

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

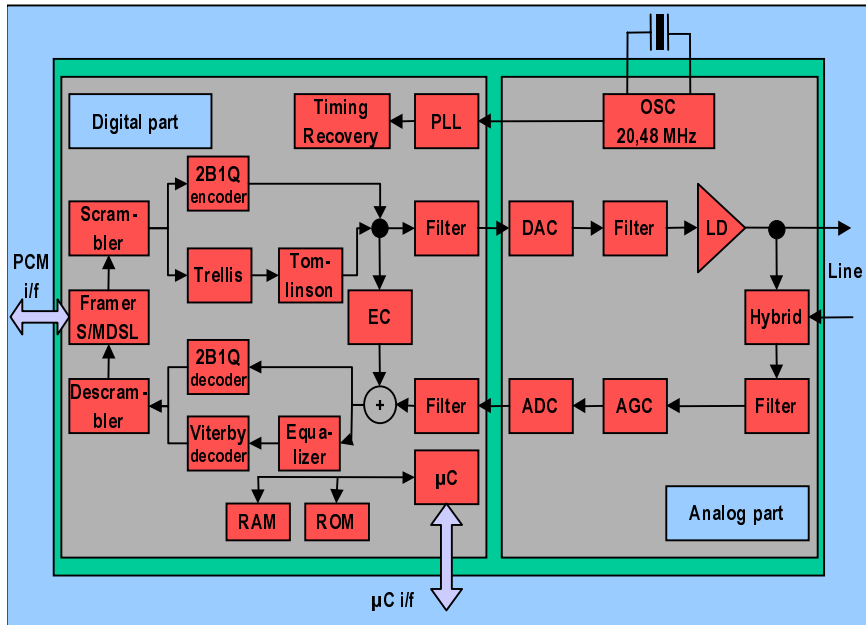
Features

- 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/s¹⁾
- 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

¹⁾ Bit rates below 512 kbit/s on request

- 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

MuBIC 2 Block Diagram



Development and Support Tools

- Evaluation board

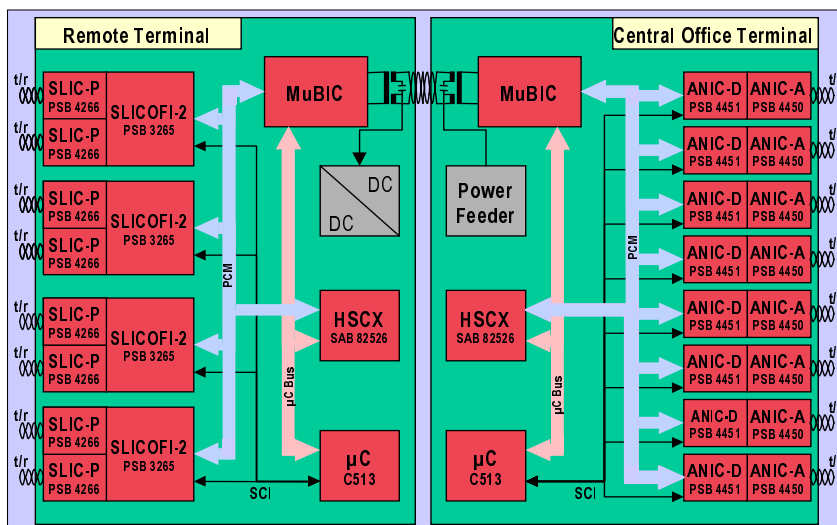
Documentation

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



A Wien ☎ (+43) 1-1707-356 11	HK Hong Kong ☎ (+852) 2832 05 00
AUS Richmond (Melbourne), Vic. 3121 ☎ (+61) 3-9420 71 11	I Milano ☎ (+39) 02-6676-1
B Brussel/Bruxelles ☎ (+32) 2-536 23 48	IND New Delhi 110 014 ☎ (+91) 11-461 74 47
BR São Paulo-SP ☎ (+55) 11-836 23 77/ 26 84	IRL Dublin 4 ☎ (+353) 1-603 23 42
CDN Mississauga, Ontario L5T 1P2 ☎ (+1) 905-819 80 00	J Tokyo 141-0022 ☎ (+81) 3-5449 64 11
CH Zürich ☎ (+41) 1-495 30 65	N Oslo 5 ☎ (+47) 22-63 30 00
D Düsseldorf ☎ (+49) 211-399 15 51 Laatzten (Hannover) ☎ (+49) 511-877 27 06 München ☎ (+49) 89-9221 40 86 Nürnberg ☎ (+49) 911-654 76 22 Stuttgart ☎ (+49) 711-137 33 14	NL Den Haag ☎ (+31) 70-333 24 29
DK Ballerup ☎ (+45) 4477-44 77	P Amadora ☎ (+35) 1-417 00 11
E Tres Cantos-Madrid ☎ (+34) 91-514 80 00	PL Warszawa ☎ (+48) 2-670 91 51
F Saint-Denis CEDEX 2 ☎ (+33) 1-4922 31 00	RC Taipei ☎ (+886) 2-2773 66 06
FIN Espoo (Helsinki) ☎ (+35) 9-51 05 1	ROK Seoul 135-080 ☎ (+82) 2-527 77 00
GB Berkshire RG 12 8FZ ☎ (+44) 1344-39 60 00	RUS Moskva ☎ (+7) 095-237-64 76, -69 11
GR Amaroussio/Athen ☎ (+30) 1-686 41 11	S Kista ☎ (+46) 8-703 35 00
	SGP Singapore 349 253 ☎ (+65) 840 06 10
	TR Findikli (Istanbul) ☎ (+90) 212-251 09 00
	USA Cupertino, CA 95014 ☎ (+1) 408-777 45 00
	ZA Halfway House 1685 ☎ (+27) 11-652-20 00, -27 00

How to reach us:
<http://www.infineon.com>

© Infineon Technologies AG 1999.

All Rights Reserved.

Please note that any information contained in this publication may be subject to change. Infineon Technologies reserves the right to make changes to or to discontinue any product or service identified in this publication without notice.

Please contact our regional offices to receive the latest version of the relevant information to verify, before placing orders, that the information being relied upon is current.

All brand or product names, hardware or software names are trademarks of their respective companies or organizations.

Published by

Infineon Technologies AG

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