

Low Power DisplayPort™ to LVDS Converter with Single Channel 18-bpp Output

Features

- All software compatible with AMD platform driver/BIOS stacks
 - Designed and fully tested with extensive APU-based platform test requirements
 - No additional firmware and EEPROM to manage LCD dimming and video timing control
- Two package options available to support for new and running-change platforms (36 & 64-QFN)
- Backward drop-in compatible with ANX3110
- Super low power single channel 18-bit per pixel LVDS output
 - Single Channel: Up to 120 MHz pixel clock
 - 50% power reduction: <100mW@65MHz
 - Up to WSXGA+ 1680 x 1650 @ 60Hz, 18-bpp
- Smart panel dimming control state machine compatible with Travis-based family products
- Programmable directly through AUX or local I2C slave port
- Compliant with VESA DisplayPort™ 1.1a
 - 1-lane with 1.62 / 2.7Gbps data rate support
 - AUX channel link up to 1Mbps bandwidth
 - DPCD registers accessible by the AUX channel and I²C Slave Interface
- Spread Spectrum Clock (SSC) support for improved EMI performance
- eDP content protection with Chip ID, OUI support
- Programmable LVDS swing, pre-emphasis, channel swap, and polarity inversion
- Programmable LVDS Output Spread Spectrum Clocking Generation (SSCG) with amplitude +/- 1.75% for EMI reduction
- Optional on-chip microcontroller with 512-Byte program space
- Recommend 3.3V_{IO} and 1.2V_{CORE} power supply for APU platform
- Optionally support 2.5V_{IO}/1.2V_{CORE} application system
- Package
 - 64-pin QFN (9x9)
 - RoHS compliant and Halogen free

ANX3111 has same 64 QFN package, drop-compatible with dual-LVDS ANX3110 product in AMD APU-based platform with Analogix's low power DisplayPort™ receiver offering 18 bit-per-pixel and single channel LVDS output. It provides a high quality interface solution between AMD's APU processor and LVDS panels. Please refer to the part ordering and related products information.

