Advanced Information

General Description

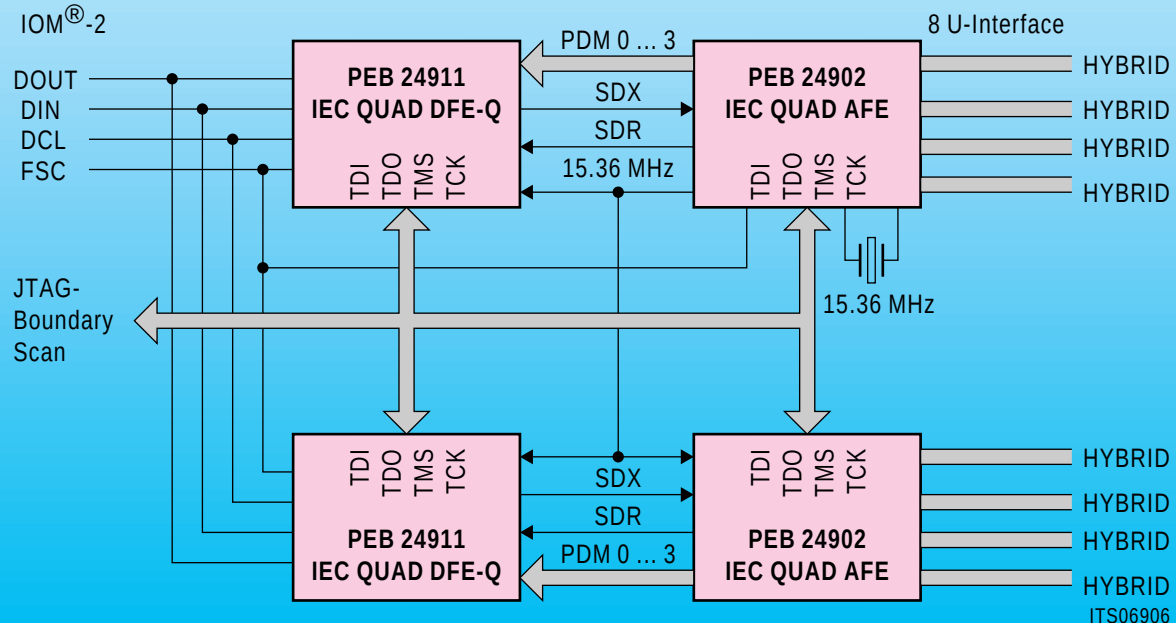
The PEB 24911 Quad ISDN 2B1Q Echocanceller Digital Front End (Quad IEC DFE-Q) is the digital part of an optimized ISDN 2B1Q U-interface line card chip set. It features 4 independent digital signal processors providing, in conjunction with the PEB 24902 ISDN Quad Analog Front End, full duplex data transmission at the U_{k0}-reference point according to ANSI T1.601, ETSI ETR80, CCITT G.961 and CNET ST/LAA/ELR/DNP/822 standards. The PEB 24911/ PEB 24902 chip set is based on the PEB 2091 IEC-Q V4.4 single chip ISDN U-transceiver. The IEC-Q V4.4 is approved by Bellcore. The PEB 24911 comes in a P-MQFP-64 package.

Features

- Full duplex transmission and reception at the U-reference point compliant to:
  ANSI T1.601-1992,
  CNET ST/LAA/ELR/DNP/822,
  ETSI ETR 080 1993.
- Recommendation CCITT, G.961
- 144-kbit/s user bit rate over a two-wire subsriber loop
- 2B1Q-block code (2 binary, 1 quaternary)
- 80-kHz symbol rate
- Activation and deactivation procedure
- Meets transmission requirements for loop #1 through loop #15 of ANSI‘s 15 telephone plant test loops
- Meets transmission requirements for loop #1 through #6 of CNET’s 6 telephone plant test loops

Type	Package
PEB 24911	P-MQFP-64-1 (SMD)
PEF 24911	P-MQFP-64-1 (SMD)

- Meets transmission requirements for loop #1 through #8 of ETSI’s 8 telephone plant test loops
- Built-in wake-up unit for activation from power-down state
- Adaptive echo-cancellation
- Adaptive equalization
- Automatic polarity adaption
- Clock recovery (frame and bit synchronization) in all applications
- Automatic gain control
- Low power consumption
- Extended temperature range – 40 °C to 85 °C available (PEF 24911)
- U-interface propagation delay measurement with better than ± 300-ns resolution
- LT-PBX mode allowing D-channel arbitration and synchronization of DECT-base stations
- IOM-2 system interface
- 4 relay driver pins per port addressable by Monitor command
- 2 status pins per port reporting to the Monitor channel
- Activation procedure with the 15 s limit disabled to cope with regenerators
- JTAG-boundary scan path



8 Channel LT Application