NCS2566

Six-Channel Video Driver with Triple SD & Triple Selectable SD/HD Filters

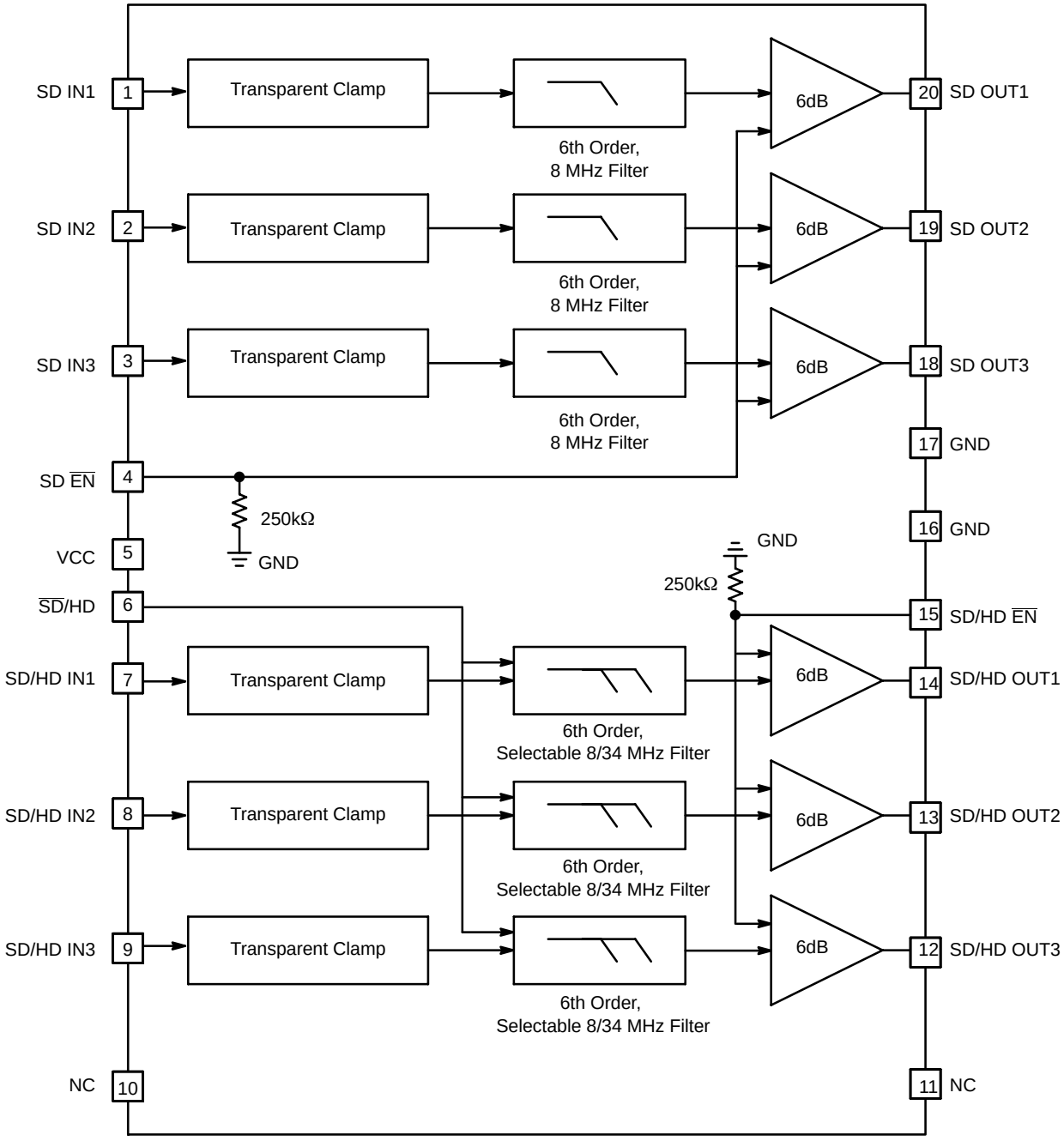

Figure 1. NCS2566 Block Diagram

NCS2566

MAXIMUM RATINGS

Parameter	Symbol	Rating	Unit
Power Supply Voltages	V_{CC}	$-0.3 \le V_{CC} \le 5.5$	Vdc
Input Voltage Range	V_I	$-0.3 \le V_I \le V_{CC}$	Vdc
Input Differential Voltage Range	V_{ID}	$-0.3 \le V_I \le V_{CC}$	Vdc
Output Current Per Channel	I_O	50	mA
Maximum Junction Temperature (Note 1)	T_J	150	°C
Operating Ambient Temperature	T_A	−40 to +85	°C
Storage Temperature Range	T_{stg}	−	°C