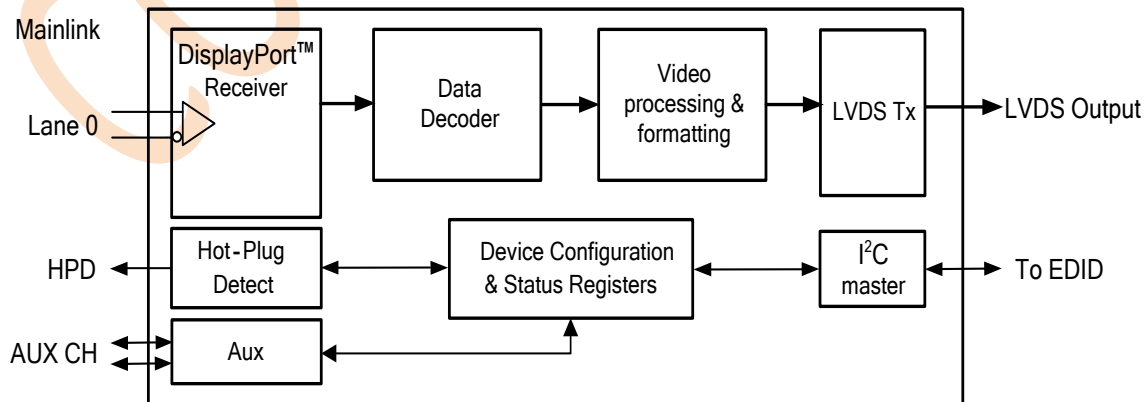
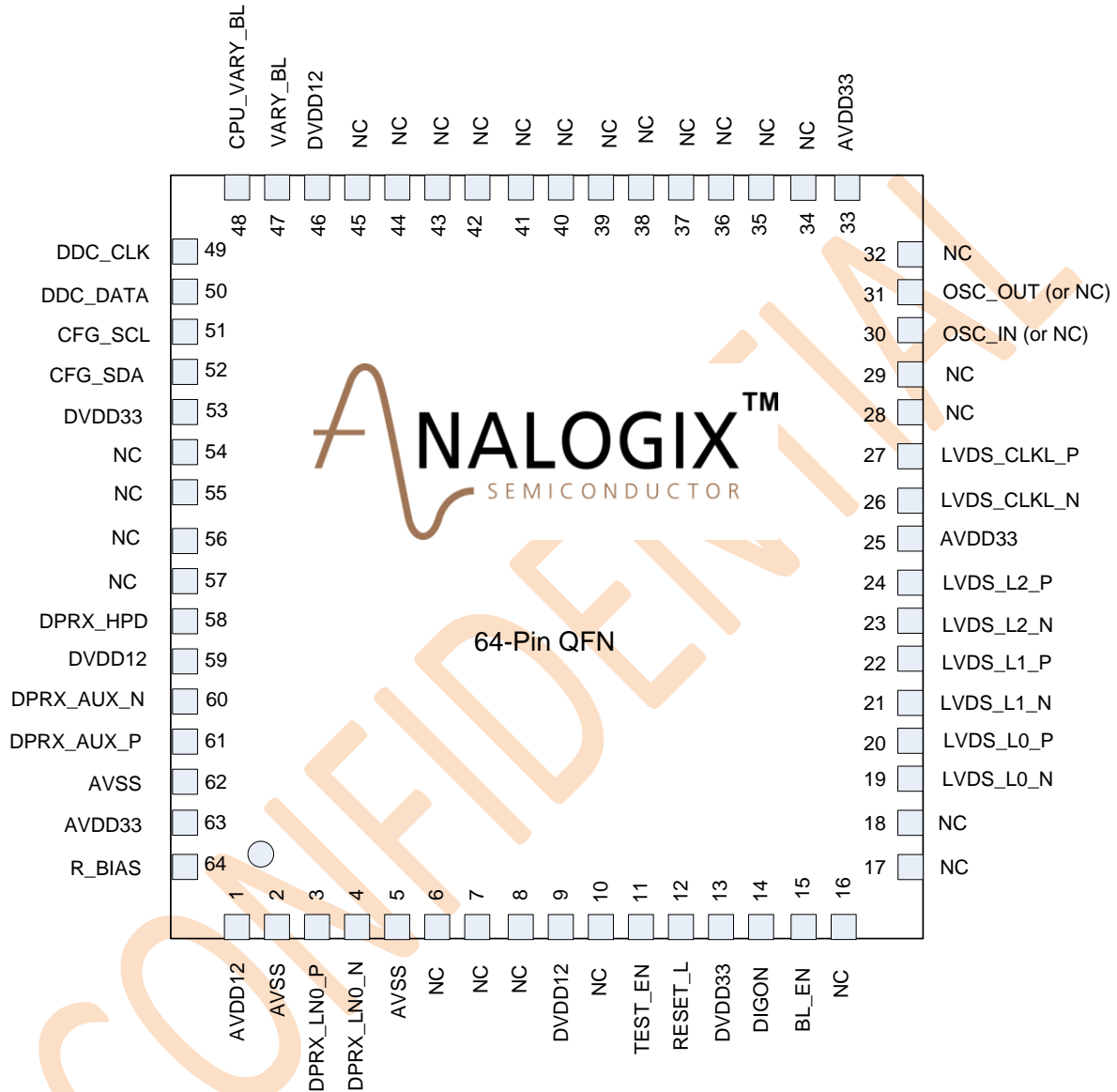


Figure 1: ANX3111 Block Diagram

ANX3111 Pin Out



Note: Recommend to use external low jitter 100MHz differential clock. For built-in oscillator usage, please leave pin 30 and pin 31 as NC (No Connection)

Parts Ordering Information

Part No.	Description	Availability
ANX3111	Low cost DisplayPort™ to LVDS converter with single channel LVDS 18-bpp output, 64-pin QFN package	Sep-2011

