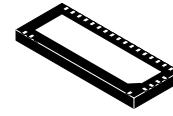
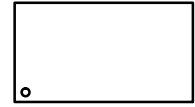


3.3V
 10 GΩ
 D
 NB7N
 B 3.1 G
 Q
 L
 C
 -2
 1104M



WQFN42
 CASE 510AP

MARKING
 DIAGRAM



Description

ORDERING INFORMATION

Device	Package	Shipping

Features

- ±
-
-
-
-
-
-
- -Ω
-
- -
- ±
-
- - ° °
-
- -

Typical Applications

- - -
-
-
-
-
-
-

NB7NPQ1104M

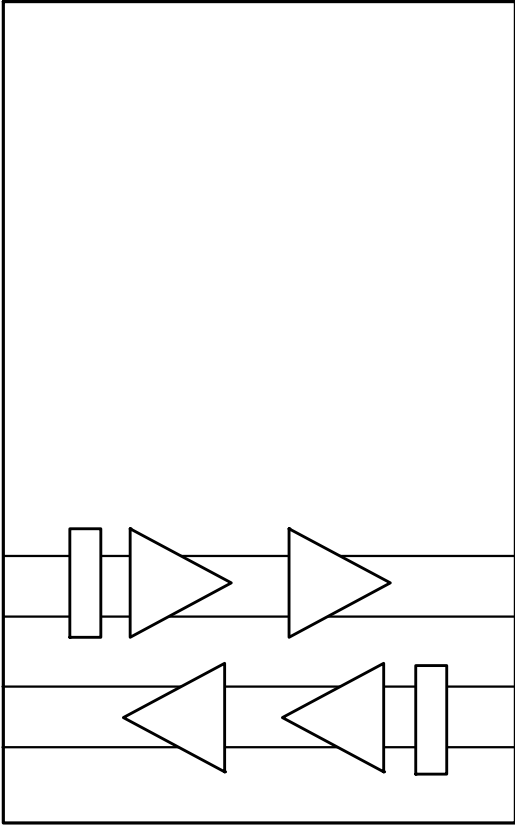


Figure 1. Logic Diagram of NB7NPQ1104M

Figure 2. WQFN-42 Package Pinout (Top View)

NB7NPQ1104M

Table 1. PIN DESCRIPTION

Pin Number	Pin Name	Type	Description
			- Ω - Ω -

NB7NPQ1104M

Power Management

Table 3. EQUALIZATION SETTING

EQA/B/C/D	Equalizer Setting (dB)	
-Ω		
-Ω		

Table 2. OPERATING MODES

Mode	R _{IN}	R _{OUT}
	-Ω	-
	-	-Ω
	-Ω	-Ω
	-Ω	-Ω

NB7NPQ1104M

Table 11. CML RECEIVER AC/DC CHARACTERISTICS

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
- -						Ω
- -	-					Ω
- - -	-					Ω
- - -						
- - -	- - -					

NB7NPQ1104M

Table 12. TRANSMITTER AC/DC CHARACTERISTICS

Parameter	Test Conditions	Min	Typ	Max	Unit
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CHANNEL PERFORMANCE

Parameter	Test Conditions	Min	Typ	Max	Unit

NB7NPQ1104M

PARAMETER MEASUREMENT DIAGRAMS

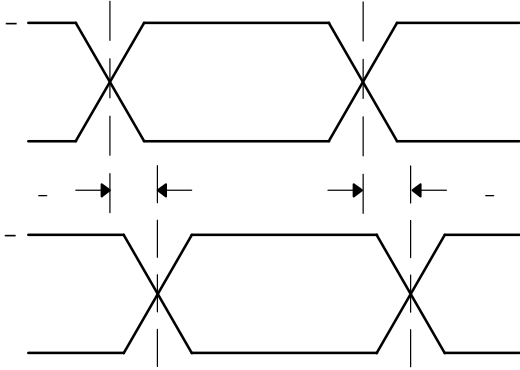


Figure 3. Propagation Delay

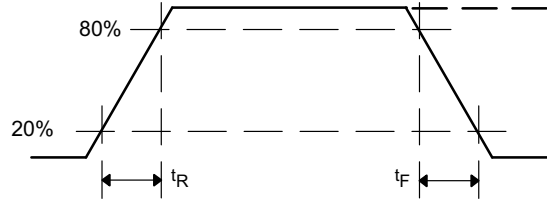


Figure 4. Output Rise and Fall Times

APPLICATION GUIDELINES

LFPS Compliance Testing

LFPS Functionality

Ping.LFPS for TX Compliance

Control Pin Settings

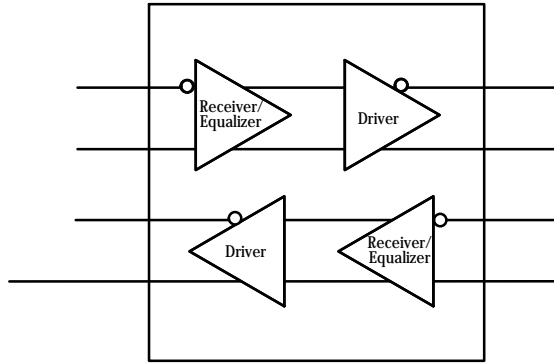
Linear Equalization

DC Flat Gain

Total Gain

NB7NPQ1104M

USB 3.1
Controller



USB 3.1
Receptacle

NB7NPQ1104M

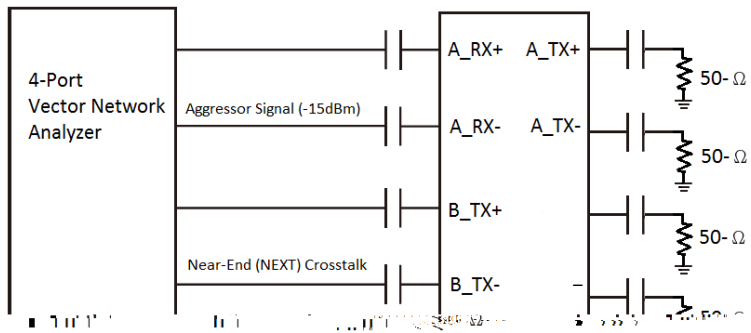
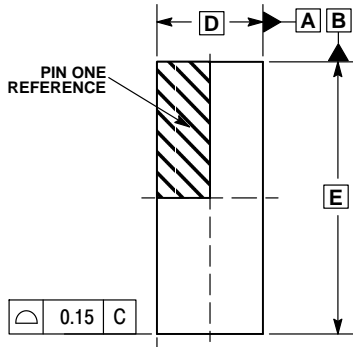


Figure 6. Channel-Isolation Test Configuration

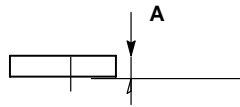
WQFN 0.5P
C P

DATE 15 FEB 2010

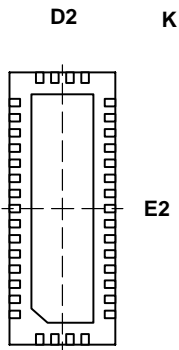
SCALE 2:1



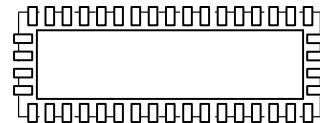
TOP VIEW



SIDE VIEW



BOTTOM VIEW



NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. DIMENSION b APPLIES TO PLATED TERMINAL AND IS MEASURED BETWEEN 0.15 AND 0.30 MM FROM TERMINAL TIP.
4. COPLANARITY APPLIES TO THE EXPOSED PAD AS WELL AS THE TERMINALS.

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