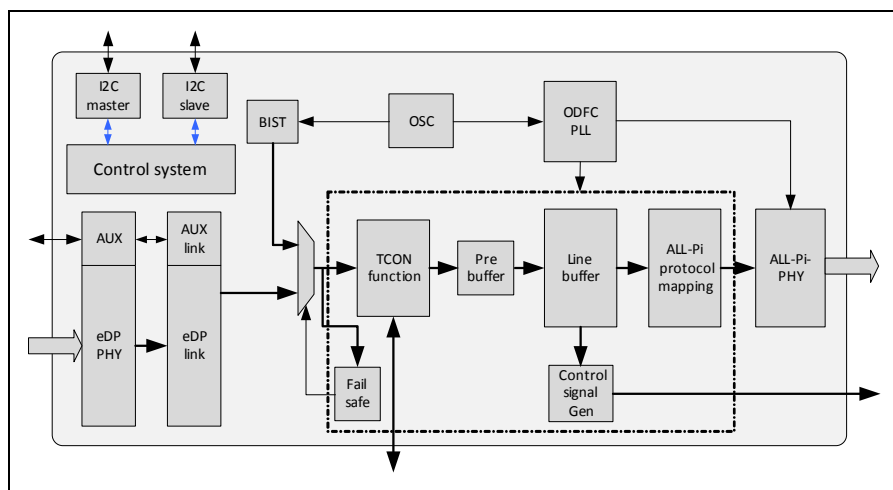


## 2-lane FullHD eDP TCON with 6-port All-PI Output

The ANX1851 chip is an eDP timing controller (TCON) designed for displays and panels. It adopts Analogix's new P2P interface ALL-PI, which offers lower cost and power consumption with low EMI. The ANX1851 chip supports 2-lane DisplayPort input 6-port ALL-PI output with video resolution of 1920x1200.

### Features

- TCON functions
  - Support FHD (1920x1080@60) and WUXGA (1920x1200@60)
  - Support gate D-IC/GIP timing through GPIO
  - Power-up gate output masking to avoid DC/DC over-loading
  - Programmable fail-safe mode control configurable BIST and AGP pattern
  - 10-bit Gamma correction table for each color
  - Support various FRC pattern configurations
  - PWM generator, PWM pass-through, and PWM product modes
  - 0-D dimming function for backlight low power
  - Support color engine process function
  - 18/24 bpp color depth
- eDP input
  - 2-lane DisplayPort 1.2/ eDP 1.3 interface
  - RBR (1.62Gbps), HBR (2.7Gbps)
  - Support DRRs/NvDRRs/SDRRs functions
- ALL-PI output
  - 6-port/1-pair configuration
  - Compatible with ALL-PI v1.0
- ALL-PI TX supports up to 1.2Gbps per pair
- Support various swap modes: pair swap, p/n swap, RGB swap, etc
- Support Z-inversion (column, inversion), and N-line inversion
- Support DRD mode
- Adjustable output swing and common mode
- CON line to initialize SD-IC
- System IO functions for special applications
  - EDID access through AUX channel
  - On chip filtered reset
  - EEPROM shared for EDID and configuration power requirements
  - I2C standard mode (100KHz) and fast mode (400KHz) support
  - On-chip SSCG (+/-1% with 0.25% step, 10/20/30/40KHz, center spreading)
- No external crystal required
- 2.5VIO and 1.2VCORE power supply or 3.3VIO and 1.2VCORE power supply support
- 60-pPin QFN package (5x9mm)
- RoHS compliant and Halogen free package



Copyright ©2014 Analogix Semiconductor, Inc.  
3211 Scott Blvd., Suite 103  
Santa Clara, CA 95054, USA  
+1 (408) 988-8848

<http://www.analogix.com/>

©2014 Analogix Semiconductor, Inc. All Rights reserved.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY EXPRESS REPRESENTATIONS OF WARRANTIES. IN ADDITION, ANALOGIX SEMICONDUCTOR INC. DISCLAIMS ALL IMPLIED REPRESENTATIONS AND WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

This document contains proprietary information of Analogix Semiconductor, Inc. or under license from third parties. No part of this document may be reproduced in any form or by any means or transferred to any third party without the prior written consent of Analogix Semiconductor, Inc.

The information contained in this document is not designed or intended for use in on-line control of aircraft, aircraft navigation or aircraft communications; or in the design, construction, operation or maintenance of any nuclear facility. Analogix disclaims any express or implied warranty of fitness for such uses.

Analogix Semiconductor, Inc., the Analogix Logo, and WideEye™ SerDes, SlimPort®, and CoolHD® are trademarks of Analogix Semiconductor, Inc., in the United States and other countries.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

DisplayPort and the DisplayPort logo are trademarks or registered trademarks of the Video Electronics Standards Association, VESA®.

USB and the USB logo are trademarks or registered trademarks of USB Implementers Forum, Inc., creators of USB technology.

All other trademarks and registered trademarks are the property of their respective owners.