Analogix Related Products

Part No.	Description	Availability
ANX3112	Low cost DisplayPort™ to LVDS converter with single channel LVDS 18-bpp output, 64-pin QFN package	Sep-2011
ANX1121	Low cost DisplayPort™ to LVDS converter with single channel LVDS 18-bpp output, 36-pin QFN package	Sep-2011
ANX3110 ANX1120	High performance DisplayPort™ 1.1a to dual-LVDS LVDS converter	Now
ANX9834	High performance DisplayPort™ 1.1a to dual-LVDS LVDS & VGA converter	Now
ANX9835	Low Power DisplayPort™ 1.1a to HDMI™ 1.3 & DisplayPort™ 1.1a Replicator with HDCP 1.3 supported	Now
ANX9804	DVO / LVTTL(24-bit input) to DisplayPort™ 1.1a or HDMI™ 1.3 Transmitter with HDCP 1.3 content protection	Now
ANX9806	DVO to DisplayPort™, HDMI, Dual DVI and VGA converter with HD audio and HDCP support	Now
ANX9830	DisplayPort™ to HDMI™/ DVI converter with HDCP and audio support	Now
ANX9832	Ultra low cost DisplayPort™ to VGA converter	Now

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- Programmable LVDS swing, pre-emphasis, channel swap, and polarity inversion
- Programmable LVDS Output Spread Spectrum Clocking Generation (SSCG) with amplitude +/- 1.75% for EMI reduction
- Optional on-chip microcontroller with 512-Byte program space
- Recommend 3.3V_{IO} and 1.2V_{CORE} power supply for APU platform
- Optionally support 2.5V_{IO}/1.2V_{CORE} application system
- Package
 - 36-pin QFN (6x6)
 - RoHS compliant and Halogen free

ANX3112 has small 36 QFN package for AMD APU-based PC platform with Analogix's low power DisplayPort™ receiver offering 18 bit-per-pixel single channel LVDS output. It provides a high quality interface solution between AMD's APU processor and LVDS panels. Please refer to the part ordering and related products information.