DC ELECTRICAL CHARACTERISTICS (V_{CC} = +5.0 V, R_{source} = 37.5 Ω, T_A = 25°C, inputs AC−coupled with 0.1 μF, all outputs AC−coupled with 220 μ

AC ELECTRICAL CHARACTERISTICS FOR HIGH DEFINITION CHANNELS (Pin Numbers (7, 14), (8, 13) & (9, 12)) (V_{CC} = +5.0 V, V_{in} = 1 V_{PP}, R_{source} = 37.5 Ω, T_A = 25°C, Inputs AC−coupled with 0.1 μF, All Outputs AC−coupled with 220 μF into 150 Ω Referenced to 400 kHz; unless otherwise specified, $\overline{SD}$/HD = High)

Symbol

TYPICAL CHARACTERISTICS

V_{CC} = +5.0 V, V_{in} = 1 V_{PP}

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V_{CC} = +5.0 V, V_{in} = 1 V_{PP}, R_{source} = 37.5 Ω, T_A = 25°C, Inputs AC−coupled with 0.1 μF, All Outputs AC−coupled with 220 μF into 150 Ω
Referenced to 400 kHz; unless otherwise specified

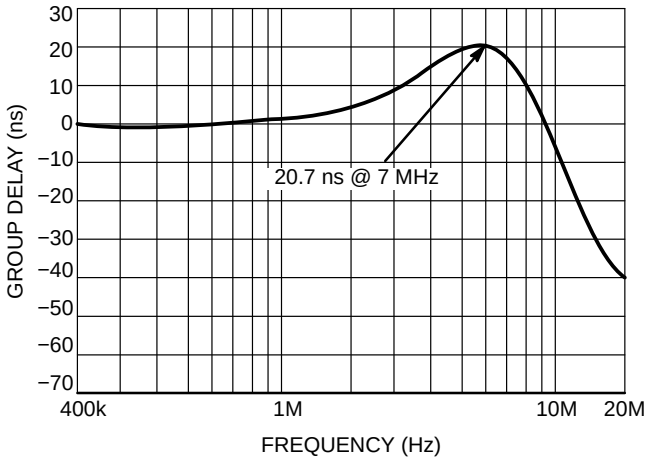

Figure 9. SD Normalized Group Delay

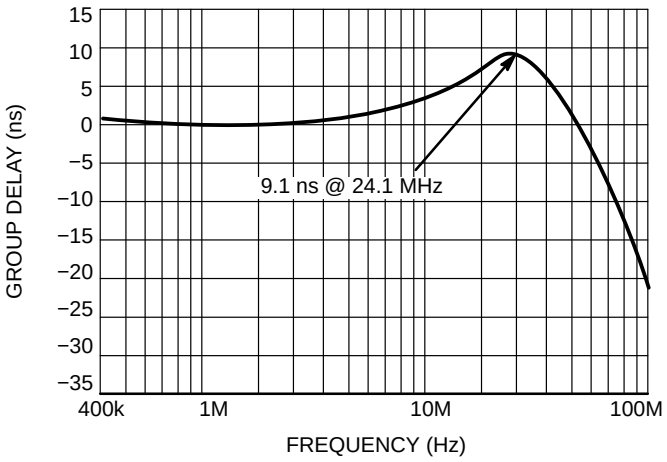

Figure 10. HD Normalized Group Delay

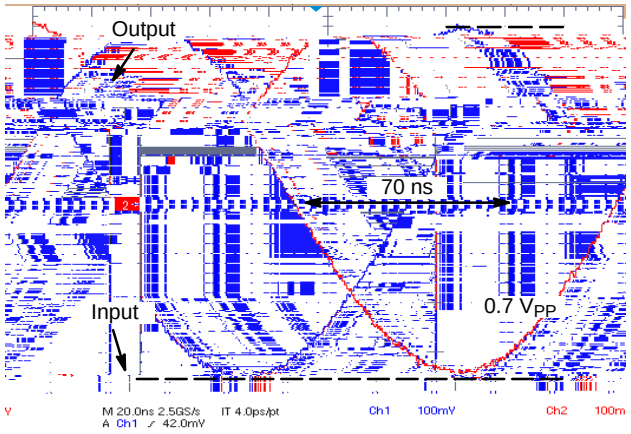

Figure 11. SD Propagation Delay

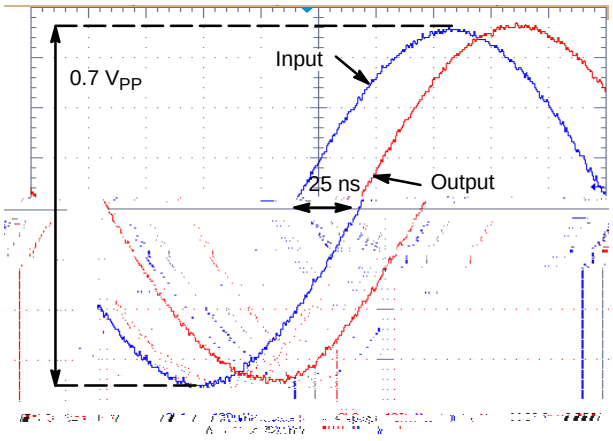

Figure 12. HD Propagation Delay

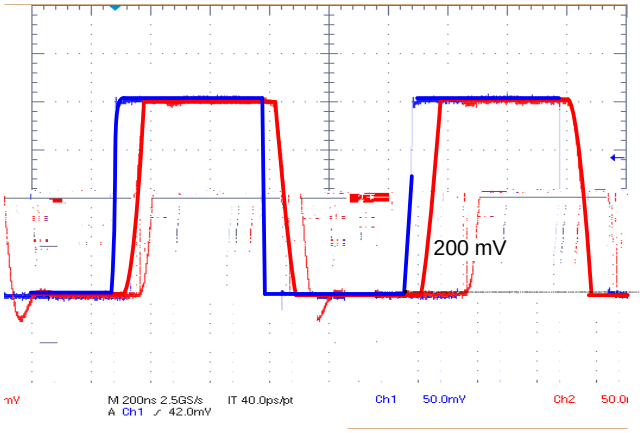

Figure 13. SD Small Signal Response

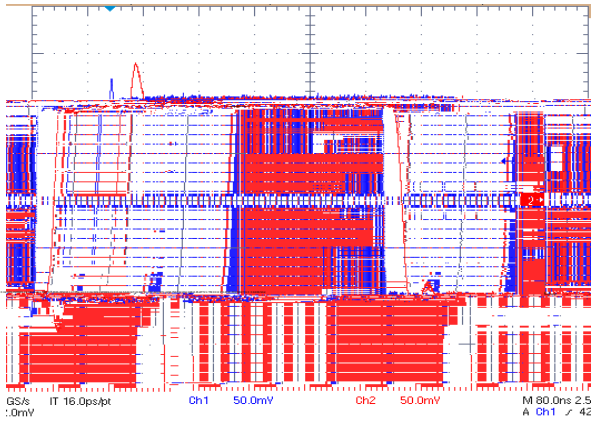

Figure 14. HD Small Signal Response

TYPICAL CHARACTERISTICS

V_{CC} = +5.0 V, V_{in} = 1 V_{PP}, R_{source} = 37.5 Ω, T_A = 25°C, Inputs AC−coupled with 0.1 μF, All Outputs AC−coupled with 220 μF into 150 Ω
Referenced to 400 kHz; unless otherwise specified

