



Product Overview

NB3M8304C: Fanout Buffer with LVCMOS/LVTTL, Low Skew, 3.3 V 200 MHz 1:4

For complete documentation, see the data sheet

Product Description

The NB3M8304C is 1:4 fanout buffer with LVCMOS/LVTTL input and output. The device supports the core supply voltage of 3.3 V (VDD pin) and output supply voltage of 2.5V or 3.3V (VDDO pin). The VDDO pin powers the four single ended LVCMOS/LVTTL outputs.

The NB3M8304C is Form, Fit and Function (pin to pin) compatible to ICS8304 (ICS8304AM). The NB3M8304C is available for commercial and industrial operating temperature range.

Features

- Input Clock Frequency up to 200 MHz
- Low Output to Output Skew: 45 ps max at $F_{in} = 133\text{MHz}$
- Low Part to Part Skew: 500 ps max at $F_{in} = 133\text{MHz}$
- Low Additive RMS Phase Jitter: 0.17 ps Typical ($F_{in} = 125\text{ MHz}$, offset freq: 12 kHz to 20 MHz)
- Input Clock Accepts LVCMOS/ LVTTL Levels

Applications

- Clock Distribution
- Networking and Data Communications
- High-End Computing

End Products

- Ethernet Switches / Routers
- Servers
- Test and Measurement
- ATE

Part Electrical Specifications

| Product | Compliance | Status | Type | Channels | Input / Output Ratio | Input Level | Output Level | V _{CC} Typ (V) | t _{jitter} RMS Typ (ps) | t _{skew(o-to-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 |
|---------------|------------------------|--------|--------|----------|----------------------|-------------|--------------|-------------------------|----------------------------------|------------------------------------|--------------------------|------------------------------------------|----------------------------------|----------------------------------|--------------|
| NB3M8304CDG | Pb-free Halide free | Active | Buffer | 1 | 1:4 | CMOS TTL | CMOS TTL | 2.5 3.3 | | 45 | 2.6 2.95 | 500 | 200 | | SOIC-8 |
| NB3M8304CDR2G | Pb-free Halide free | Active | Buffer | 1 | 1:4 | CMOS TTL | CMOS TTL | 2.5 3.3 | | 45 | 2.6 2.95 | 500 | 200 | | SOIC-8 |

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

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