

## Product Overview

### NB7L32M: $\pm$ 2 Divider with CML Output

For complete documentation, see the data sheet.

The NB7L32M is an integrated  $/2$  divider with differential clock inputs and asynchronous reset. Differential clock inputs incorporate internal  $50\ \Omega$  termination resistors and accept LVPECL (Positive ECL), CML, or LVDS. The high frequency reset pin is asserted on the rising edge. Upon power-up, the internal flip-flops will attain a random state; the reset allows for the synchronization of multiple NB7L32M's in a system. The differential 16 mA CML output provides matching internal  $50\ \Omega$  termination which guarantees 400 mV output swing when externally receiver terminated  $50\ \Omega$  to VCC (See Figure 16). The device is housed in a small 3x3 mm 16 pin QFN package.

### Features

- Maximum Input Clock Frequency 14 GHz Typical
- 200 ps Max Propagation Delay
- 30 ps Typical Rise and Fall Times
- $< 0.5$  ps Maximum (RMS) Random Clock Jitter
- Operating Range: VCC = 2.375 V to 3.465 V with VEE = 0 V
- CML Output Level (400 mV Peak-to-Peak Output), Differential Output Only
- $50\ \Omega$  Internal Input and Output Termination Resistors
- Functionally Compatible with Existing 2.5 V / 3.3 V LVEL, LVEP, EP, and SG Devices
- Full RoHS Compliance.

### Applications

- High frequency clock division in Automated Test Equipment.
- Ultra precise clock division in networking and telecomm applications.

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