Product Brief

MuBIC 2

PEB 22522 V2.1

Multi Bit Rate Integrated Circuit

MDSL (Medium bit rate Digital Subscriber Line) covers the sub SDSL (Symmetric/Single Pair bit rate DSL) rates at a granularity of 8 kbit/s. The MuBIC 2 is the 2nd generation of the Infineon MDSL product family which fills the gap between ISDN and SDSL.

Using the TC-PAM coding scheme the MuBIC 2 offers an excellent transmission performance in combination with a very low interference with other services like POTS, ISDN, HDSL, ADSL, ADSL Lite and VDSL in the same bundle. The exceptional low power consumption of less than 500 mW at 1 Mbit/s meets manufacturers requirements for remote fed equipment e.g. for life line service. The tiny TQFP-100 package contains a lot of additional functionality like framer and microcontroller.

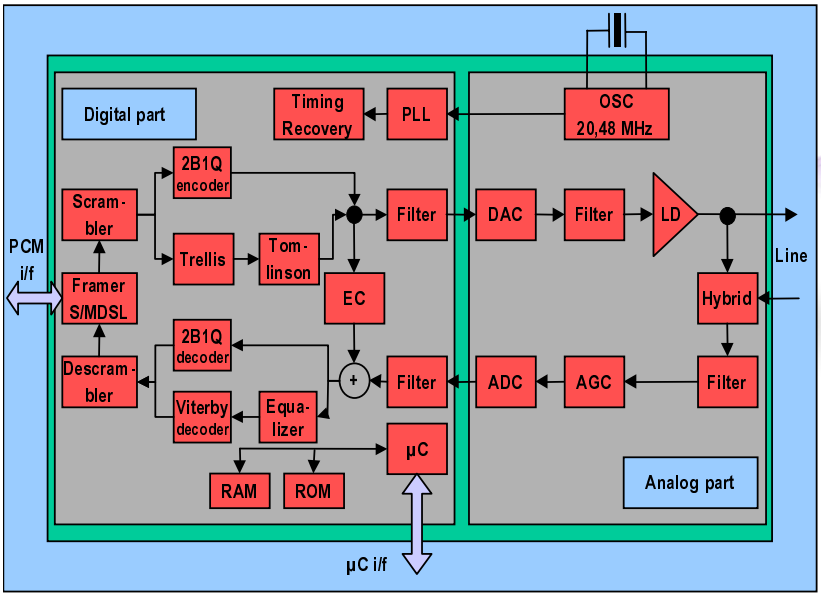
Potential Applications

- N-channel DAML systems
- Fractional T1/E1 systems
- Broadband subscriber access for voice and data
- Line cards for central office and loop carriers
- Network terminators (NTs)
- DSLAMs
- ISDN H0 transport
- Remote LAN Access (Home office)
- Videoconferencing
- Access to cellular base stations
- RITL and WLL systems
- SDH and SONET termination
- Leased line services
- Frame Relay services
- PBX trunk lines

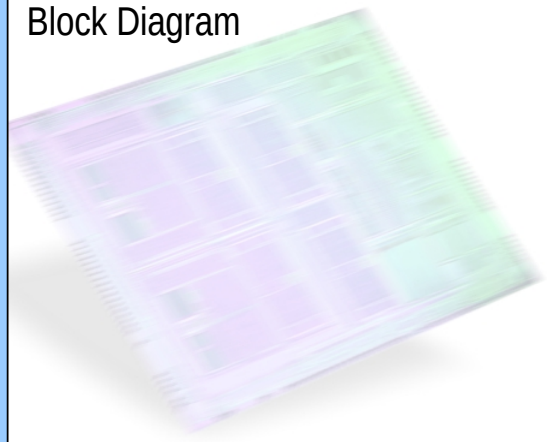
Features

- Single chip MDSL transceiver
- Plastic TQFP-100 package
- Typical 450 mW power consumption at 1 Mbit/s
- TC-PAM linecode with 2,3 or 4 Bits/symbol
- Transmission of any bit rate between 512 kbit/s and 1040 kbit/s[1)]
- Same hardware for all bit rates
- Meets ETSI/ANSI HDSL and ISDN performance
- Embedded µC for easy start-up
- Universal 8-Bit µC interface
- Transparent transmission or built-in Framer
- Inputs and Outputs TTL level
- Software access to D-Bits
- Central office (COT) and remote (RT) operation (master/slave)
- Warmstart capability
- Power down mode
- 1.544 Mbit/s, 2 Mbit/s and 4 Mbit/s TDM interface
- Tolerates input jitter according to I.431 jitter transfer function
- Easy software download
- Diagnostic loop backs
- DECT base station synchronization and delay measurement
- 2B1Q mode
- Operation speed selectable by software only
- JTAG boundary scan

[1)] Bit rates below 512 kbit/s on request



MuBIC 2
Block Diagram



Development and Support Tools

- Evaluation board

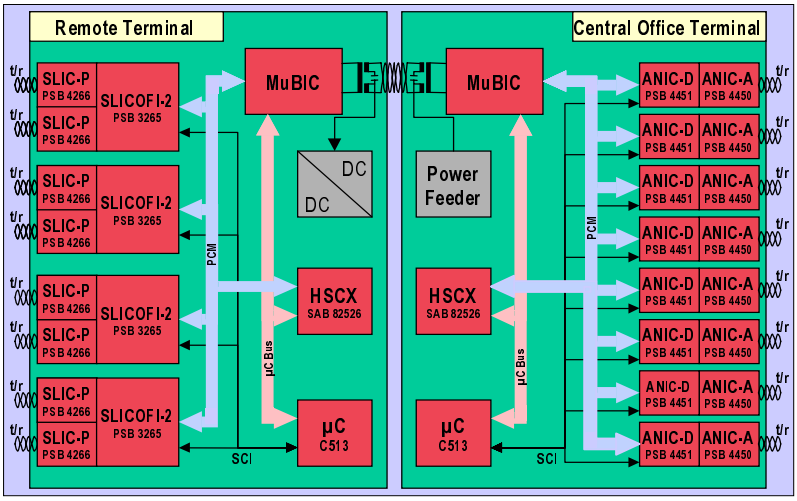
Documentation

Type	Date of Issue/Version
PEB 22521/2 V2.1 Preliminary Data Sheet	10.99

Ordering information

Type	Ordering Code	Package	Availability
PEB 22522F V2.1	Q67233-H1151	P-TQFP-100	ES

Application Example DAML



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Published by

Infineon Technologies AG

Ordering No. B115-H7325-X-X-7600
Printed in Germany
PS 10985.