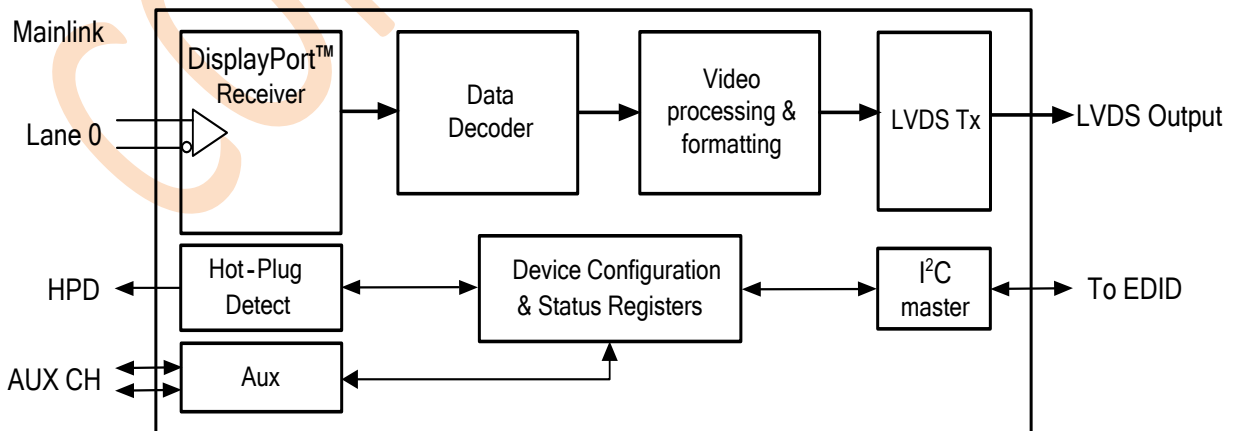
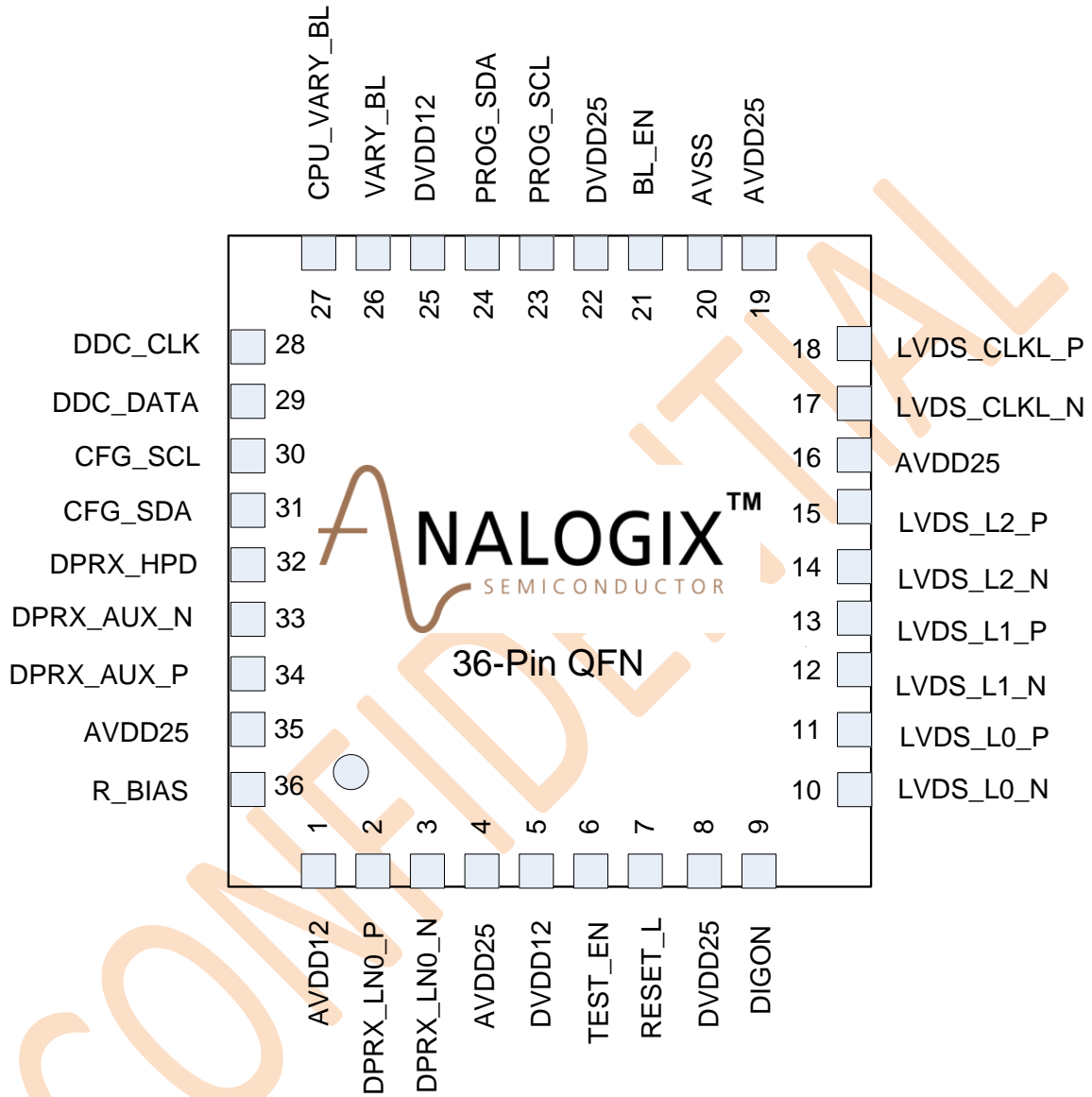


Figure 1: ANX3112 Block Diagram

ANX3112 Pin Out



Parts Ordering Information

Part No.	Description	Availability
ANX3112	Low cost DisplayPort™ to LVDS converter with single channel LVDS 18-bpp output, 36-pin QFN package	Sep-2011

Analogix Related Products

Part No.	Description	Availability
ANX3111	Low cost DisplayPort™ to LVDS converter with single channel LVDS 18-bpp output, 64-pin QFN package	Sep-2011
ANX1121	Low cost DisplayPort™ to LVDS converter with single channel LVDS 18-bpp output, 36-pin QFN package	Sep-2011
ANX3110 ANX1120	High performance DisplayPort™ 1.1a to dual-LVDS LVDS converter	Now
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