

# DisplayPort to VGA signal format converter

Seamless connectivity between DisplayPort-based devices and VGA monitors and projectors



## STDP3100: Converts DisplayPort signals to VGA format

The STDP3100 interfaces next-generation DisplayPort-based PCs, notebook computers with conventional VGA displays, such as CRTs, LCD monitors, and projectors. The STDP3100 is a highly integrated converter featuring a DisplayPort receiver, video DAC, clock form generator, test pattern generator, and sink detection block.

The IC has an on-chip microprocessor with SPI interface for external serial Flash used for firmware storage. The external firmware option offers flexibility in developing usage dependant applications and customization. ST offers an STDP3100 designers kit with complete reference hardware and firmware.

## Key features

- Two-lane DisplayPort 1.1a receiver
- Triple 10-bit video DAC
  - 162 MSPS throughput rate
  - VSIS compatible
  - RGB output with 0 to 700 mV range
- 3.3 V Hsync, Vsync
- Resolution through WUXGA
- EDID, MCCS pass-through support
- 3.3 V DDC output signals
- Sink detection logic
- Low-power operation – active 400 mW, standby mode 15 mW
- Package: 64-pin LQFP, 10 x 10 mm

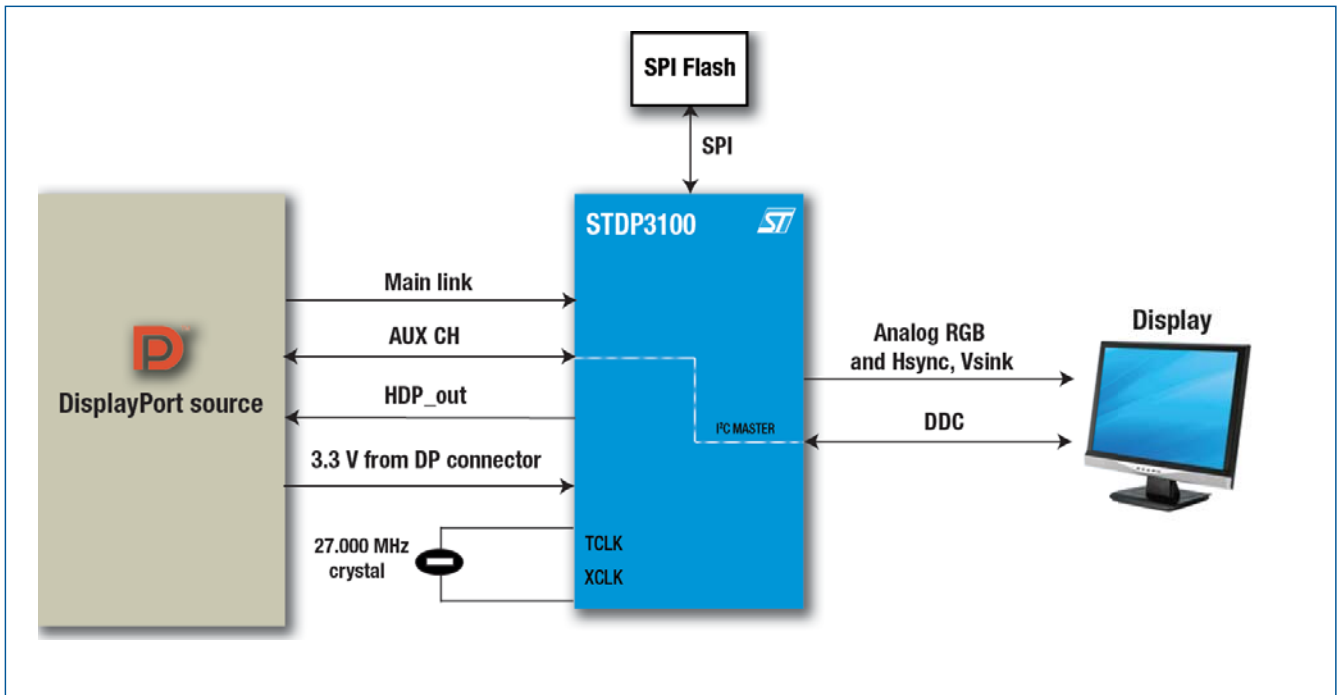
## Key benefits

- Comprehensive feature set for DisplayPort to VGA dongle and for notebook embedded application
- Proven interoperability with DisplayPort sources from all major graphics vendors
- Cost savings due to optimized BOM, low power, low EMI, and small form factor
- DisplayPort CTS compliant

## Target applications

- DisplayPort to VGA dongle as an attachment to notebook and desktop PCs
- DisplayPort to VGA conversion for notebook and desktop PC motherboard applications

## STDP3100 block diagram



## Software development and evaluation platform

STMicroelectronics provides a comprehensive suite of hardware and software tools to enable rapid product development. Complete turnkey reference design available with source code for quick time-to-market.



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