

NLB6214

NEL
SELIC

Quint Line Receiver

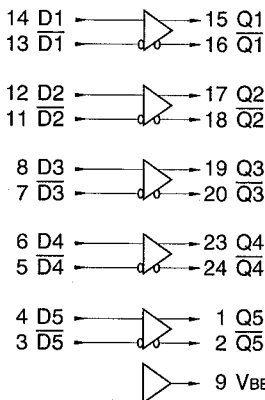
Description

The NLB6214 is an ultra high-speed monolithic quint line receiver.

Features

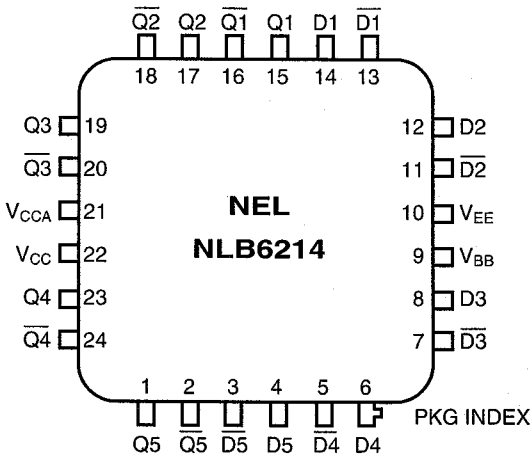
- Typical AC characteristics
Data rate up to 5 Gb/s.
 $t_r=170\text{ps}$
 $t_f=150\text{ps}$
- Internal pull down resistors on input pins (Dn) to maintain logic LOW level with the pins left open.
- Internal pull up resistors on input pins (Dn) to maintain logic HIGH level with the pins left open.
- ECL 100K compatible I/O levels.
- Differential outputs.

Logic Symbol



VCC 22
VCCA 21
VEE 10

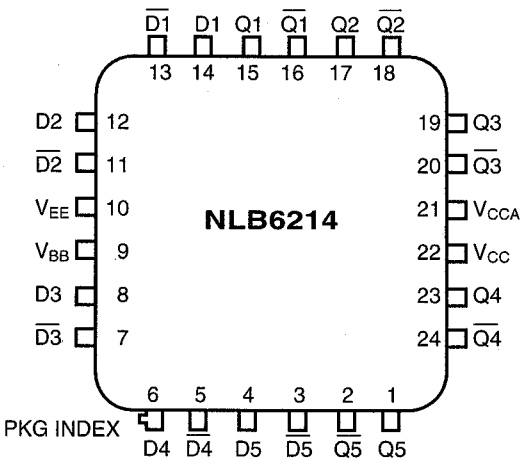
Pin Assignment Top View (Ceramic)



Pin Name

Dn, $\overline{Dn}$	Data inputs
Qn, $\overline{Qn}$	Data outputs
VCC	Circuit GND
VCCA	Circuit GND for outputs
VBB	Reference voltage output
VEE	-4.5V

Back View (Metal Cap)



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DC Characteristics

$V_{EE} = -4.5V \pm 0.3V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2V$, $T_c = 0^\circ C$ to $+85^\circ C$, $R_T = 50\Omega$ to V_{TT}

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Power supply current	I_{EE}	100	170	225	mA
Min. differential input voltage	V_{P-P}		50		mV

AC Characteristics

$V_{EE} = -4.5V \pm 0.3V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2V$, $T_c = 0^\circ C$ to $+85^\circ C$, $R_T = 50\Omega$ to V_{TT}

Characteristics	Symbol	Min.	Typ.	Max.	Unit
Propagation delay to output	t_{PLH}		260	350	ps
	t_{PHL}		260	350	
Rise time 20% to 80%	t_r		170	230	
Fall time 80% to 20%	t_f		150	200	

Typical Output Voltage Swing

$V_{EE} = -4.5V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2V$, $R_T = 50\Omega$ to V_{TT}

