NLB6214

NEL
SELIC

Quint Line Receiver

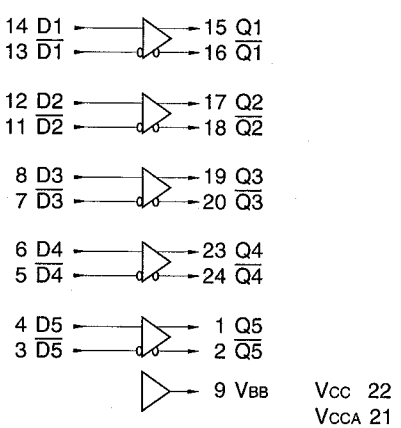
Description

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

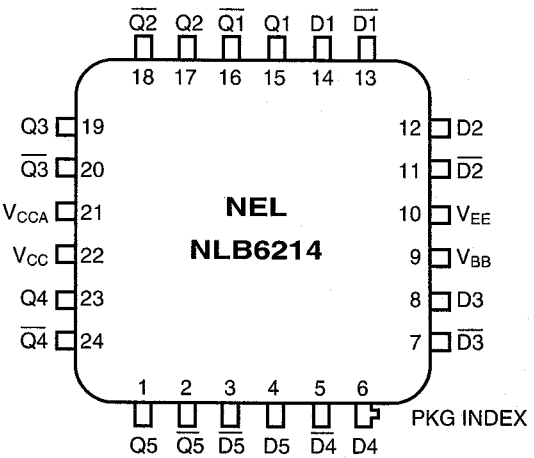
Features

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

Logic Symbol



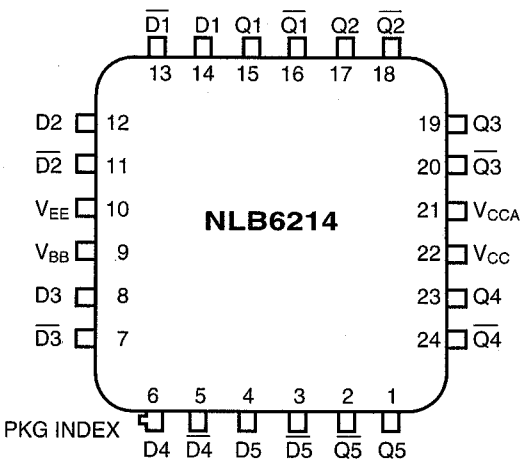
Pin Assignment
Top View (Ceramic)



Pin Name

Dn, $\overline{Dn}$	Data inputs
Qn, $\overline{Qn}$	Data outputs
V_{CC}	Circuit GND
V_{CCA}	Circuit GND for outputs
V_{BB}	Reference voltage output
V_{EE}	-4.5V

Back View (Metal Cap)



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DC Characteristics

V_{EE}=-4.5V±0.3V, V_{CC}=V_{CCA}=GND, V_{TT}=-2V, T_C=0°C to +85°C, R_T=50Ω 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 ±0.3V, V_{CC}=V_{CCA}=GND, V_{TT}=-2V, T_C=0°C to +85°C, R_T=50Ω 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=50Ω to V_{TT}