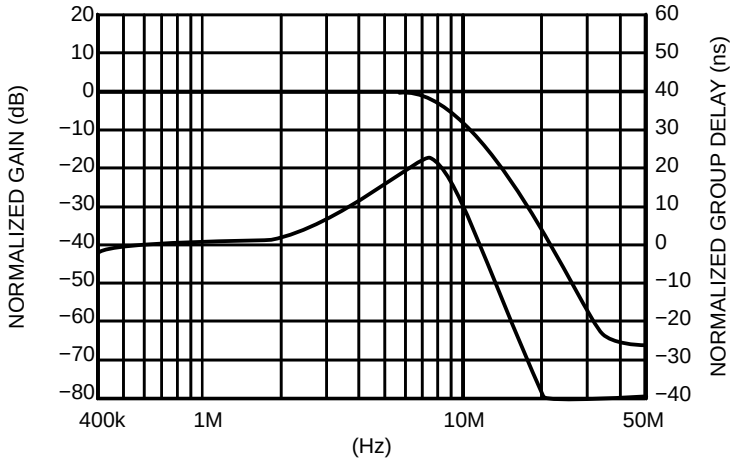

Figure 18. SD Frequency Response and Group Delay

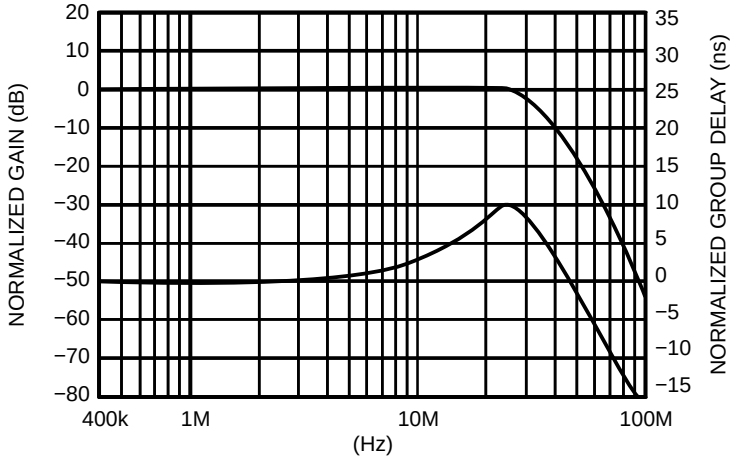

Figure 19. HD Frequency Response and Group Delay

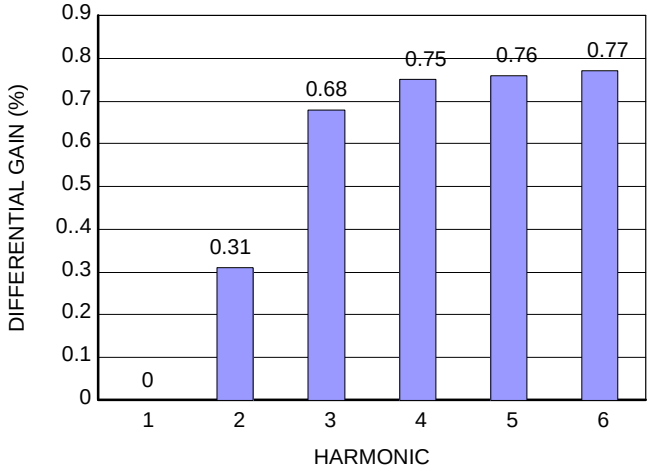

Figure 20. SD Differential Gain

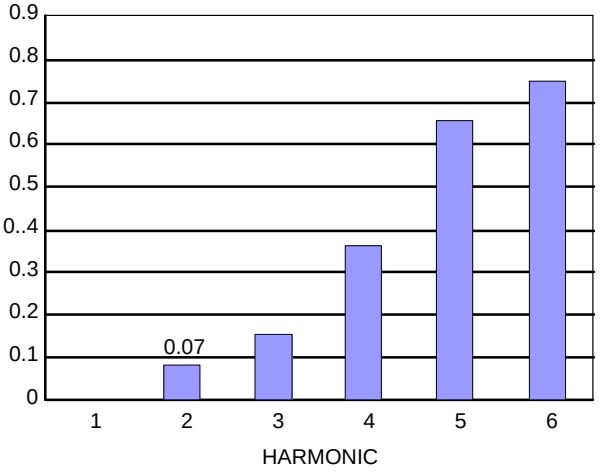

