

Display Timing Controller IC for eReaders with EPD Displays



Overview

Avatar's AVT6201 EPD controller provides customers a low cost and high efficiency monolithic solution for EPD timing signal generation. The controller can reduce CPU's runtime for displaying to EPD modules and has seamless interface to popular gate drivers and source drivers. It supports simultaneous update to 16 regions supporting hand-writing interface, scroll bar, and other on-screen user interactive applications. This monolithic solution also provides customized interface for power management unit of the system, SDRAM, SPI flash.

Samples and Development Kit will be available in May 2011.

Package Forms

	Package	Integrated SDRAM and NOR Flash	RGBW Color Mapping
AVT6201	BGA180	No	No
AVT6203	BGA180	Yes	No
AVT6204	BGA180	No	Yes

Features

- Intel 80 interface:
 - Up to 100MHz 16 bits async. interface
 - Support user defined command
 - Support optimized commands for EPDs
- Display:
 - 2048x1536 @ 50Hz
 - Up to 256 gray levels with dithering
 - 16 regions updating simultaneously
 - Glueless interface to EPD panel
 - Multi-panel support
- Power management:
 - Customized power configure pins
- Serial flash memory Waveform:
 - SPI Flash memory for waveform read
 - High speed SPI mode
- Thermal and humidity sensor:
 - I2C interface for temperature reading
 - User defined command
- External memory support:
 - 16/32-bit mobile SDRAM Interface
- Color EPD:
 - RGBW color mapping (AVT6204 only)
- Package-level memory integration:
 - SDRAM and NOR flash (AVT6202 only)



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