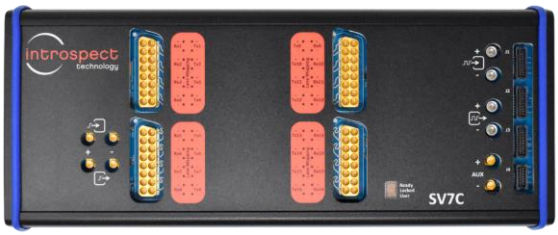

C SERIES

SV7C-eDP

Embedded DisplayPort Generator

Ultra-Portable, High-Performance Generator for eDP up to v2.0 and DP up to v2.1 in HBR and UHBR

The SV7C-eDP Embedded DisplayPort Generator is an ultra-portable, high-performance instrument capable of generating traffic for Embedded DisplayPort up to v2.0 and DisplayPort applications up to v2.1 in HBR and UHBR. The SV7C-eDP Generator provides analog parameter controls that enable DisplayPort receiver stress-testing and allows for deep insights into voltage and timing sensitivities of DisplayPort sink devices. The instrument operates with the award-winning Pinetree software environment which includes full pattern synthesis tools for generating test patterns and video frames for system-level test.

KEY FEATURES:

- **Protocols:** Supports Embedded DisplayPort (eDP) up to v2.0 and DisplayPort (DP) up to v2.1 in HBR and UHBR.
- **Supported Data Rates**: Up to 26 Gbps with a fully continuous range of data rates.
- **Lane Count**: Configurable from 1 to 4 lanes (ML1 to ML4) plus auxiliary channel (AUX).
- **Pattern Generation**: Full video frame generation with 8 GBytes of total pattern memory.

KEY BENEFITS:

- **Multi-Stream Transport:** Supports MST with up to 4 virtual channels.
- **Analog Controls & Signal Impairments:** Unique features for stressing a DisplayPort sink device, including per-lane voltage amplitude, common-mode voltage control, jitter injection, sinusoidal voltage noise injection, and per-wire timing skew.
- **Self-Contained:** An all-in-one system that enables the simplest bench environment for physical layer test to full protocol layer validation.

Typical Application: The SV7C-eDP Generator Sends Traffic to an Embedded DisplayPort Sink Device

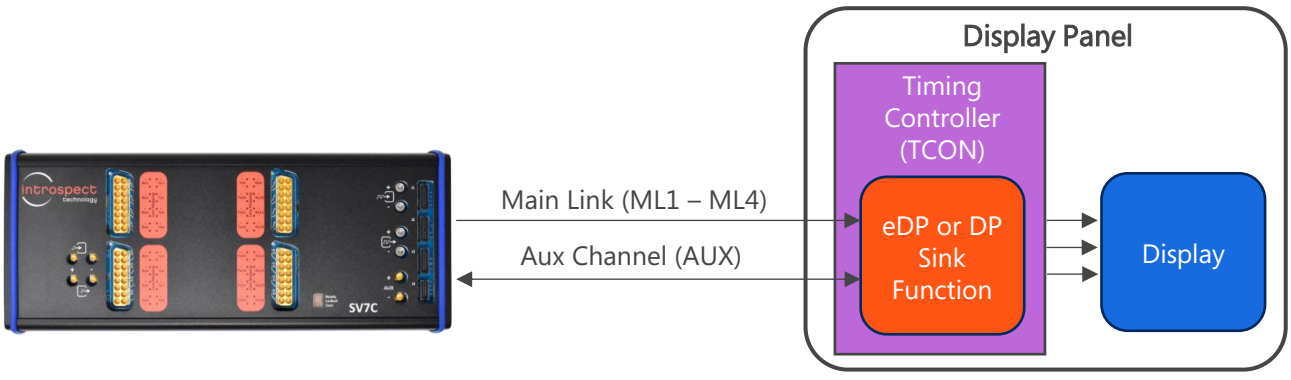

Diagram of the SV7C-eDP Generator connected to an Embedded DisplayPort system.

