] Those skilled in the art having the benefit of this disclosure will appreciate that many other variations from the foregoing description and drawings may be made within the scope of the present invention. Indeed, the invention is not limited to the details described above. Rather, it is the following claims including any amendments thereto that define the scope of the invention.

What is claimed is:

1. A panel controller for use with a display panel, the panel controller comprising:

interface logic for connecting the panel controller to the display panel;

a pixel engine coupled to the interface logic for generating output pixel data to be sent to the display panel; and

an output configurator coupled to the interface logic and the pixel engine, to configure at least one operating characteristic of the pixel engine in response to at least one parameter received from the display panel.

2. The panel controller of claim 1 wherein:

the interface logic is further for receiving the parameter from the display panel over a communication path that also carries at least some of the output pixel data to the display panel.

3. The panel controller of claim 1 wherein the at least one operating characteristic comprises at least one of:

resolution;

data bus width;

display technology;

gray scale support;

modulation index;

scan type;

clock frequency;

scan rate;

degradation; and

color depth.

4. The panel controller of claim 1 further comprising:

a lookup table for converting a received indirect parameter into a parameter value.

5. The panel controller of claim 1 further comprising:

parameter storage to store received parameters.

6. The panel controller of claim 1 further comprising:

a configuration cycle machine for detecting incoming parameters.

7. The panel controller of claim 1 further comprising:

a video card containing the panel controller and a graphics controller.

8. An apparatus comprising:

a graphics controller;

a display panel; and

a configurable panel controller coupled to receive graphics data from the graphics controller, coupled to provide pixel data to the display panel, and coupled to receive at least one configuration parameter from the display panel.

9. The apparatus of claim 8 wherein the configurable panel controller is responsive to the at least one configuration parameter to modify at least one operational characteristic of the configurable panel controller in response thereto.

10. The apparatus of claim 9 wherein the configurable panel controller is responsive to at least one parameter selected from the group comprising resolution, data bus width, display technology, gray scale support, modulation index, scan type, clock frequency, scan rate, degradation, and color depth.

11. The apparatus of claim 9 wherein the configurable panel controller is responsive to the configuration parameter to adjust an output resolution of the configurable panel controller.

12. The apparatus of claim 9 wherein the configurable panel controller includes more than two pixel data output channels and is responsive to the configuration parameter to select a subset of the pixel data output channels to transmit pixel data to the display panel.

13. The apparatus of claim 12 wherein the subset of the pixel data consists of two pixel data output channels.

14. The apparatus of claim 8 constructed as a television.