

## Product Overview

### NB3U23C: 1.2 V Dual Channel CMOS Buffer / Translator

For complete documentation, see the data sheet.

The NB3U23C is a 2-input, 2-output buffer/voltage translator for a UFS (Universal Flash Storage) application in a mobile phone. This dual channel CMOS buffer accepts 1.8 V CMOS input and translates it to 1.2 V CMOS output. The device is powered using single supply of 1.2 V  $\pm 5\%$ .

The NB3U23C is packaged in an ultra-small 6-pin SC70-6 package and a 6 pin thin UDFN package

### Features

- Operating Frequency: 52 MHz (Max)
- Propagation Delay: 5 ns (Max)
- Low Standby Current:  $< 10 \mu\text{A}$  at 1.2 V VDD
- Low Phase Noise Floor: -150 dBc/Hz (Typ)
- Low Phase Noise Floor: -150 dBc/Hz (Typ)
- Rise/Fall Times (tr/ta): 2 ns (Max)
- Operating Supply Voltage Range (VDD): 1.2 V  $\pm 5\%$
- Operating Temperature Range (Industrial):  $-40^\circ\text{C}$  to  $85^\circ\text{C}$

### Applications

- Computing and Peripherals
- Universal Flash Storage
- Portable and Wireless

### End Products

- Smart Phones
- Tablets
- Camera
- E-readers

### Part Electrical Specifications

Product	Compliance	Status	Type	Channels	Input / Output Ratio	Input Level	Output Level	V <sub>CC</sub> Typ (V)	t <sub>jitter</sub> RMS Typ (ps)	t <sub>skew</sub> (o-o) Max (ps)	t <sub>pd</sub> Typ (ns)	t <sub>r</sub> & t <sub>f</sub> Max (ps)	f <sub>max</sub> Clock Typ (MHz)	f <sub>max</sub> Data Typ (Mbps)	Package Type
NB3U23CMNTAG	Pb-free	Active	Buffer	2	1:1	CMOS	CMOS	1.2	0.15		5	2000			UDFN-6
	Halide free														
NB3U23CSQTCG	Pb-free	Active	Buffer	2	1:1	CMOS	CMOS	1.2	0.15		5	2000			SC-88-6 / SC-70-6 / SOT-363-6
	Halide free														

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