

Product Overview

NB3H83905C: Clock Fanout Buffer, Crystal Input, 1:6 LVTTTL/LVCMOS, with Output Enable

For complete documentation, see the data sheet.

The NB3H83905C is a 1.8 V, 2.5 V Crystal input to 1:6 LVTTTL/LVCMOS fanout buffer with outputs powered by a flexible 1.8 V, 2.5 V, or 3.3 V supply (VDD must be greater than VDD0). The core accepts a fundamental Parallel Resonant crystal from 3 MHz to 40 MHz or a Single Ended LVCMOS Clock from 3 MHz to 100 MHz. Core supply must be equal or greater voltage than the output supply.

Features

- 6 LVTTTL/LVCMOS Output Clock copies
- Supply Operation VDD VDD0: 1.8 V 0.2 V, 2.5 V 5% or 3.3 V 5% Core VDD 1.8 V equal or greater than VDD0: 1.8 V, 2.5 V, 3.3 V Nom.
- Crystal Input Frequency Range: 3 MHz to 40 MHz
- Clock Input Frequency Range: 3 MHz to 100 MHz
- Crystal Oscillator Interface
- LVCMOS compatible Enable Inputs
- 5 V Tolerant Enable Inputs
- Tight Output to Output Skew: 80 ps Max
- Synchronous Output Enable
- Phase Noise Floor 160 dBc (at 1 MHz)

For more features, see the data sheet

Benefits

- Design Flexibility
- Design Flexibility
- Design Flexibility
- Design Flexibility

Applications

- Fanout Buffer
- Consumer
- Networking

End Products

- Routers
- Set Top Box
- Digital TV
- Ethernet Switch

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V _{CC} Typ (V)	t _{Jitter} MS Typ (ps)	t _{skew(o)} Max (ps)	t _{pd} Typ (ns)	t _R & t _F Max (ps)	f _{max} Clock Typ (MHz)	f _{max} Data Typ (Mbps)	Package Type
NB3H83905CDR2G		Pb-free	Active	Buffer	1	1:6	Crystal	CMOS	1.8 3.3	0.27 0.13 0.08 0.14 0.19 0.18	80		800	40		SOIC-16
NB3H83905CDTG		Pb-free	Active	Buffer	1	1:6	Crystal	CMOS	1.8 3.3	0.18 0.13 0.08 0.19 0.14 0.27	80		800	40		TSSOP-16
NB3H83905CDTR2G		Pb-free	Active	Buffer	1	1:6	Crystal	CMOS	1.8 3.3	0.08 0.13 0.14 0.19 0.18 0.27	80		800	40		TSSOP-16
NB3H83905CMNG		Pb-free Halide free	Active	Buffer	1	1:6	Crystal	CMOS	3.3 1.8	0.13 0.27 0.14 0.08 0.18 0.19	80		800	40		QFN-20

For more information please contact your local sales support at www.onsemi.com.

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