

ABSTRACT**A PRINT ENGINE CONTROLLER FOR A PAGEWIDTH INKJET PRINT HEAD**

A print engine controller for a page width inkjet print head includes at least one integrated circuit. The circuit defines an input interface which is configured to receive data representing compressed pages. A continuous tone image data decoder is connected to the input interface to decode any data representing compressed continuous tone images received from the input interface. A bi-level image data decoder is connected to the input interface to decode any data representing compressed bi-level image data received from the input interface. A half-toner is connected to the input interface for dithering continuous tone images. A compositor is connected to the input interface for compositing bi-level images. A print head interface is configured to receive data representing dithered and composite images and to generate data that is readable by the inkjet print head.

Figure 3