

## Test Procedure for the NCS25XX Evaluation Boards

ON Semiconductor®



12.28.2005

1. Connect -5.0 Vdc to  $-V_s$  and +5.0 Vdc to  $+V_s$ .
2. Read the current of the power supplies (See table below for correct power supply current readings for each device).
3. Check the small signal 3.0 dB bandwidth (for  $V_o = 0.5 V_{p-p}$ ) using a Vector Network Analyzer.
4. Connect a square wave signal to the input and measure the slew rate. Note: For NCS2500, NCS2501, NCS2530, and NCS2502 the nominal gain of +2.0 is attenuated by a factor of two when measured with an oscilloscope that has a  $50 \Omega$  termination resistance. For NCS2510, NCS2511, NCS2550, NCS2551, NCS2552, NCS2535, and NCS2540 the attenuation factor is three.

Device	Typical Power Supply Current (per enabled amplifier)	Small Signal Bandwidth ( $A_v = +2.0$ , $V_o = 0.5 V_{p-p}$ )	Slew Rate ( $A_v = +2.0$ , $V_{step} = 2.0$ )
NCS2500	1.1 mA	200 Mhz	450 V/ $\mu$ s
NCS2501	1.1 mA	200 Mhz	450 V/ $\mu$ s
NCS2502	650 uA	110 Mhz	230 V/ $\mu$ s
NCS2510	12 mA	1.4 Ghz	2500 V/ $\mu$ s
NCS2511	7.5 mA	1 Ghz	2500 V/ $\mu$ s
NCS2550	13 mA	750 Mhz	1700 V/ $\mu$ s
NCS2551	5.5 mA	500 Mhz	1400 V/ $\mu$ s
NCS2552	13 mA	750 Mhz	1700 V/ $\mu$ s
NCS2530*	1.1 mA	200 Mhz	450 V/ $\mu$ s
NCS2535*	12 mA	1.4 Ghz	2500 V/ $\mu$ s
NCS2540*	13 mA	750 Mhz	1700 V/ $\mu$ s

\* Triple Op Amp Device