© Introspect Technology, 2025. Published in Canada on 2025/06/03, MK-D043E-E-25153

General Specifications

PARAMETER	VALUE	UNITS	DESCRIPTION
Supported Protocols			
Physical Layer Interface	eDP and DP		Support for eDP up to v2.0 Support for DP up to v2.1 in HBR and UHBR
Ports			
Number of MST Virtual Channels	4		
Number of Transmitter Lanes	5		Main Link 1, 2, 3, 4 AUX Channel (bidirectional)
Number of GPIO pins	5		Programmable as external trigger input or flag output pins
Number of Dedicated Reference Clock Inputs	1		
Number of Dedicated Reference Clock Outputs	2		
PC Connections for Pinetree Control	2		USB2 and USB3
Data Rates and Reference Clocks			
Maximum Data Rate	20+	Gbps	Per Lane
Maximum External Input Reference Clock	250	MHz	
Maximum External Output Reference Clock	500	MHz	

The SV7C-eDP Generator Supports Multi-Stream Transport (MST) with up to Four Virtual Channels

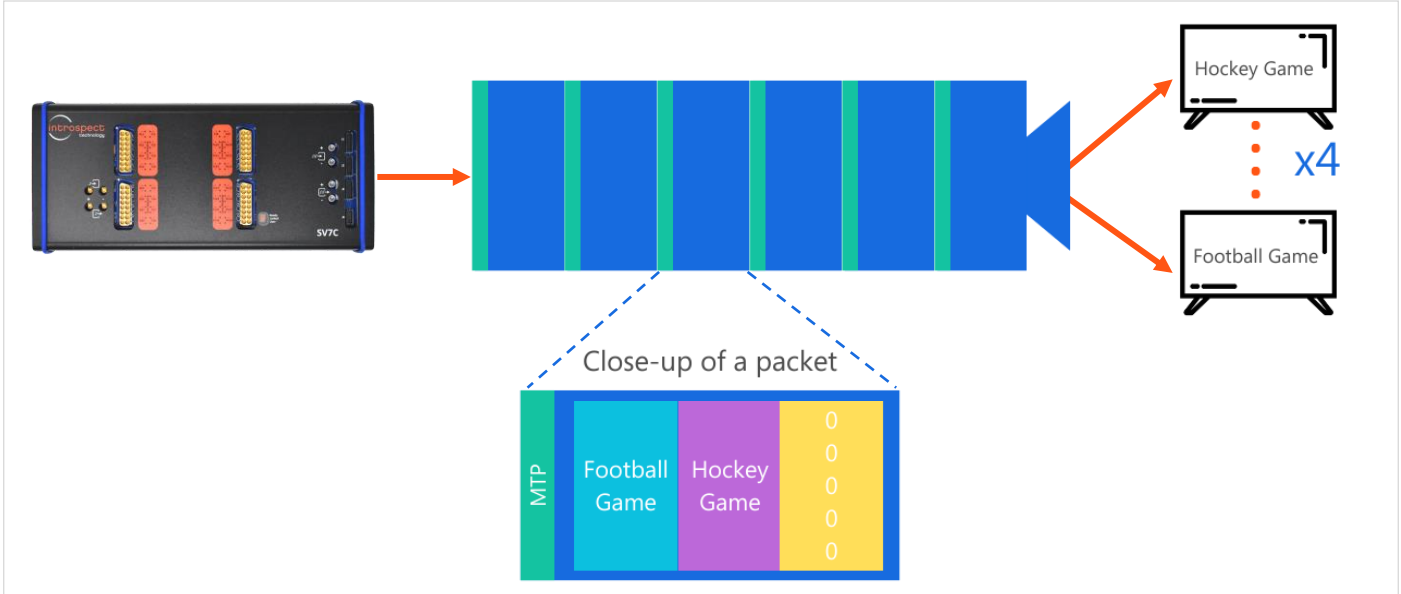

Diagram of the SV7C-eDP Generator producing traffic for a Multi-Stream Transport application.

© Introspect Technology, 2025. Published in Canada on 2025/06/03, MK-D043E-E-25153