

Product Brief

MuBIC

PEB 22521

Multi Bitrate Integrated Circuit



MDSL as Medium bitrate Digital Subscriber Line covers the sub SDSL (Symmetric/Single Pair bit rate DSL) rates at a granularity of 64 kbit/s. The MuBIC is the part of the Siemens POTSWIRE™ product family which fills the gap between ISDN and HDSL.

Based on the highly sophisticated TCPAM coding scheme the MuBIC complies with the upcoming standards for SDSL. It excellently coexists with both symmetrical services like POTS, ISDN and HDSL as well as with asymmetrical services like ADSL, ADSL Lite

and VDSL in the same bundle. The exceptional low power consumption meets manufactures requirements for remote fed equipment e.g. for live line service.

DSL

Phase One

Potential Applications

- N-channel digital pair-gain systems
- Data communications
- Internet connectivity
- ISDN H₀ transport
- Home office
- Video conferencing
- Extended range fractional T1/E1
- Cellular base stations (GSM, DECT, PHS)
- RITL systems

Features

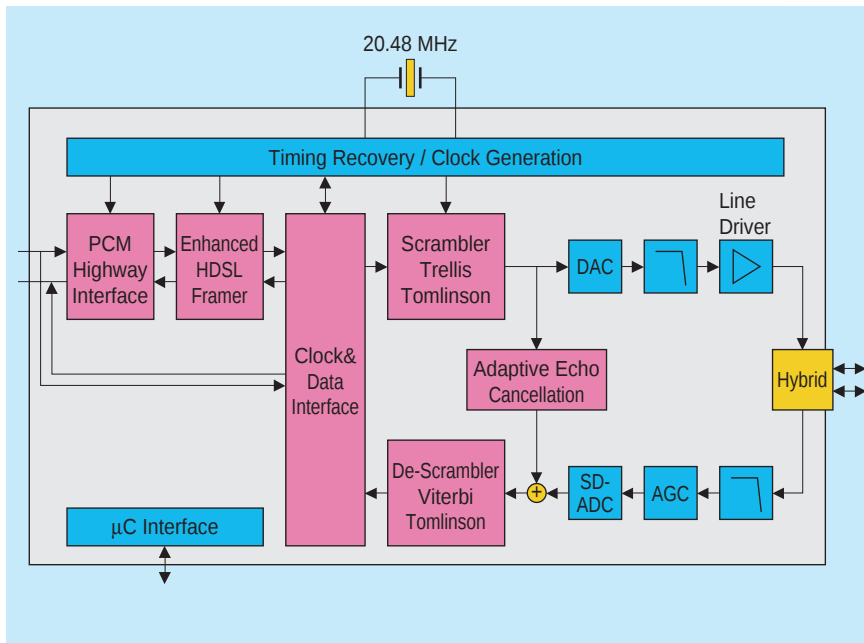
- Fully integrated TCPAM transceiver function
- Spectrally compatible TCPAM line code with less bandwidth requirements

- Two, three or four bits per symbol TCPAM
- Siemens/Intel and Motorola compatible standard microcontroller interface
- Embedded address latch for Siemens/Intel 8-bit multiplexed microcontroller
- Local and remote operation (master/slave) software configurable
- Embedded DECT base station synchronization
- Delay measurement
- Tolerates input jitter according to I.431 jitter transfer function
- TDM interface 2 Mbit/s and 4 Mbit/s in addition with single clock mode

- Diagnostic loop backs
- Single 3.3 V and +5 V power supply
- Inputs and Outputs TTL level compatible
- 500 mW to 900 mW power dissipation (depending on baud rate)
- Transceiving any bit rate between 512 kbit/s and 800 kbit/s¹⁾
- Software configurable operation speed
- JTAG IEEE1149.1

¹⁾ Bitrates below 512 kbit/s on request

MuBIC Block Diagram



Development and Support Tools

- Evaluation board

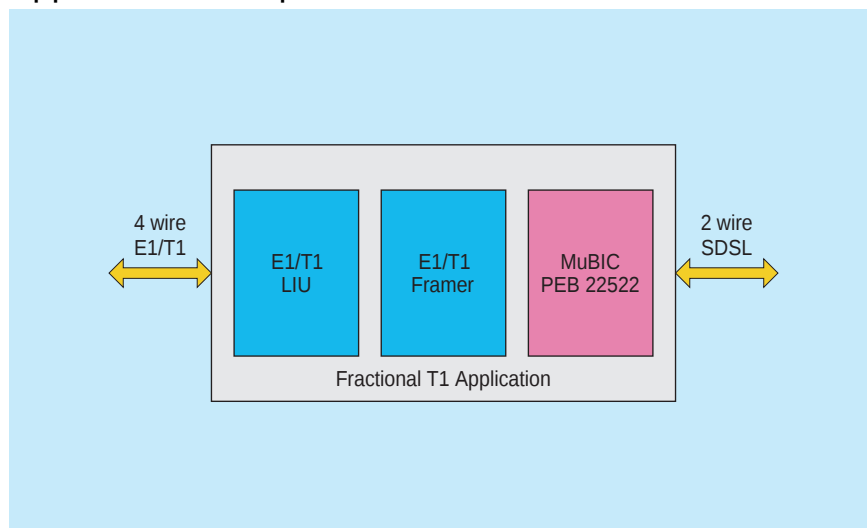
Documentation

	Date of Issue/Version
MuBIC PEB 22521 V1.0 Data Sheet	07.98

Packing

Type	Ordering Code	Package	Availability
MUBIC PEB 22521F	Q67233-H1102	P-TQFP-100	10/98

Application Example Fractional T1



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