Figure 21. SD Differential Phase

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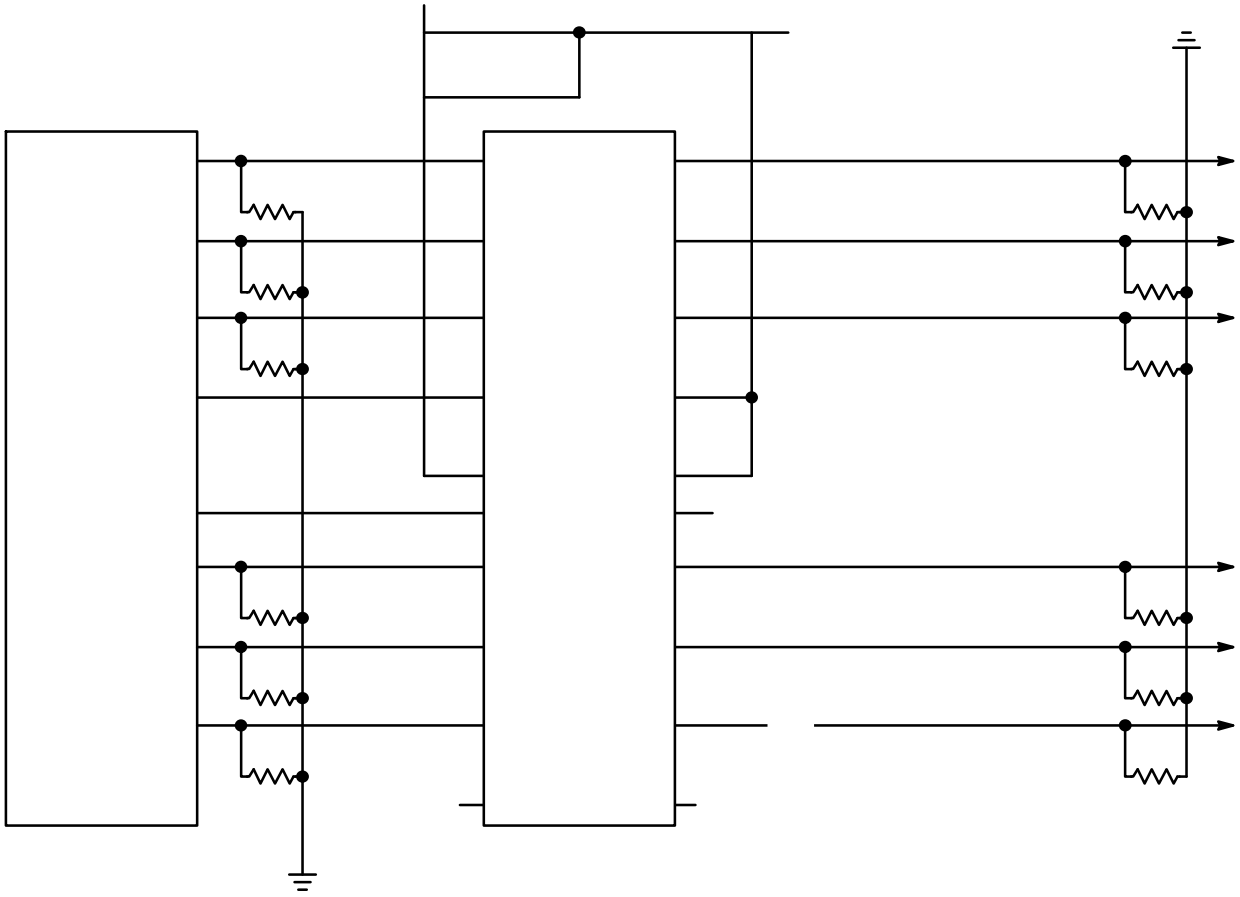
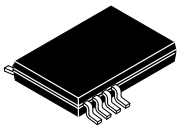


Figure 22. Typical Application



SCALE 2:1

TSSOP−20 WB
CASE 948E
ISSUE D

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