

Network Termination Controller NTC-Q PEB / PEF 8091

The Network Termination Controller (NTC-Q) is a Network Termination (NT) circuit for the basic rate ISDN. It combines a U-transceiver and an S-Tranceiver on one chip. The NTC-Q provides the 2B1Q-U-interface together with the S/T-interface .

1. Potential application

- NT
- Repeater for 2B1Q-Line Code

2. Features:

Single chip solution including U- and S-transceiver

- Perfectly suited for the NT1 in the ISDN
- Fully automatic activation and deactivation
- U-interface (2B1Q) conform to ANSI T1.601, ETSI ETR 080 and CNET ST/LAA/ELR/DNP/822:
 - Meets all transmission requirements on all ANSI, ETSI and CNET loops with margin
 - Conform to British Telecom's RC7355E
 - Pin programmable CSO-bit
 - Pin programmable ACT-bit in loop meets ETSI and ANSI specification
 - MLT input and decode logic (ANSI)
- Function compatible to IEC-Q NTE
- S/T-interface conform to ITU Rec. I.430, ETS 300 12 and ANSI T1.605
 - Meets and exceeds all transmission requirements
 - Supports point-to-point and bus configurations
 - Function compatible to SBCX
- IOM-2 interface eases chip testing and evaluation
- Low power CMOS technology with power-down mode

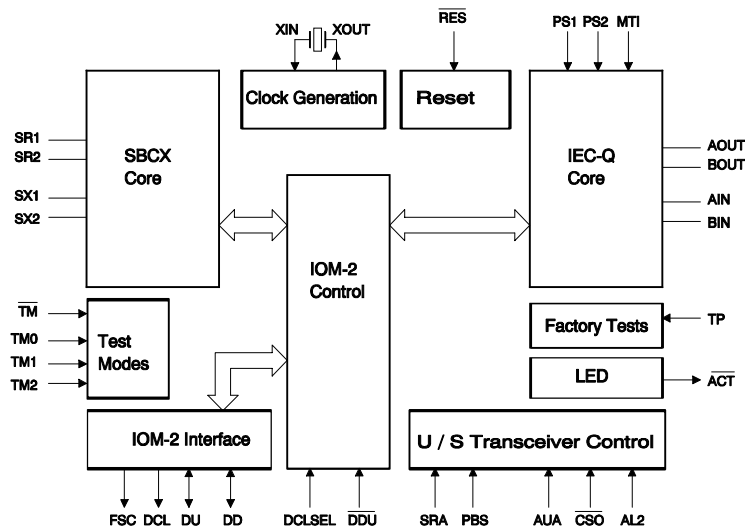
3. Packaging

Type	Ordering Code	Package
PEB 8091 H V1.1	Q67221-H1029	M-QFP 64
PEF 8091 H V1.1	Q67221-H1040	M-QFP 64
PEB 8091 F V1.1	Q67221-H1009	T-QFP 64

4. Product status

Product	Step	Status	Changes
PEB/PEF 8091 F/H	V1.1	ES available, Prod. 10/97	

5. Diagram



6. Documentation (Please contact our sales office for details)		
	<u>Date of issue/version</u>	<u>Type of material</u>
Data Sheet	10/97	Copy
	10/97	

7. Development and support tools		
	<u>Availability</u>	<u>Ordering number</u>
SIPB 8091	available	on request

8. Applications

- • Standard NT 2B1Q/ System Solution

The diagram illustrates the Standard NT 2B1Q/ System Solution. It features a central green box labeled "PEB 8091 for 2B/1Q NTC-Q" which contains two transceivers: "S0 Transceiver" and "U Transceiver", connected by a bidirectional arrow. To the left of the central box, a circuit with a battery and a switch is connected to the S0 Transceiver. Below this, a "Current Limit RPM/NPM" block is connected to a switch labeled "X". The switch "X" has two outputs: "40V RPM" and "40V NPM". The "40V RPM" line goes to a "DC/DC Converter" (green box) which outputs "5V" to the PEB 8091. The "40V NPM" line goes to an "AC/DC Converter" which is connected to "AC 230V". The "DC/DC Converter" is also connected to an "IDCC PEB 2023" block, which in turn connects to the U Transceiver. The U Transceiver is also connected to a battery symbol.